

# 2014 | OIC ECONOMIC OUTLOOK

*“Enhancing Productivity and  
Competitiveness”*

*Editor  
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ORGANISATION OF ISLAMIC COOPERATION

STATISTICAL ECONOMIC AND SOCIAL RESEARCH  
AND TRAINING CENTRE FOR ISLAMIC COUNTRIES





# OIC ECONOMIC OUTLOOK 2014

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## “ENHANCING PRODUCTIVITY AND COMPETITIVENESS”

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# ACRONYMS

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CFM	Council of Foreign Ministers
EDBI	Ease of Doing Business Index
FDI	Foreign Direct Investment
FFI	Financial Freedom Index
GCF	Gross Capital Formation
GCI	Global Competitiveness Index
GDP	Gross Domestic Product
GERD	Gross Domestic Expenditure on Research and Development
GNI	Gross National Income
HIPC	Heavily Indebted Poor Countries
ICT	Information and Communication Technology
IFS	International Financial Statistics
ILO	International Labour Organisation
IMF	International Monetary Fund
IMFCR	IMF Credits
IPR	Intellectual Property Rights
IsDB	Islamic Development Bank
LAC	Latin America and the Caribbean
LDC	Least Developed Countries
LDOD	Long-term Debt
LP	Labour Productivity
LPI	Logistics Performance Index
MENA	Middle East and North Africa
MFP	Multi-Factor Productivity
ODA	Official Development Assistance

OECD	Organisation for Economic Cooperation and Development
OIC	Organisation of Islamic Cooperation
OTJT	On-the-Job-Training
PPP	Purchasing Power Parity
PPPs	Public Private Partnership
R&D	Research and Development
RCA	Revealed Comparative Advantage
SSA	Sub-Saharan Africa
STD	Short-term Debt
TFP	Total Factor Productivity
TPS-OIC	Trade Preferential System among the Member Countries of the OIC
UAE	United Arab Emirates
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
UNSD	United Nations Statistics Division
UNWTO	United Nations World Tourism Organization
USD	United States Dollar
VET	Vocational Education and Training
WB	World Bank
WDI	World Development Indicators
WEF	World Economic Forum
WIPO	World Intellectual Property Organization
WTO	World Trade Organization

## FOREWORD

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The OIC Economic Outlook 2014 is appearing in a time when global economic activity has broadly strengthened and is expected to improve further in 2014–15, with developing countries seem to be the driving force of the global growth both in 2014 and 2015. However, with the positive economic outlook for the advanced economies in 2014 and 2015, the recovery in the United States, and the positive growth rate expectations in the European Union after a zero-growth rate in 2013, the contribution of the developed countries to the world economic growth is expected to rise in 2014-15. Developing countries are expected to maintain an increase in the average growth rate that will climb from 4.9% in 2014 to 5.3% in 2015. However, as a result of long-lasting painful fiscal and monetary measures, the recovery in developed economies in terms of real GDP growth rate is projected to reach 2.3% in 2015 compared to 2.2% in 2014. After demonstrating signs of recovery at the beginning of 2014, the global economic forecasts are more optimistic about the medium and long-run growth rates. In particular, the expected return of global giants with positive growth rates will carry the average global growth rate from 3.6% in 2014 to 3.9% in 2015. Yet, although downside risks have diminished overall, the lower-than-expected inflation which poses risks for advanced economies and the increased financial volatility and cost of capital in emerging market economies will likely dampen investment and weigh on global growth.

Despite comparing favourably to last year's increase, the growth of world merchandise exports of 2% in 2013 is still much lower than the 20% annual average growth observed in years 2010 and 2011. The tightening fiscal policies and limited monetary expansion seem to stabilize the consumer prices on average in the world. As a result, global inflation rate decreased to 3.7% in 2013 and is expected to be around 3.5% in 2014 and 2015 compared to 5.0% in 2011. Meanwhile, unemployment remained one of the most challenging issues across the globe. With high youth unemployment rates remaining a major concern worldwide (13.1% in 2013), the global unemployment rate remained at 6.0% in 2013, and, despite some positive expectations in the world economy for 2013–14, little improvement is expected in the global labour market in 2014, with the global unemployment rate is expected to tick up slightly to 6.1%, a rate which is still above the pre-crisis level of 5.4% in 2007.

In light of the recent global and regional economic developments, the OIC Economic Outlook 2014 analyses the trends in major economic indicators for the OIC member countries, as a



group, during the latest five-year period (2009-2013). It investigates these trends in a comparative manner with their counterparts in the groups of the developed and other developing countries as well as with the world economy as a whole and highlights a number of constraints and challenges confronting the OIC member countries in their efforts to enhance their economic development and progress.

The OIC member countries, as a group, followed in general similar trends with other developing countries. Yet, while the total GDP of the group of the OIC countries has increased constantly reaching to \$9.8 trillion in 2013 compared to \$7.7 trillion in 2009, their share in the world total GDP remained stable at around 11% and their share in the total GDP of developing countries group has declined steadily to reach 22.3% in 2013, a decrease by one percentage point over the 5-year period 2009-2013. The average real GDP growth rate of the group of the OIC countries slowed down to 3.9% in 2013 from 4.6% in 2012, a rate which is lower than the rate of 4.7% of the group of other developing countries. However, when China and India are excluded from the group of developing countries, the average growth rates of the OIC group indicate significantly better performance during the period 2009-2013 and in the projected two years of 2014 and 2015 as well. While the average growth rates of the OIC countries are forecasted at 4.1% in 2014 and 4.9% in 2015, these figures are predicted for the group of other developing economies, excluding China and India, at 2.8% for 2014 and 3.4% for 2015.

This year's Report provides a comprehensive overview of productivity and competitiveness issues in OIC member countries, which are highly critical to achieve better standards of living and position themselves in the world in a comparably better situation. The analysis in this part highlights major factors that influence productivity and competitiveness and provides some policy implications for enhancing productivity and competitiveness in OIC countries. The Report also highlights the role of public-private partnerships for the development of the tourism sector in OIC Member Countries. The analysis in this part highlights the importance of PPPs in tourism industry through creating new products or services, achieving higher levels of efficiency, opening markets that were previously inaccessible and pooling resources.

Prof. Savaş Alpay  
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# EXECUTIVE SUMMARY

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## Recent Economic Developments in the World and OIC Countries

### Production, Growth and Employment

#### *Production*

GDP of the world – expressed in current USD and based on PPP – has witnessed an increasing trend over the period 2009-2013, reaching \$87.0 trillion in 2013 compared to \$70.6 trillion in 2009. Developing countries witnessed rapid increase in GDP from \$33.0 trillion in 2009 to \$43.9 trillion in 2013 whereas; it was recorded at \$43.1 trillion in 2013 compared to \$37.6 trillion in 2009 for developed countries. OIC countries also witnessed an increasing trend in economic activity from \$7.7 trillion in 2009 to \$9.8 trillion in 2013. They produced only 11.2% of the world and 22.3% of developing countries total output in 2013. The average GDP per capita in OIC countries also increased from \$5,110 in 2009 to \$6,076 in 2013.

#### *Growth*

The slowdown in global economy continued in 2013 with growth rate plunging down to 3.0%. However, outlook for 2014 and 2015 are positive with growth rate of 3.6% 3.9% respectively. While the recovery in developed countries remained slow, developing countries seem to be the driving force of the growth in world economy. On the other hand, global per capita GDP growth has also witnessed the declining trend with 2.2% growth rate in 2013. The global real GDP per capita is forecasted to grow by 2.8% in 2014 and 3.1% in 2015. In 2013, growth in GDP per capita was recorded at 3.6% in developing countries which is expected to increase to 3.8% in 2014 before climbing up to 4.3% in 2015. On the other hand, developed countries witnessed very low growth rate of 0.8% in 2013 which is estimated to increase to 1.7% and 1.8% in 2014 and 2015 respectively. OIC countries also witnessed slowdown in economic activity and their growth rate declined from 4.6% in 2012 to 3.9% in 2013. They will likely experience a recovery with growth rate forecasted to be around 4.1% in 2014 and 4.9% in 2015. The average growth rate of the real per capita GDP in OIC countries has been positive during the period 2009-2013.

The average real GDP per capita growth rate in OIC countries was recorded at 1.8% in 2013 which is forecasted to reach 2.1% in 2014 and 2.9% in 2015.

### *Production by Sectors*

In terms of the average shares of the value-added by four major sectors in the total GDP, service sector has the largest share of global total output (65.8%), followed by the industrial sector (both manufacturing and non-manufacturing) (29.7%), while the share held by agriculture, fishing and forestry is relatively small (4.4%). OIC countries also show a similar structure. Although agriculture is widely known to be the primary economic activity and assumed to play a major role in the economies of developing countries, this feature does not stand firm in the case of OIC and other developing countries as a group. The average share of agriculture in OIC economies contracted to 10.7% in 2011 and to 10.3% in 2012. A more stable trend was observed in other developing countries, where the average share of agriculture in the economy has for long remained slightly above 9% and was recorded at 9.1% in 2011 and 2012.

### *GDP by Major Expenditure Items*

When the shares of the major expenditure items in the total GDP are considered, final household and government consumption continued to be the highest in the total GDP over the years. In 2012, household consumption accounted for the lion share of 57.6% followed by gross capital formation (24.4%) and general government final consumption (17.2%). The relative shares of the major expenditure items in the total GDP of OIC countries registered significant variation from the world. In 2012, final household and general government spending accounted for 66.7% of the total GDP of OIC countries. These figures marked an increase in the shares of both consumption types compared to the previous year.

### *Unemployment*

Unemployment is one of the most serious problems facing world today. Despite recovery in the economic activities lately, the global unemployment rate for adults remained at 6.0% of the total labour force, unchanged from 2012. The number of unemployed around the world is estimated to have reached 201.8 million in 2013, an increase of 4.9 million from a revised 196.9 million in the previous year. Youth continued to suffer from lack of decent job opportunities across the globe. According to the latest estimates, it is estimated that some 74.5 million young people were unemployed in 2013; that is almost 1 million more than in the year before. OIC countries recorded significantly higher average unemployment rates compared to the world, developed and other developing countries during the period 2000-2008. During this period, total unemployment rate in OIC countries changed between 7.6% and 8.8%. After the global financial crisis, unemployment rates in developed countries increased from a level below 6% to over 8%. Average unemployment rate in other developing countries remained significantly lower (around 2-3%) than the OIC average. The figures on youth unemployment in OIC countries are even less promising. As of 2012, youth unemployment in OIC countries estimated at 15.6%, in developed countries at 17.2% and in other developing countries at 10.9%.

### *Inflation*

Global inflation rate has declined from 4.0% in 2012 and 3.7% in 2013, and it is expected to be around 3.5% in 2014 and 2015. Price volatility is not foreseen to be a major concern for developed and developing countries. Inflation is expected to be 1.5% in 2014 and 1.6% in 2015

for developed countries and 5.5% and 5.2% respectively for developing countries. Average inflation rate in OIC countries has been significantly higher than the developed and developing countries. In OIC countries inflation increased to 8.7% in 2012 before moderately declining to 8.5% in 2013. The overall inflation figures marked an increase of 45.8% in consumer prices in OIC countries during the period under consideration. This is well above the average increase recorded in other developing countries (32%) as well as the world average (20.5%) in the same period.

### *Fiscal Balance*

In the wake of tightening policies implemented especially in the developed countries, fiscal balances are improving systematically across the world. World fiscal balance deficit as% of GDP witnessed a declining trend from -7.2% in 2009 to -3.9% in 2013. The forecast shows that a further decrease is expected -3.6% in 2014 and -3.1% in 2015. A similar trend is observed in the developed countries where fiscal balance deficit declined from -9.6% in 2009 to -5.0% in 2013. This ratio is expected to be -4.4% in 2014 and -3.7% in 2015. Developing countries also have registered negative fiscal balances but are in relatively better position than the developed countries. OIC countries outperformed all other country groups and registered comparatively very low negative fiscal balances. In fact, OIC countries registered fiscal balance surplus for year 2011 and 2012 before it decreased to negative. In 2013, OIC countries recorded fiscal balance deficit of -1.1% of GDP. The fiscal deficit is expected to increase slightly to -1.3% in 2014 and -1.5% in 2015.

## **Trade and Finance**

### *Merchandise Trade*

In 2013, total merchandise exports from OIC countries fell to US\$ 2.2 trillion, as compared to their historically highest level of US\$ 2.3 trillion observed in 2012. Accordingly, the share of OIC countries in total exports of developing countries contracted to 28.7% in the same year, compared to 30.4% in the previous year. Similarly, after its peak of 12.9% in 2012, collective share of OIC countries in the total world merchandise exports, which was recorded at US\$ 18.3 trillion, decreased to 12.2% in 2013.

Total merchandise imports of OIC countries experienced a strong post-crisis bounce-back and increased from as low as \$1.2 trillion in 2009 to \$2.0 trillion in 2013. The share of OIC countries in global merchandise imports reached 10.7% in the same year. Their share in total developing country merchandise imports, on the other hand, sustained its expansion for the second year since 2011 and reached 26.7% in 2013.

### *Services Trade*

OIC countries as a group continued to be net importers of services. They collectively exported US\$ 201 billion worth of services in 2012, whereas the OIC services imports were recorded at US\$ 318 billion in the same year. These figures marked significant decreases over their 2011 values of US\$ 259 billion and US\$ 427 billion, respectively. Accordingly, OIC shares in in developing country services exports and imports dropped to 20.4% and 25.0% in 2012. Similarly, their shares in the total world services exports and imports also contracted, and were recorded at 5.1% and 8.4% in the same year.

*Intra-OIC Merchandise Trade*

OIC countries registered a total of US\$ 748 billion intra-OIC merchandise trade in 2013. In the post-crisis period, intra-OIC trade registered a relatively stronger upturn compared to the OIC countries' trade with the rest of the world. Accordingly, as of 2013, intra-OIC trade accounted for 17.9% of OIC countries' total merchandise trade with the world. Intra-OIC exports were recorded at US\$ 359 billion in 2013, as compared to US\$ 363 billion in 2012. Intra-OIC imports, on the other hand, were recorded at US\$ 388 billion in 2013, registering a slight decrease over their 2012 value of US\$ 390 billion.

*Inward FDI Flows and Stock*

World total FDI inflows stood at US\$ 1.5 trillion in 2013, of which 50.5% was destined for developing countries. FDI flows to OIC countries, on the other hand, continue to remain sub-potential. In 2013, OIC countries were able to attract only US\$ 136 billion in FDI, compared to US\$ 145 billion in 2012. The shares of OIC countries in both developing country and global FDI inflows were recorded at 18.6% and 9.4% in 2013, respectively. Of US\$ 25.4 trillion global inward FDI stock in 2013, OIC countries hosted only 6.8%. This is much lower than the other developing countries' share of 22.5% in the same year.

*Financial Sector Development*

As a sign of low financial deepening, the average volume of broad money relative to the GDP in OIC countries was 55.1% in 2012, compared to 110.9% in other developing countries and 131.8% in developed countries. In the same year, the domestic credit provided by the financial sector in OIC countries was on average equivalent to 60.9% of the GDP whereas this figure was 105.3% in other developing countries and 215% in developed countries.

*External Debt and Reserves*

The total external debt stock of OIC countries continued to increase. In 2012, total OIC external debt reached US\$ 1.2 trillion. However, the same argument is not true for the relative size of the OIC debt to OIC GDP and to total developing country debt. Average debt-to-GDP ratio in OIC countries declined from its 31.1% peak in 2009 to 26.2% in 2012. Similarly, the share of OIC countries in total external debt stock of developing countries also declined from 28.7% to 25.3% during the period of 2008-2012.

Reserves are usually considered as an important instrument to safeguard the economy against abrupt external shocks. World total monetary reserves, including gold, reached US\$ 12.6 trillion in 2013, of which US\$ 1.9 trillion (or 14.9%) came from OIC countries. However, the share of OIC countries in total reserves of the developing countries declined from 25.7% to 22.8% during 2008-2013.

*ODA and Remittances*

In 2012, net ODA flows from all donors to developing countries reached US\$ 94 billion. As of the same year, OIC countries accounted for half of the total ODA flows to developing countries (49.6%). When adjusted for the size of their respective GDPs, ODA flows to OIC and other developing countries exhibits a strong convergence pattern over the last few years. The average ODA-to-GDP ratios in OIC and other developing countries were recorded at 0.9% and 0.5%, respectively, which corresponded to average ODA per capita figures of US\$ 29.7 and US\$ 17.3.

The inflows of personal remittances to OIC member countries in general followed an upward trend between 2008 and 2012. OIC countries received a total of US\$ 112 billion in remittances in 2012, registering a 30.1% share in developing countries. Remittance flows to other developing countries, on the other hand, were recorded at US\$ 260 billion in 2012.

## Enhancing Competitiveness and Productivity in OIC Countries

### Roles of Productivity and Competitiveness

Selected economic growth theories are overviewed with a focus on productivity and competitiveness. The overview shows that the only way to generate a higher welfare level is to sustain positive economic growth rates. The only way to reach sustainable positive economic growth rates is to innovate and enhance technology growth. Otherwise, diminishing returns to capital will halt economic growth in the long-run and hinders countries to generate additional output. In order to enable country institutions for innovation and technology growth countries need to review their national policies.

The section also shows that there is a close link between productivity and competitiveness. Factors that enhance productivity growth will also make countries more competitive in international markets. Therefore, policy-makers need to formulate their policies in order to boost technology growth and to eliminate factors that hinder their competitiveness.

### Levels of Productivity and Competitiveness in OIC Countries

The selected productivity, competitiveness and economic growth indicators are analyzed by using datasets compiled from different sources for OIC member countries, other developing countries, developed countries and the world. Therefore, the analysis presents the performance of OIC member countries in productivity, competitiveness and economic growth in a comparative perspective.

The analysis shows that OIC member countries, on average, have significantly improved their level of productivity levels mostly by having average positive growth rates. However, the average levels of GDP per capita, productivity (both labor and total factor), and competitiveness are below the world average that reveals the necessity of further collective effort in OIC member countries to enhance productivity and competitiveness.

### Fostering Productivity and Competitiveness

Competitiveness is a reflection of the overall circumstances including institutions, policies and factors that have impact on the level of productivity. While the level of productivity is critical in determining the returns to investments, higher returns to investments bring higher growth rates. Therefore, more competitive economies with higher productivity levels are expected to generate higher income levels for their citizens. It is well-known that productivity is the main determinant of economic growth.

#### *Fundamentals for Enhancing Productivity and Competitiveness*

Long-run growth is determined by the level of technological progress, because growth cannot be sustained by increases in capital per worker or increases in the number of workers. In

order to expand the efficiency with which an economy uses its inputs, productive capacities of each production factors should be improved. In this context, human capital development and technological innovation are considered to be the essential factors in enhancing productivity and competitiveness.

Formal education is highly instrumental to improve the production capacity of a society. Better education improves the production processes in several ways. Educated, or skilled, workers are able to perform complex tasks and thereby contribute to producing more technologically sophisticated products. Especially in developing countries, skilled workers increase the absorptive capacity of the country by acquiring and implementing the foreign knowledge and technology, which is of crucial importance in successful economic diversification and development.

For the development of human capital, key prerequisite is not only to increase the access and participation to education, but also to improve the progression and quality in education. OIC countries have made significant progress in improving the participation to education over that last four decades. However, the quality of education remains as a concern in many OIC countries. A positive relationship between the quality of education and labour productivity in OIC countries is observed. Therefore, for higher productivity and better economic performance, it is critical to improve the quality of education.

Innovation requires significant investment and long-term perspective. Therefore, available resources for research and innovation need to be allocated according to national development strategies and priorities. Today's knowledge economies heavily rely on research and development activities and innovative technologies to sustain their competitive status vis-à-vis other countries. On the other hand, the expected benefits of investment in innovative activities in low income countries may be disappointing due to insufficient framework conditions.

R&D expenditure in OIC countries increases from year to year but it is still unsatisfactory. The OIC countries account for only 2.1% of the world total Gross Domestic Expenditures on R&D (GERD), or 8.8% of the total GERD of developing countries. While expenditure on R&D reflects the importance given the research and innovation, the number of patent applications shows how successful are the investments in these areas. The total patent applications in OIC countries reached almost 60,000; however, they account for only 0.6% of total applications filled in the world.

Ideas need an innovation-friendly environment to grow and generate benefits to all societies through new products and/or services. If enterprises in OIC countries are to become competitive in the global economy, policies in OIC countries should focus on creating an environment that promotes innovation.

### *Boosting Multifactor Productivity Growth*

A number of factors for boosting productivity and competitiveness, including institutional quality, infrastructure development, economic stability and market efficiency, are discussed as they are considered to be important dimensions of realizing higher multifactor productivity growth.

Institutions promote productivity and competitiveness by reducing transaction costs which cover search and information costs, negotiation costs, policing and enforcement costs.

According to the WB Governance Indicators, OIC countries show lower level of institutional quality compared to other developing countries. For effectively enhancing productivity and competitiveness, two indicators of governance are of particular importance: regulatory quality and rule of law. In these categories, only around 10 OIC member countries have positive scores. While more than one third of other developing countries and all developed countries have positive scores, the performance of OIC countries are not quite appealing in terms of promoting the development of domestic competitive industries.

A well-functioning and efficient infrastructure is highly instrumental for economic and social development. It increases living standards, attracts more businesses, and supports the production process of agricultural and manufactured goods by reducing costs. It also helps economic integration and facilitates trade as it eases the access to goods and services. In addition to its direct contribution to production process and GDP, infrastructure investment can increase total factor productivity by reducing cost of doing business and allowing effective use of resources.

Productivity growth is higher in countries with an adequate supply of infrastructure services. However, in many countries, enterprises are facing more than one infrastructural challenge. According to the World Bank Enterprises Survey, at least 20% of enterprises in 21 OIC countries identified transportation infrastructure and at least 50% of enterprises in 20 OIC countries identified electricity infrastructure as major constraints for their businesses. As of 2014, 45% of the OIC member countries had poor logistics performance. Between 2000 and 2011, electricity production in OIC countries is almost doubled; however, it is difficult to say whether these increases at aggregate level were enough to promote industrial development and productivity growth at individual country level.

An important element in the policy mix of boosting productivity and competitiveness is the need to maintain macroeconomic stability, since this would create a business environment free of uncertainty and unanticipated costs. A stable macroeconomic environment would entail lower volatility in inflation rate, interest rate, exchange rate and a low fiscal deficit as a percentage of GDP. It would also require less volatility in terms of the size of economic transactions with the rest of the world.

By hampering the efficiency of the price system in effectively allocating resources, unanticipated changes in inflation (high inflation volatility) will lead to production and growth below the real potential and higher unemployment rates due to possible impacts on the labour market. Higher exchange rate volatility may discourage firms from acquiring or seeking to acquire more efficient foreign technologies and continue with less sophisticated domestically available technologies. Firms will refrain from more productive production processes that involve reliance on the imported materials due to price uncertainty. Finally, higher volatility in the financial system may discourage financial intermediaries from giving long-term loans even if project evaluations on the profitability are positive. This will lead to less efficient allocation of resources and lower productivity growth, with implications on overall competitiveness.

An efficient market is critical for ensuring the optimum allocation of resources based on supply and demand conditions in the market. There are three main areas where efficiency is sought: labour market, goods market and financial market. An efficient labour market should ensure that the skill mismatch is at minimum level in the market. In other words, the skills and



capabilities offered by the labour force should match to a large extent with the skills and capabilities needed by enterprises. Moreover, an efficient labour market should ensure that the available labour force is used in most effective way. In the case of goods market efficiency, the right mix of goods and services should be produced and effectively traded in the market. Healthy market competition is important in driving market efficiency and business productivity. Finally, an efficient financial market will ensure allocation of resources to most productive business opportunities; thereby increase overall productivity and competitiveness of an economy.

A flexible labour market, on the other hand, facilitates the adjustment to new economic conditions after any shocks that may arise. Market efficiency is commonly associated with competition, which requires control of abuse of dominant positions, prevention of collusion between firms and removal of market entry barriers. An efficient financial market is required to allocate resources to their most productive uses. For an efficient allocation of resources, prices should reflect all information available and transaction costs should be realistic. If informational and operational efficiency conditions are met, resources will be directed to the places where they will be the most productive and effective.

#### *Identification of Productive Capacities for Competitiveness*

Another important dimension of enhancing productivity and competitiveness is the process of identification of productive capacities. If investments are made in sectors that are to become more competitive and more strategic for the development of an economy, then critical achievements can be made in enhancing overall productivity and competitiveness in medium and long term. An important process of identification is economic diversification, where countries try to position their most competitive advantages through investing in a large variety of fields. Another important factor in identification is the entrepreneurial activities. Diversification can only take place if there are enough entrepreneurs who can take risks to explore new profitable business opportunities.

While lack of diversification in export increases the exposure of countries to adverse shocks and macroeconomic instability, high concentration of economic activity in sectors with limited potential for productivity growth may not bring about much growth and development to the country. Export diversification can be achieved across products or trading partners. When it occurs at product level, it can involve introduction of new product lines or a more balanced mix and higher quality of existing product lines. Producing higher quality varieties of existing products can build on existing comparative advantages. It can boost export revenue potential of countries through the use of more physical- and human-capital intensive production techniques.

Entrepreneurs create a positive externality through bringing new goods and new technology to the market. Encouraging entrepreneurial activity for identifying productive capacities is critical, but improving only procedures is not enough if entrepreneurs are not innovative. Innovative abilities of entrepreneurs should also be improved through investing in skills and education of entrepreneurs. It is innovative entrepreneurship that is most desirable for growth.

## Policy Issues for Structural Transformation

In the light of the above analyses, important policy issues are identified for better performance in enhancing productivity and competitiveness and achieving successful structural transformation towards higher development in OIC countries.

Evidence suggests that reform priorities for better productivity growth differ across countries. Low income countries are particularly in need of improved education and infrastructure, good quality economic institutions, reduced barriers for better market efficiency and effective competitiveness. Low income countries need to achieve rapid accumulation of capital, raising agricultural productivity and technology diffusion in labour intensive industries in order to maintain a dynamic growth path supported by productivity growth.

On the other hand, middle income countries need, among others, effective policies for investment promotion, quality higher education, investment on research and development, deepening of financial markets, more flexible and competitive goods and labour markets. Sectoral reallocation from agriculture to industry and services in these countries may already have taken a long way and these countries may need more efforts to increase their capacity to innovate and apply new knowledge and technologies. Middle income countries need also to achieve a greater flexibility to shift resources across sectors in order to improve productivity and competitiveness. Economic diversification, particularly in resource-rich countries, remains critical to achieve sustained growth through higher productivity and competitiveness levels.

## Public Private Partnership for the Development of Tourism Sector

Like in the case of any other sectors in the economy, the development of sustainable tourism sector, through enhancing long-term quality and competitiveness of tourism destinations, necessitates effective and coordinated involvement of both the public and private sector. However, it is most often the case that these two sectors are working independently, particularly in the developing countries. In this context, the experience has shown that if these two forces come together to work synergistically for the development of the tourism sector, the value could be exponential. The way to make this happen is the effective Public-Private Partnerships (PPPs).

### *International Tourism Worldwide*

Worldwide, international tourism activity has been growing, over the last five decades, at substantial and sustainable rates in terms of both tourist arrivals and tourism receipts. The number of international tourist arrivals worldwide increased from 69.3 million in 1960 to 1087 million in 2013, corresponding to an average annual growth rate of 5.3%. The revenues generated by those tourists, i.e. international tourism receipts in terms of current US dollar prices, increased from \$6.9 billion to \$1,159 billion in the same period, corresponding to an average annual growth rate of 10.2%; a rate which was significantly higher than that of the world economy as a whole.

### *International Tourism in OIC Member Countries*

As a substantial part of the developing countries, international tourism activity in the OIC member countries has been also growing substantially in terms of both tourist arrivals and

tourism receipts. The number of international tourist arrivals into the OIC countries was growing by an average annual growth rate of 4.6% during the period 2008-2010. In 2012, the number of international tourist arrivals in the OIC countries, for which the data are available (27 countries), declined to 157.3 million, corresponding to a decrease by 5.2% over 2011. Consequently, the share of OIC region in the world tourism market decreased slightly to 15.2% in 2012 compared 16.7% in 2011.

Intra-OIC tourist arrivals increased steadily during the period 2008-2011 and reached a peak of 57 million in 2011, corresponding to 35.6% of total OIC international tourist arrivals. In contrast, in 2012, intra-OIC tourist arrivals decreased by 18.7% over the year 2011, to reach 46.3 million, corresponding to a 30.8% share in total OIC international tourist arrivals. On the other hand, intra-OIC tourism receipts reached a peak of \$40.8 billion in 2010, corresponding to 33.9% of the total OIC tourism receipts, before declining in the following two-year period of 2011-2012.

### *The Role of PPP for Development of Tourism Sector*

There is an increasing interest in cooperation between public and private sectors to promote development within a country. In this context, when successfully implemented, PPPs can play an important role in improving attractiveness of a destination, marketing efficiency, productivity as well as overall management of the tourism industry.

PPP's can be attractive to both the government and the private sector. For the government, private financing can support increased infrastructure investment without immediately adding to government borrowing and debt, and can be a source of government revenue. For the private sector, PPP's present business opportunities in areas from which it was in many cases previously excluded as well as expansion of products and services beyond their current capability.

The main area in which public-private partnership has traditionally developed is that of marketing and promotions, because private sector activities are considered to be more entrepreneurial and effective. In addition to this, infrastructure and product development, education and training, financing and investment are other areas where partnership can contribute to development of tourism sector as a competitive industry.

### *Policy Issues for Tourism Development in OIC Member Countries*

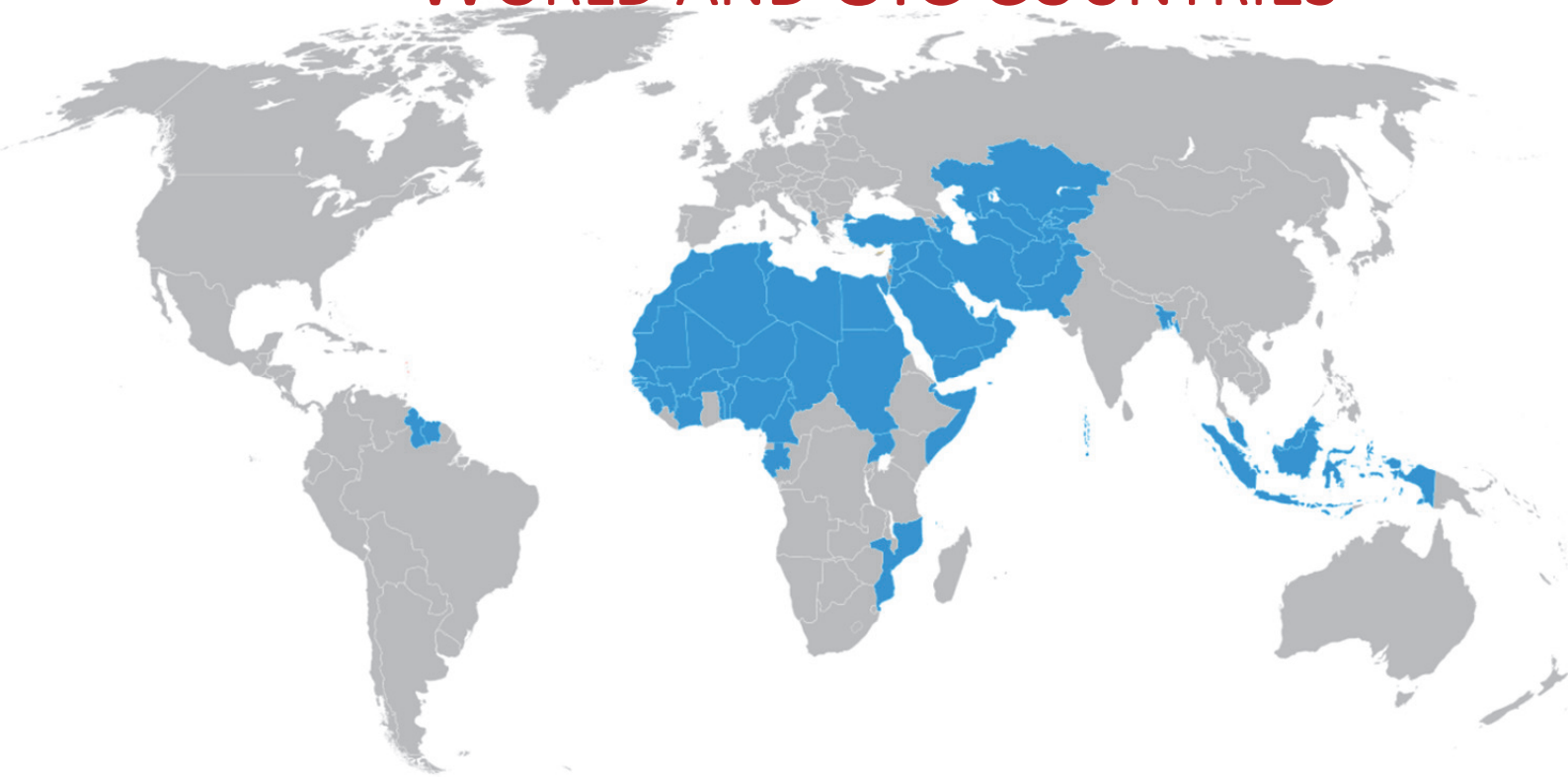
The OIC countries have a high potential for the development of a sustainable international tourism sector. This is particularly true considering their rich and diverse natural, geographic, historical and cultural heritage assets. However, given the modest share of the OIC region in the world tourism market and the concentration of the international tourism activity in only a few OIC countries, it seems that a large part of the tourism potential of the OIC region remains unutilised.

In this fashion, PPPs in tourism industry can be formed to create new products or services, to achieve higher levels of efficiency, to open markets that were previously inaccessible, or to simply pool resources. The key factor leading to PPPs relies on the fact that all partners from the public and private sector wish to benefit from sharing resources and objectives.

# Part I

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## RECENT ECONOMIC DEVELOPMENTS IN THE WORLD AND OIC COUNTRIES



This part includes:

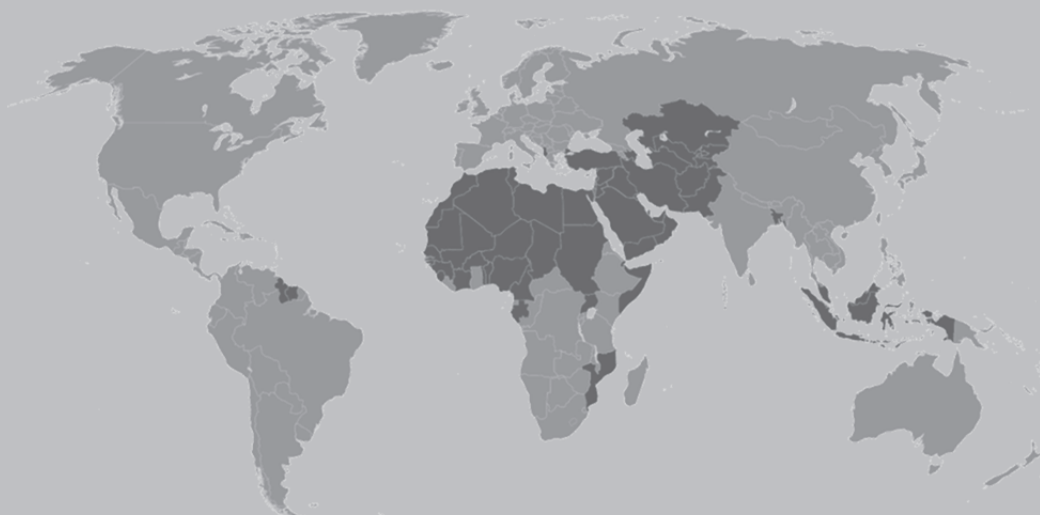
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1. Production, Growth and Employment
2. Trade and Finance

## PART I

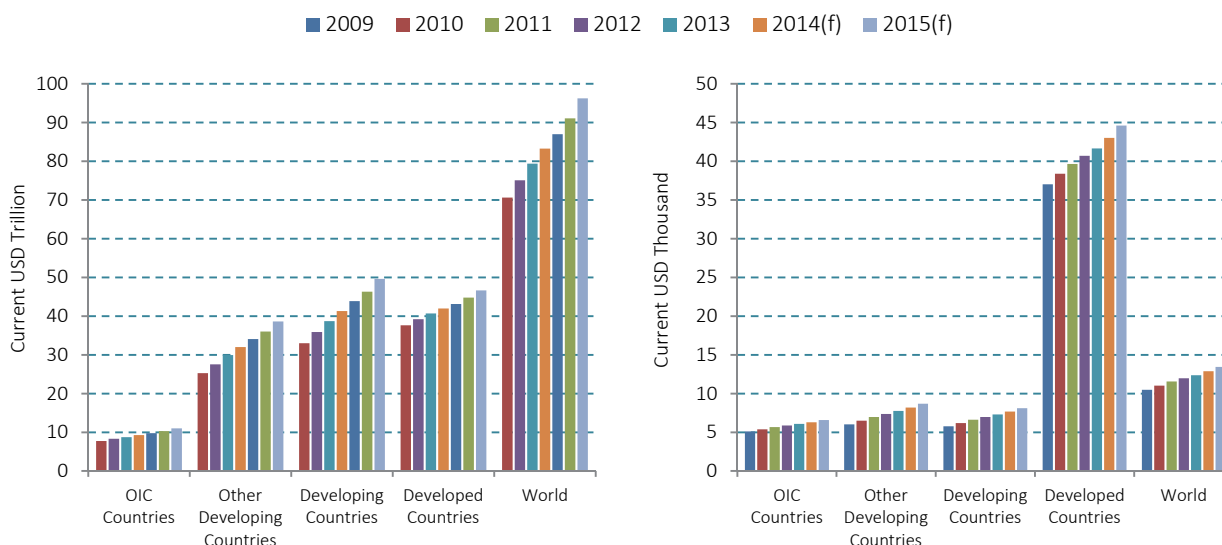
This part analyses the trends in major economic indicators for the OIC member countries, as a group, during the latest five-year period (2009-2013) for which the data are available. It investigates these trends in a comparative manner with their counterparts in the groups of the developed and other developing countries as well as with the world economy as a whole and highlights a number of constraints and challenges confronting the OIC member countries in their efforts to enhance their economic development and progress.

The first chapter of this Part of the Report evaluates the developments in production, growth and employment. This includes GDP, GDP per capita, GDP growth, decomposition of GDP, inflation, fiscal balance, labour force participation and unemployment. The second chapter deals with trade and finance indicators. This include export and import of goods and services, intra-OIC trade, current account balance, foreign direct investment flows, financial sector development, external debt and reserves, and official development assistance and remittances.



# Production, Growth and Employment

**Figure 1.1: Total GDP (left) and GDP per capita (right), based on PPP**



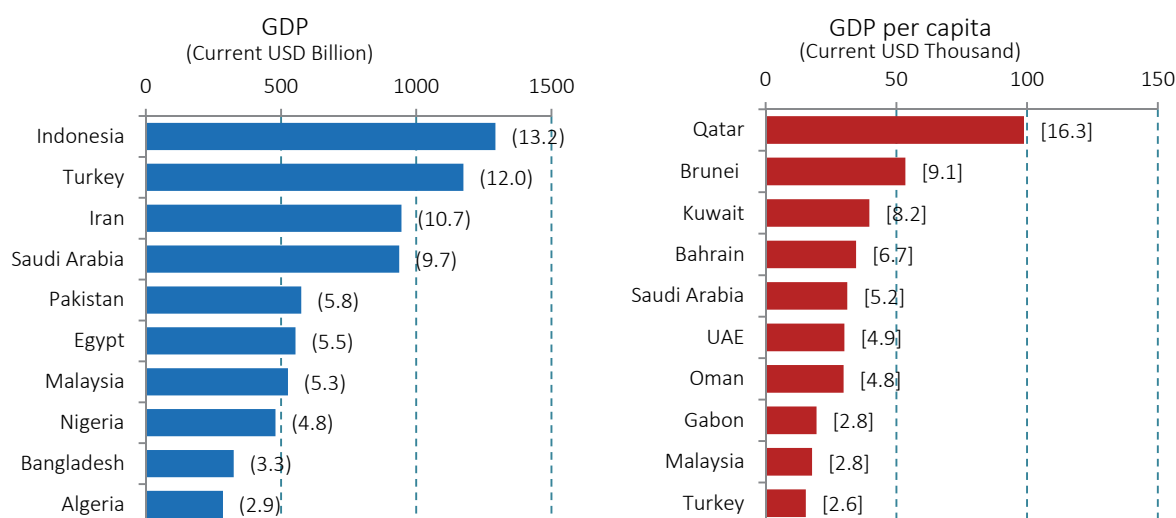
Source: IMF WEO Database April 2014.

**G**lobal GDP – expressed in current USD and based on PPP – has witnessed an increasing trend over the period 2009-2013, reaching \$87.0 trillion in 2013 compared to \$70.6 trillion in 2009 (Figure 1.1), left panel). During the same period, developing countries witnessed more rapid increase in GDP as the total GDP in these countries climbed up from \$33.0 trillion in 2009 to \$43.9 trillion in 2013. On the other hand, developed countries witnessed comparatively a moderate increase as their GDP reached \$43.1 trillion in 2013 compared to \$37.6 trillion in 2009. As a result, for the first time during 2009-2013, developing countries produced more output than the developed countries. The estimates show that the developing countries share in global output is expected to reach 52% by the end of 2015. During the same period, the average GDP per capita in the world – expressed in current USD and based on PPP – has increased continuously and reached \$12,366 in 2013, compared to \$10,495 in 2009 (Figure 1.1, right panel). Meanwhile, in 2013 GDP per capita was recorded at \$41,654 in developed countries and

\$7,310 in developing countries. In other words, developed countries GDP per capita are 6 times higher than the developing countries. This huge gap between developing and developed countries is expected to continue in coming years.

OIC countries also witnessed an increasing trend in economic activity and their GDP increased from \$7.7 trillion in 2009 to \$9.8 trillion in 2013. During the same period, other developing countries experienced a more rapid increase in their output as the total GDP in these countries reached \$34.1 trillion in 2013, a level which is well above the \$25.3 trillion they recorded in 2009. Though the share of OIC countries in the world total GDP remained stable at around 11%, their share in the total GDP of developing countries group has declined steadily and was recorded at 22.3% in 2013, a decrease by one percentage point over the 5-year period under consideration. During the same period, the average GDP *per capita* in the OIC countries has increased continuously and reached \$6,076 in 2013, compared to \$5,110 in 2009 (Figure 1.1, right panel).

**Figure 1.2: Top 10 OIC Countries by GDP and GDP per capita (2013)**



Source: IMF WEO Database April 2014 and SESRIC BASEIND Database. The numbers in round (square) brackets on left-(right-)hand side indicate the share (ratio) of the related country's GDP (GDP per capita) in the overall GDP (to the average GDP per capita) of the OIC countries as a group.

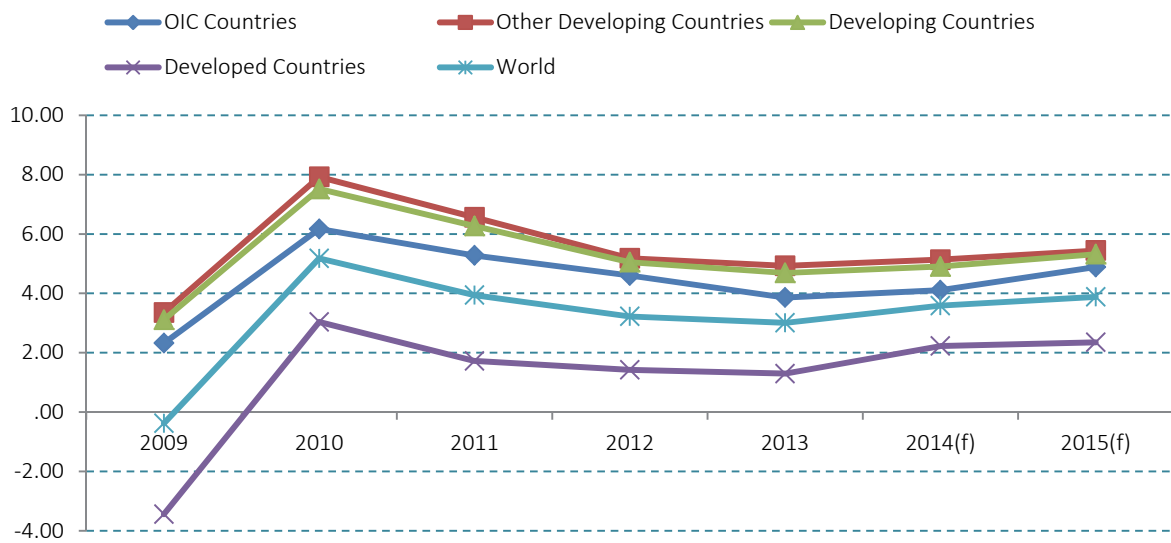
However, the gap between the average **per capita GDP** levels of the OIC member countries and those of other developing countries has widened further. The per capita GDP differential between the two groups in the period 2009-2013 has almost doubled from \$666 to \$1,234. During the same period, the average GDP per capita in the OIC countries has also diverged from the world average as the gap increased from \$5,385 to \$6,290.

Furthermore, it is observed that the total GDP of the OIC countries is still produced by a few member countries. In 2013, the top 10 OIC countries in terms of the volume of GDP produced 72.6% of the total output of OIC countries (Figure 1.2, left panel). Indonesia has the highest share in OIC GDP (13.2%) followed by Turkey (12.0%), Iran (9.7%) and Saudi Arabia (9.6%). The overall economic performance of the group of OIC member countries remained highly dependent on the developments in these ten countries. As a matter of fact, fuel is the main source of export earnings for 4 out of these 10 OIC countries; namely Iran, Saudi Arabia, Nigeria, and Algeria.

Among the OIC countries, Qatar registered the highest GDP per capita in 2013 followed by Brunei, Kuwait and Bahrain (Figure 1.2, right panel). The per capita GDP of Qatar was 16.3 times higher than the average of the OIC countries as a group, a situation which reflects a high level of income disparity among the OIC countries. Among the top 10 OIC countries by GDP per capita 6 are from the Middle East region. Furthermore, Qatar was ranked first and Brunei was ranked 5th among the 186 countries in the world.

The economic slowdown triggered by the economic crisis of 2008 has finally bottomed out in 2010 with global economy growing at an impressive rate of 5.2% compared to -0.4% in 2009. However, non-functioning austerity measures in the Euro zone economies, high fiscal imbalances in the United States and the European Union countries raised fears at a global scale and hampered investment and international trade. As a result, the world **economic growth** rate decreased to 3.9% in 2011. The sovereign debt crisis in the euro area has further hampered the world economic growth in



**Figure 1.3: GDP Growth in the World**

Source: IMF WEO Database April 2014.

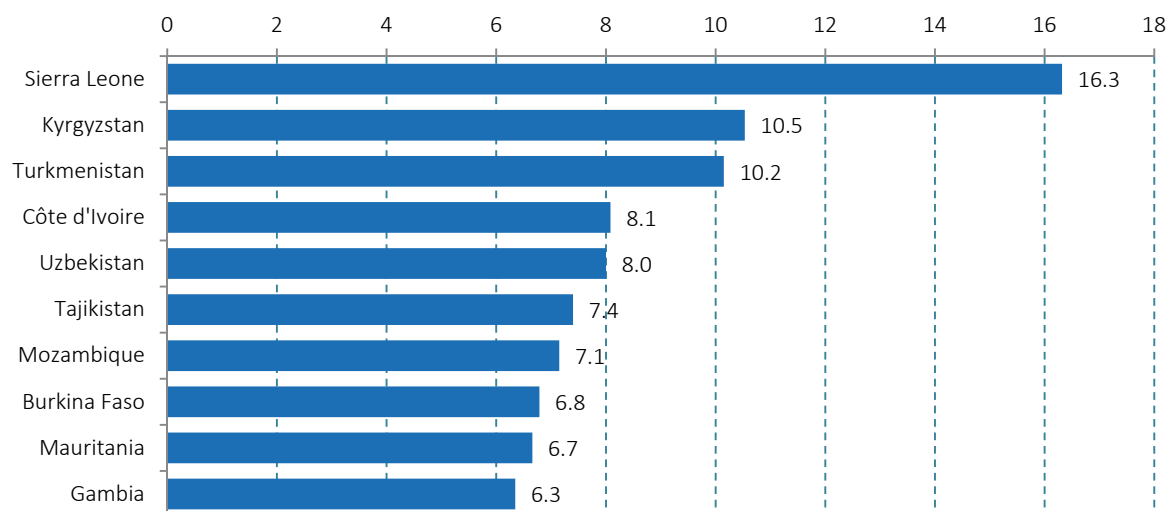
2012, recorded at 3.2%. The slowdown in global economy continued in 2013 with growth rate further plunging down to 3%. After demonstrating signs of recovery at the beginning of 2014, the growth rate of the world economy is predicted to reach 3.6% by the end of the year. The positive economic outlook for advanced economies in 2014 and 2015, the recovery in the Euro Area, United States, United Kingdom, Canada and developing countries seem to fuel the world economic growth. As a result, by following the positive momentum in 2014, the global economy is expected to grow by 3.9% in 2015.

While the recovery in developed countries remained slow, developing countries seem to be the driving force of the global growth both in 2014 and 2015. However, with the recovery in the United States and positive growth rate expectations in the European Union after a zero-growth rate in 2013, the contribution of the

developed countries to the world economic growth is expected to rise in 2014 (Figure 1.3).

Developing countries fueled the world output growth rate since 2010, while major developed economies were contracting. In 2013, developing countries are expected to grow by 4.7%, which is twice the average growth rate of the developed countries. However, as a result of long-lasting painful fiscal and monetary measures, the recovery in developed economies in terms of real GDP growth rate is projected to reach 2.3% in 2015 compared to 2.2% in 2014.

Developing countries are expected to see an increase in the average growth rate that will climb from 4.9% in 2014 to 5.3% in 2015. Overall, as of 2014, the global economic forecasts are more optimistic about the medium and long-run growth rates. In particular, the expected return of global giants with positive growth rates will carry the average global growth rate from 3.6% in 2014 to 3.9% in 2015.

**Figure 1.4: Top 10 OIC Countries in terms of GDP Growth Rate (2013)**

Source: IMF WEO Database April 2014 and SESRIC BASEIND Database.

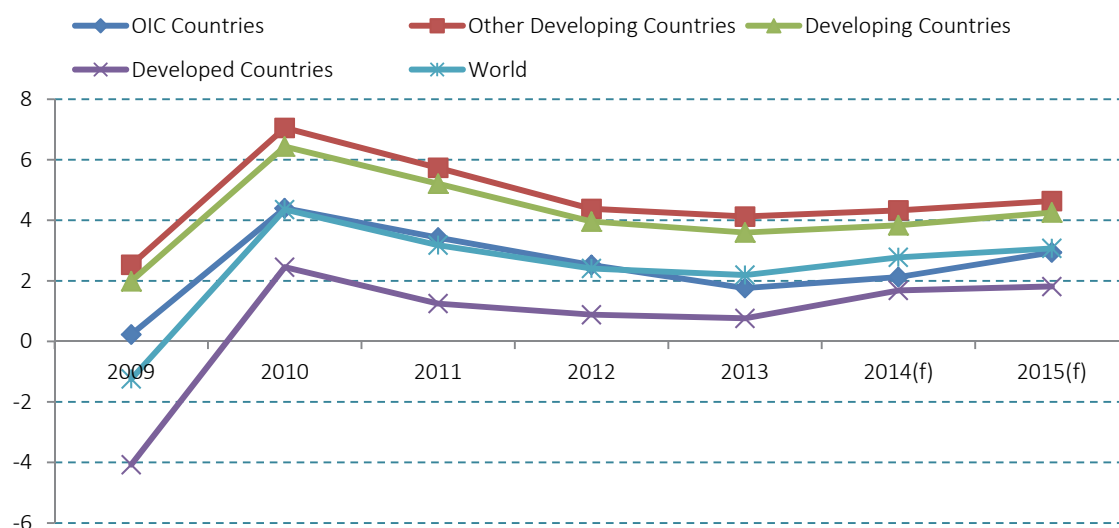
The GDP growth of OIC countries has slowed down to 3.9% in real terms in 2013, as compared to 4.6% in 2012 (Figure 1.3). Although this is in line with the persistent slowdown in across-the-board economic activity, which started to take hold in 2010, the **growth in OIC countries** remained relatively more stable in 2013 – mainly as a result of the smoother economic transitions in some of its rapidly growing major economies such as Indonesia, Turkey and Saudi Arabia. The economic performance of other developing countries, on the other hand, has so far been highly influenced by the pace of growth in the two leading Asian economies, namely China and India. Indeed, the average real GDP growth rates in the other developing countries excluding China and India were below the OIC average during the period 2009-2013. Moving forward, the average rate of growth in the OIC countries will likely experience a recovery in 2014, with average growth rate forecasted to be around 4.1%. This recovery is expected to be consolidated further to 4.9% in 2015. Yet, these figures are still better than the predicted average growth rates for the group of other

developing economies excluding China and India (2.8% for 2014 and 3.4% for 2015), as well as the world average as a whole.

At the individual country level, Sierra Leone, with a remarkable growth rate of 16.3% in 2013, was the fastest growing economy in the group of OIC countries followed by Kyrgyzstan and Turkmenistan (Figure 1.4). Sierra Leone was the second fastest growing economy in the world after South Sudan whereas Kyrgyzstan and Turkmenistan were ranked at 5th and 6th position. On the other hand, all the OIC top-10 fastest growing economies are from Sub-Saharan Africa (6) and Central Asia regions (4). Whereas; five of the OIC LDCs were among the top 10 fastest growing OIC countries in 2013: Sierra Leone, Mozambique, Burkina Faso, Mauritania and Gambia with their real GDP growth rates ranging between 16.3% and 6.3%.

Globally, **GDP per capita** has witnessed significant recovery in 2010, registering a growth rate of 4.4% compared to negative growth rate of 1.2% in 2009. Nevertheless, this recovery was short lived and growth rate plunged to 2.2% in 2013. The global

**Figure 1.5: Real GDP per capita Growth, Annual Percentage Change**



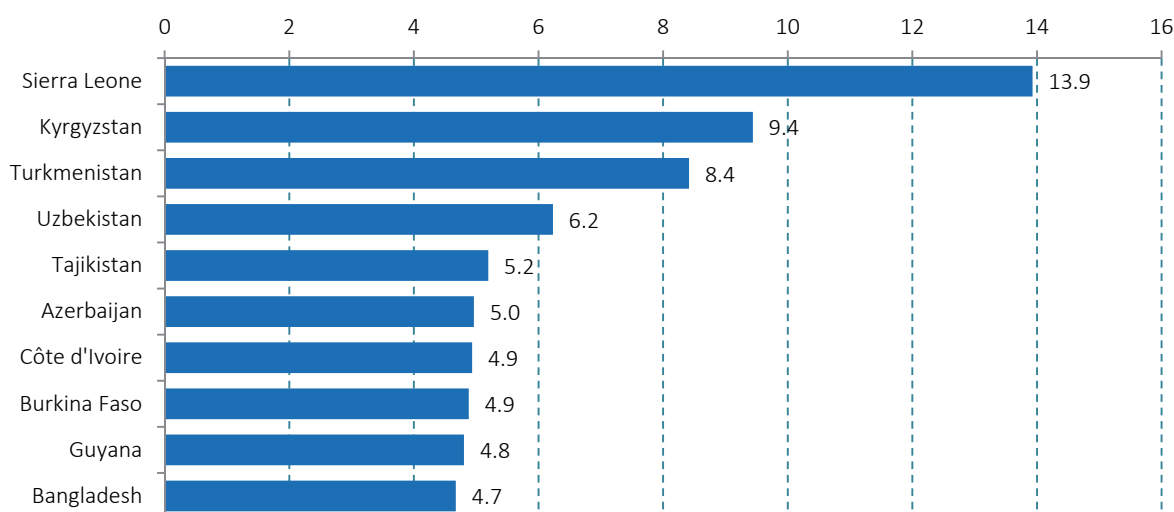
Source: IMF WEO Database April 2014 and SESRIC BASEIND Database.

real GDP per capita is forecasted to grow by 2.8% in 2014 and 3.1% in 2015. As it was in the case of real GDP growth, developing countries remained at the helm and derived the growth in per capita GDP. In 2013, growth in GDP per capita was recorded at 3.6% in developing countries which is expected to increase to 3.8% in 2014 before climbing up to 4.3% in 2015. On the other hand, developed countries witnessed very low growth rate of 0.8% in 2013 which is estimated to increase to 1.7% and 1.8% in 2014 and 2015 respectively.

The average growth rate of the real per capita GDP in the OIC countries has been positive during the period 2009-2013 (Figure 1.5). This implies that the real GDP in the OIC member countries has grown on average faster than the population. This can be interpreted as a real increase in standards of living in the OIC community. However, a similar downward trend, as in the case of real GDP growth, is also observed for real GDP per capita growth rates. OIC countries seem to suffer from this trend as well. Following a short-lived recovery in the aftermath of the global financial crisis, the

average real GDP per capita growth rate in OIC countries had started to decline again starting from 2011 and was recorded at 1.8% in 2013, as compared to 4.4% in 2010. The average real GDP per capita growth rate is forecasted to increase slightly to 2.1% in 2014 and bounce back to 2.9% in 2015. In general, the pace of the real GDP per capita growth in the OIC member countries has been around the same level of the world average and the average of other developing countries excluding China and India, and compared favourably to the pace of growth in the developed countries. Yet, it remained below that of the other developing countries.

At the individual country level, Sierra Leone, with a remarkable per capita GDP growth rate of 13.9% in 2013, was the fastest growing economy in the group of OIC countries followed by Kyrgyzstan and Turkmenistan (Figure 1.6). Sierra Leone was the second fastest growing economy in the world after South Sudan whereas Kyrgyzstan and Turkmenistan were ranked at 4th and 7th position. On the other hand, 5 of the OIC top-10 economies with fastest growth of per capita GDP are from Central Asia and 4 are from

**Figure 1.6: Top 10 OIC Countries in terms of GDP per capita Growth Rate (2013)**

Source: IMF WEO Database April 2014 and SESRIC BASEIND Database.

Sub-Saharan Africa region. Whereas; 3 of the OIC LDCs were among the top 10 OIC countries in 2013: Sierra Leone, Burkina Faso, and Bangladesh with their real per capita GDP growth rates ranging between 13.9% and 4.7%.

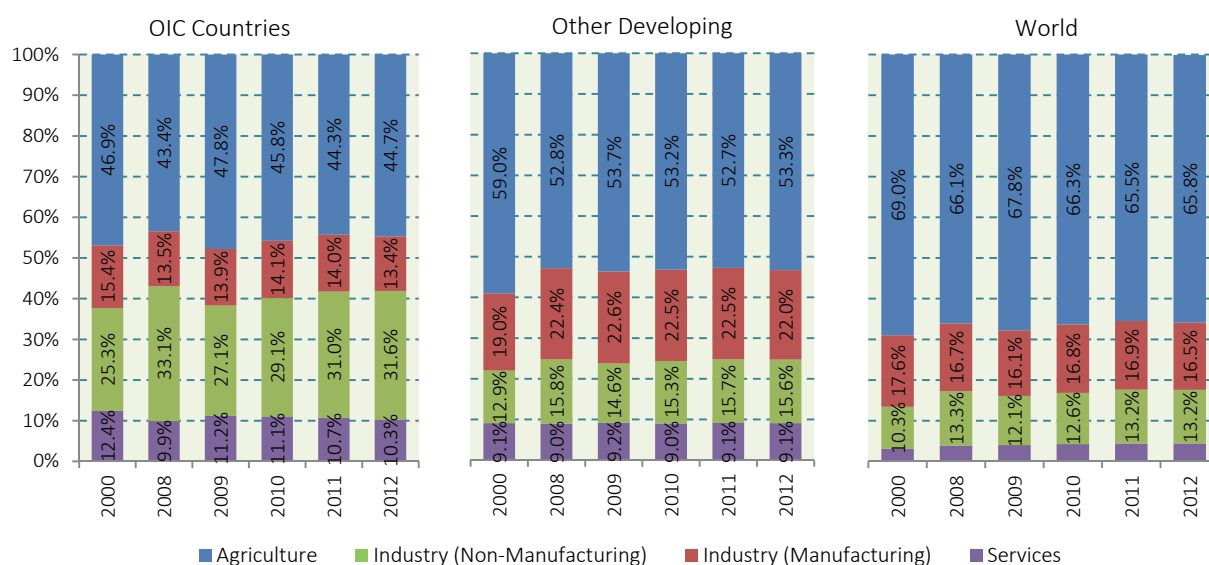
According to the latest estimates, **service sector** has the largest share of global total output (65.8%), followed by the industrial sector (both manufacturing and non-manufacturing) (29.7%), while the share held by agriculture, fishing and forestry is relatively small (4.4%). Over the years, the share of services has registered a decline of 3.2% from 2000 to 2012 whereas the shares of non-manufacturing industry and agriculture sectors increased by 2.9% and 1.3% respectively during the same period (Figure 1.7).

The analysis of value-added by major sectors in the total GDP of the OIC countries and other developing countries also shows a similar structure. Although **agriculture** is widely known to be the primary economic activity and assumed to play a major role in the economies of developing countries, this feature does not stand firm in the case of OIC and other

developing countries as a group. Indeed, the share of agriculture in the total GDP of OIC countries has gradually declined from 12.4% in 2000 to 10.1% in 2008. With the breakout of the global financial crisis and contraction in the share of the non-manufacturing industry, the share of the agricultural sector started to expand to on average above 11% during 2009-2010. With industrial activity recovering, the average share of agriculture in OIC economies contracted to 10.7% in 2011 and to 10.3% in 2012. A more stable trend was observed in other developing countries, where the average share of agriculture in the economy has for long remained slightly above 9% and was recorded at 9.1% in 2011 and 2012.

At the individual country level, in 2012, the agricultural sector accounted for more than one third of the total value-added in 10 OIC member countries; namely in Benin, Burkina Faso, Comoros, Guinea-Bissau, Mali, Niger, Sierra Leone, Somalia, Sudan, and Togo – all of which were listed among the LDCs in the same year according to the classification by the UN. The share of agriculture in GDP varied substantially

**Figure 1.7: Value-added by Major Sectors of the Economy (% of GDP)**



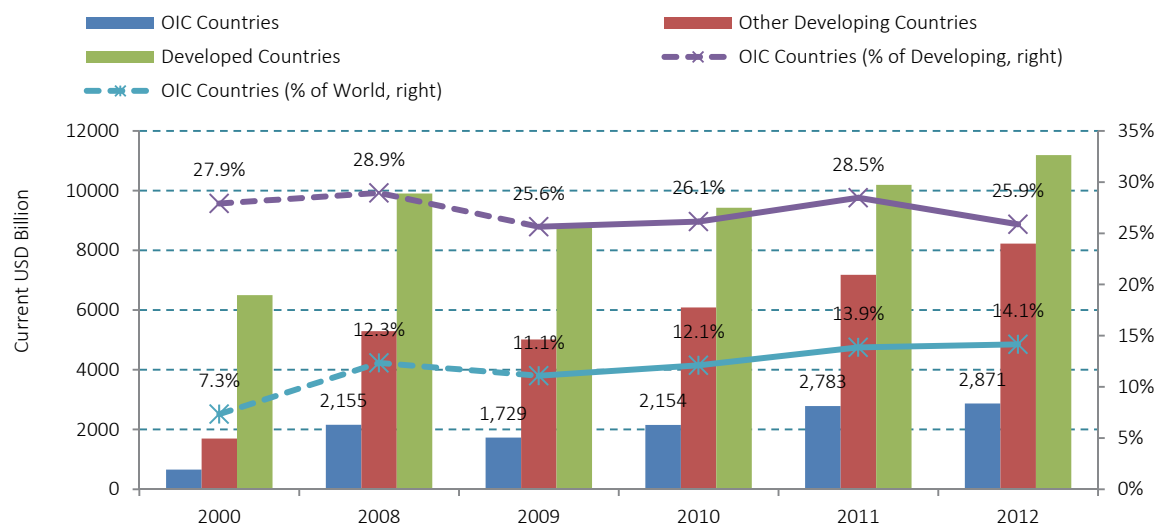
Source: UNSD National Accounts Main Aggregates Database, September 2014.

among the OIC countries, with the highest share of 60.2% in Somalia and the lowest shares below one% in the UAE and Brunei (0.7%), Bahrain and Kuwait (0.3%), and Qatar (0.1%).

In contrast, the services sector continued to play a major role in the economies of many OIC countries as the most important source of income. After a rapid contraction in 2008 with the outbreak of the global financial crisis and the resulting decrease in its share to 43.4%, the average share of the service sector in total GDP of OIC countries increased to 47.8% in 2009, which was mainly offset by a contraction in the non-manufacturing industry. With the recovery in real economic activity from 2010 onwards, the average share of the services sector in OIC economies has returned back to its pre-crisis levels with shares of 44.3% and 44.7% in 2011 and 2012, respectively. In 2012, the contribution of the services sector to the economy was still less than one third of the GDP in 10 OIC member countries; namely in Azerbaijan, Brunei, Chad, Gabon, Kuwait, Nigeria, Oman, Qatar, Saudi Arabia and Somalia (UNSD National Accounts Main Aggregates Database). The share of the

services sector in GDP varied from 27.7% in Brunei to 80.9% in Maldives. As for other developing countries, the services sector continued to account for over half of the total GDP and its share was recorded at 53.3% in 2012.

**Industry sector** – including manufacturing – accounted on average for 45% of the total GDP of the OIC member countries in 2012 (Figure 1.6). Its 46.6% share in 2008 was even more than that of the services sector, however, the situation was reversed in the period 2009-2010 and, with the global slowdown in industrial activity, and the share of the industry sector fell below that of the services sector. However, with the **industrial production** having picked up recently, the sector now contributes to the total GDP of OIC countries on average more than the services sector does. Compared to other developing countries where the industrial sector's contribution to the GDP averaged at 37.6% in 2012, the latter apparently constitutes a larger portion of the economic activity in the OIC member countries.

**Figure 1.8: Industrial Production, Volume and Share (right)**

Source: UNSD National Accounts Main Aggregates Database, September 2014.

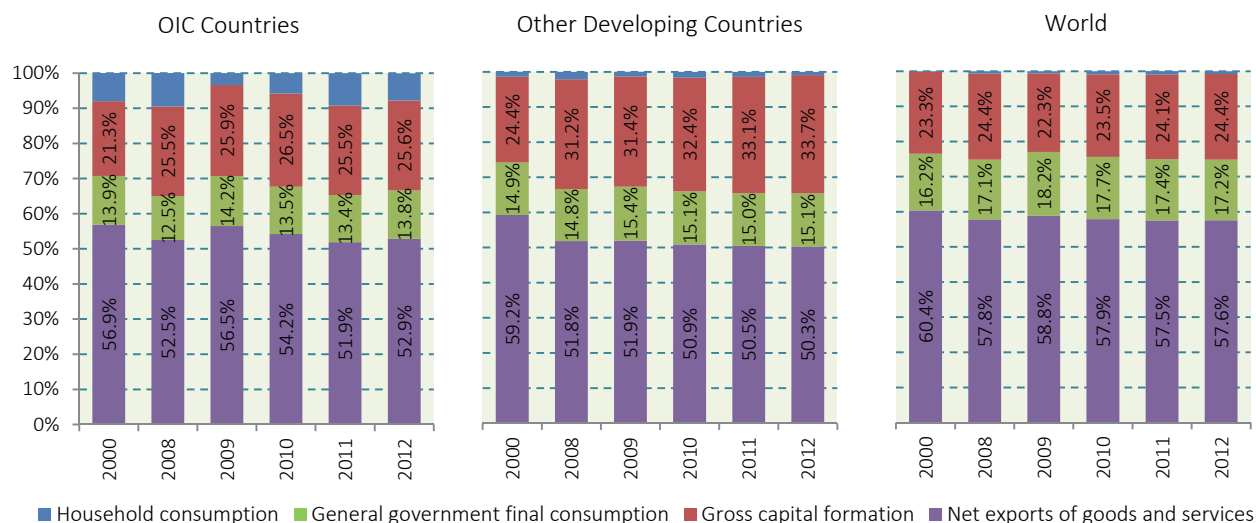
However, the share of industry in the GDP of a country, per se, does not reflect the actual industrialization level of its economy. Particularly in the case of OIC countries, the oil industry accounts for a significant portion of the total value-added of industry sector. Figure 1.6 reveals that, in year 2000, the share of manufacturing sector in total GDP of the OIC countries was 15.4%. In 2008, however, the share of the sector contracted significantly to 13.5% before improving slightly to 13.9% in 2009 and to 14.1% in 2010. Most recently, in 2012, the share of the manufacturing industry stands at 13.4% which is still far below the 15.7% level observed in year 2000. As compared to the OIC countries, the manufacturing sector in other developing countries constitutes significantly larger to their total GDP where its share was recorded at around 22.0% in 2012.

According to the Figure 1.8, the share of the OIC countries as a group in the world total industrial production has reached 14.1% in 2012. This marks 6.8% increase since year 2000. Despite this upward trend, the share of the OIC countries in the total gross fixed capital

formation of the developing countries has been on decline and contracted from 27.9% to 25.9% over the same period. This indicates the relatively poor performance shown by the OIC countries in industrial production, as compared to other developing countries.

*In order to increase their resilience to external shocks and become more competitive, there is apparently an urgent need for OIC countries to strengthen and further enhance economic cooperation more than ever before. There is a need for greater synergy to implement national and cooperation policies as well as comprehensive multilateral initiatives at the OIC level through joint projects and programmes at regional and sub-regional levels.*

**Figure 1.9: GDP by Major Expenditure Items (% of GDP)**



Source: UNSD National Accounts Main Aggregates Database, September 2014.

The analysis of global GDP by major expenditure items reveals that the share of final household and government consumption continued to be the highest in the total GDP over the years. As shown in the Figure 1.9, in 2012 household consumption accounted for the lion share of 57.6% followed by gross capital formation (24.4%) and general government final consumption (17.2%). The share of net exports in total world GDP was negligible. During the period 2000-2012, the shares of government consumption and gross capital formation in total world GDP have increased by 1% whereas the share of household consumption declined by 3%.

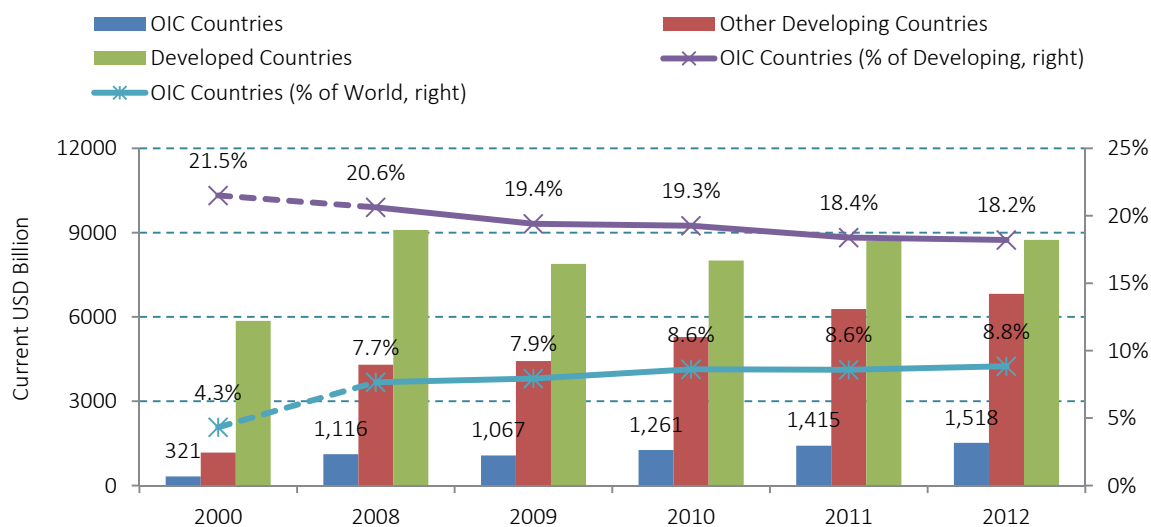
The relative shares of the major expenditure items in the total GDP of OIC and other developing countries registered significant variation from the world. In 2012, final household and general government spending accounted for 66.7% of the total GDP of OIC countries. As constituents of the final consumption expenditure, expenditure by households and governments accounted for 52.9 and 13.8% of the GDP, respectively. These

figures marked an increase in the shares of both consumption types compared to the previous year. Nevertheless, the share of household consumption in the total GDP of the OIC member countries has decreased by 3.6 percentage points since 2009 whereas the share of government spending has contracted by 0.4 percentage points over the same period. The decrease in the share of final consumption was mainly accommodated by an expansion in the share of net exports from 3.4% in 2009 to 7.8% in 2012. On the other hand, the share of final consumption in total GDP of other developing countries was recorded at 65.4% in 2012 and household consumption, with a 50.3% share in GDP, was again the main source of final consumption expenditure in these countries (Figure 1.9).

**Gross capital formation** measures the amount of savings in an economy which are transformed into investments in production. In year 2012, 25.6% of the total GDP generated in the OIC member countries was invested in productive assets (Figure 1.9). In comparison, other developing countries on average channelled



**Figure 1.10: Gross Fixed Capital Formation, Volume and Share (right)**



Source: UNSD National Accounts Main Aggregates Database, September 2014.

33.7% of their GDP into productive investments. The share of gross capital formation in the GDP of OIC countries as a group has increased by 4.3% over its year 2000 level of 21.3%, whereas it increased by as much as 9.3% in the group of other developing countries over the same period. Yet, one can argue that gross capital formation, as an indicator, is flawed primarily by the significant fluctuations in inventories and, most of the time, non-availability of the industry-level inventory information. Gross fixed capital formation, on the other hand, is promoted as being a better indicator on the net additions of productive assets created during a specific year.

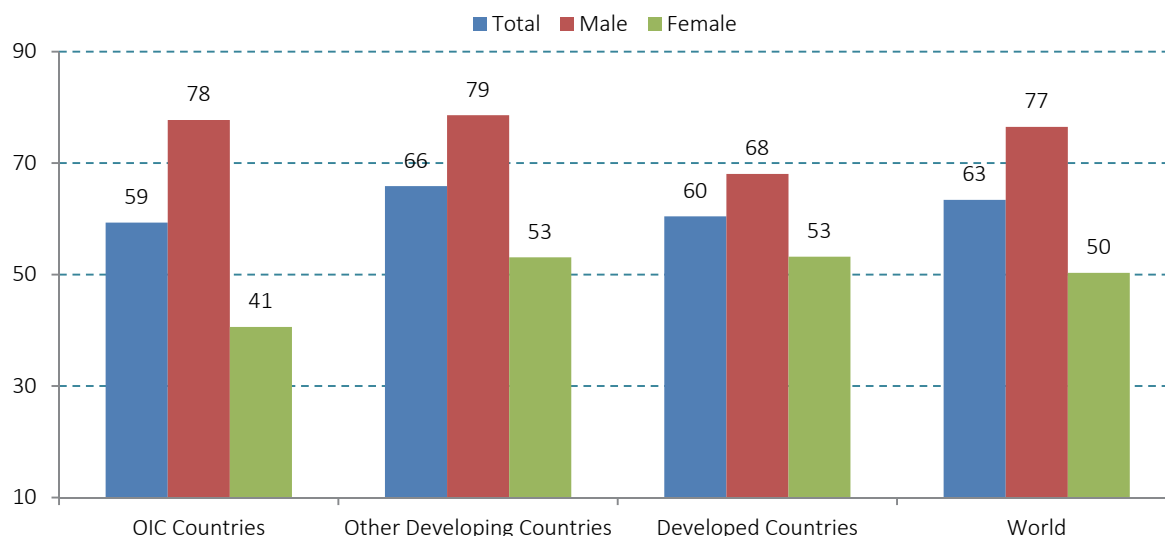
In view of the above argument, Figure 1.10 offers a look at the **gross fixed capital formation** trends in the OIC countries in comparison to other developing as well as developed countries. According to the Figure 1.10, the share of the OIC countries as a whole in world total fixed capital formation reached 8.8% in 2012. This marks 4.5% increase since year 2000. Despite this upward trend, the share of the OIC countries in the total gross fixed capital

formation of the developing countries has been on decline and contracted from 21.5% to 18.2% over the same period. This indicates the relatively poor performance shown by the OIC countries in accumulating investment capital, as compared to other developing countries.

*In their efforts to enhance their economic progress and increase their share in the world economy, the OIC countries are still confronting a number of major challenges. These challenges could underline the broad policy actions for consideration by the member countries in support of their efforts to attain higher levels of economic progress and integration.*



**Figure 1.11: The Labour Force Participation Rates, 2012**



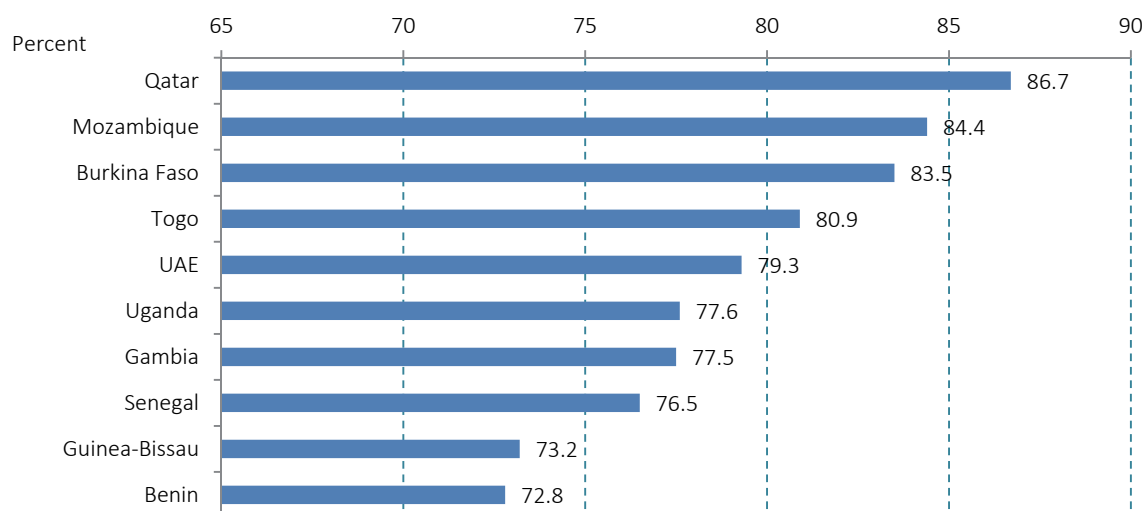
Source: SESRIC staff calculations based on ILO, KILM 8th Edition.

Although unemployment rate is accepted as one of the leading macroeconomic variable measuring the state of the economy, it may not accurately reflect the health of labour market as the definition focus on people seeking employment for pay but not the magnitude of people who are not working actually. Due to these deficiencies, it might be ideal to consider first the **labour force participation rate**, which measures the proportion of people aged 15 and above that engages actively in the labour market, either by working or actively searching for a job. It provides an indication of the relative size of the supply of labour available to engage in the production of goods and services.

As shown in Figure 1.11, in OIC member countries the total labour force participation rate, contrary to other country groups, follows a slightly increasing trend, which stood at 59.3% in 2012 compared to 64.1% in the world, 65.9% in other developing countries and 60.4% in developed countries. In case of labour force participation rate for the male population, OIC

member countries recorded a rate of 77.7% compared to 77.1% in the world, 78.6% in other developing countries and 68.1% in developed countries. Although OIC member countries registered globally comparable performance in terms of total and male labour force participation rates, their performance in case of female labour force participation rate remained significantly lower. As shown in Figure 1.11, in OIC member countries labour force participation rate for the female population was recorded at 40.6%, which is significantly lower than the 51.1% in the world, 53.1% in other developing countries and 53.2% in developed countries.

However, there is an increasing trend in labour force participation rates in OIC countries, particularly in female participation rates. Since 2000, female participation rate increased from 38.4% to 40.6%. An upward trend in this indicator is also observed in the case of developed countries but in other developing countries, female participation shows a declining trend.

**Figure 1.12: Top 10 OIC Member Countries by Labour Force Participation Rate, 2012**

Source: ILO, KILM 8th Edition.

At the individual country level, Qatar registered the highest labour force participation rate of total people aged 15-64 (86.7%) in 2012, followed by Mozambique (84.4%), Burkina Faso (83.5%), Togo (80.9%) and United Arab Emirates (79.3%). It is worth mentioning that with the exception of Qatar and United Arab Emirates, all top 10 performing member countries belong to least developed countries according to UN classification (Figure 1.12). On the other hand, lowest participation rate was recorded in Palestine with 41%. It is followed by Jordan (41.3%), Iraq (42.2%), Syria (43.6%) and Algeria (43.7%). At the global level, with respect to labour force participation rate, Qatar is ranked at 3rd, Burkina Faso at 8th and Mozambique at 10th position. It is also worth to mention that 13 of 20 countries with lowest participation rates in 2012 are the OIC member countries.

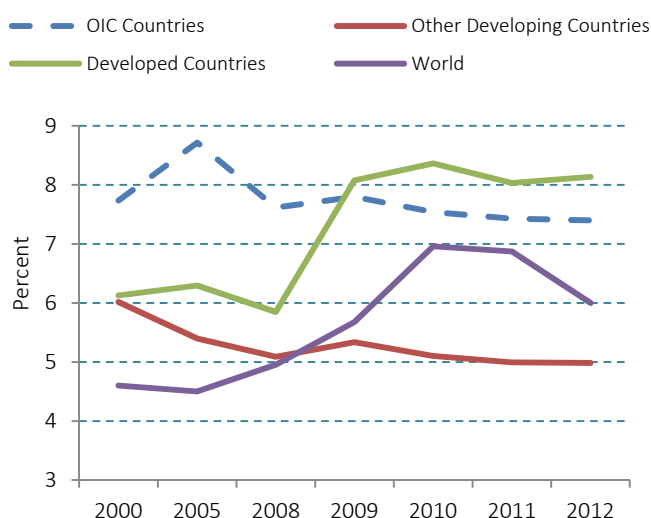
**U**nemployment remained one of the most challenging issues across the globe. According to the ILO Global Employment Trends 2014 report, almost 202 million people were unemployed in 2013 around the world, an increase of almost 5 million

compared with the year before. This reflects the fact that employment is not expanding sufficiently fast to keep up with the growing labour force. Whereas, 23 million people were estimated to be dropped out of the labour market due to discouragement and rising long-term unemployment.

According to the same report, the global unemployment rate remained at 6.0% of the global labour force, unchanged from 2012. The number of unemployed people around the world was estimated at 201.8 million in 2013, an increase of 4.9 million from a revised 196.9 million in the previous year. There were 31.8 million more unemployed persons around the world in 2013 than in 2007, prior to the onset of the global economic crisis. In spite of some positive expectations about world economy for 2013–14, little improvement is expected in the global labour market in 2014, with the global unemployment rate ticking up to 6.1% and the number of unemployed people rising by a further 4.2 million.

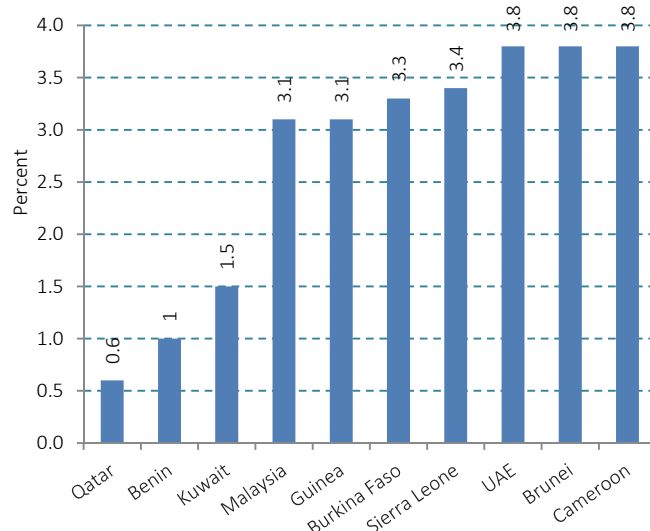
OIC countries recorded significantly higher average unemployment rates compared to the

**Figure 1.13: Total Unemployment Rate (Percentage of Total Labour Force)**



Source: SESRIC staff calculations based on ILO, KILM 8th Edition.

**Figure 1.14: Top 10 Countries with Lowest Unemployment Rates**



world, developed and other developing countries during the period 2000-2012 (Figure 1.13). During this period, average unemployment rate in OIC countries changed between 7.6% and 8.8%. After the global financial crisis, unemployment rates in developed countries increased from a level below 6% to over 8%. During the post-crisis period (2009-2012), average unemployment rate in developed countries remained higher than the rate in OIC countries. Average unemployment rate in other developing countries remained significantly lower (around 2-3%) than the OIC average during the whole period under consideration.

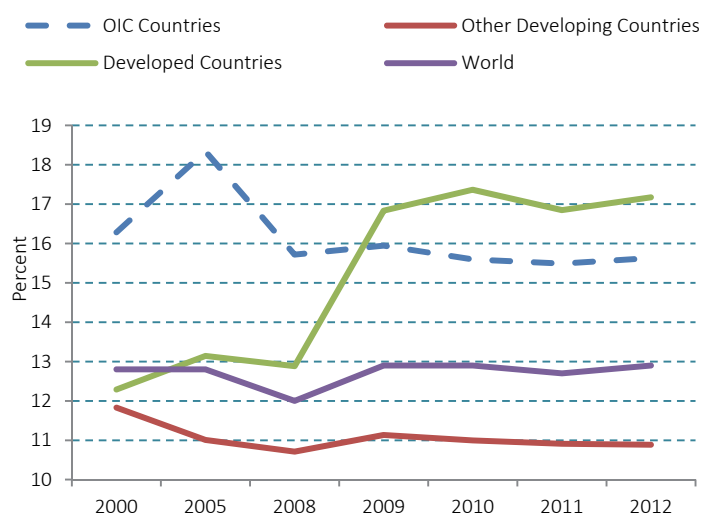
Unemployment rates for male are commonly lower than the rates for female in all country groups (SESRIC, 2014). Despite significant improvement since 2005, female unemployment in OIC countries remains highest with 9.1% in 2012. It is estimated at 5.2% in other developing countries and 8.1% in developed countries for the same year. Male unemployment in OIC countries has decreased from 7.7% in 2005 to 6.5% in 2012 and from 5.2% to 4.8% in other

developing countries during the same period. On the other hand, there is an upward trend in male unemployment rates in developed countries, which increased from 6.1% in 2005 to 8.2% in 2012.

At the individual country level, unemployment rates varied among OIC countries (Figure 1.14). The unemployed people constituted less than one 1% of total labour force in Qatar (0.6%), which is also the lowest rate in the world. Benin (1%) and Kuwait (1.5%) are also among the ten countries in the world with lowest unemployment rates. They are followed by Malaysia (3.1%) and Guinea (3.1%). However, together with Macedonia, Mauritania (31%) is the country with highest unemployment rate in the world. Unemployment is also serious concern in Palestine (23%), Guyana (21.7%), Gabon (20.3%) and Yemen (17.6%).

Youth (aged 15 to 24 years) continued to suffer from lack of decent job opportunities across the globe. According to the latest estimates, some 74.5 million young people were unemployed in 2013; that is almost 1 million more than in 2012. There were 37.1 million fewer young people in

**Figure 1.15: Youth Unemployment Rate**



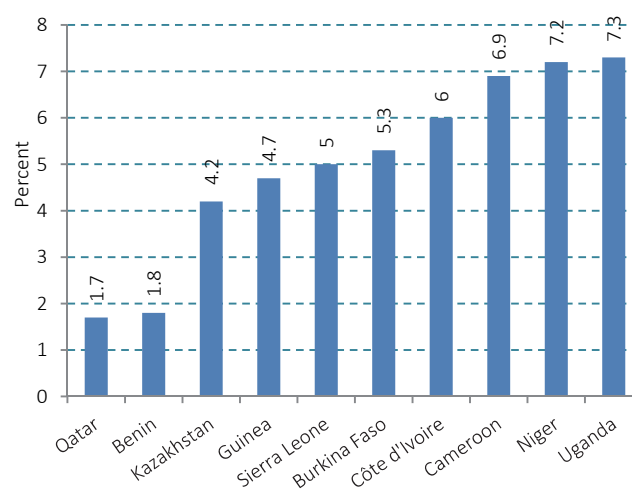
Source: SESRIC staff calculations based on ILO, KILM 8th Edition.

employment in 2013 than in 2007, while the global youth population declined by only 8.1 million over the same period. The global **youth unemployment** rate has reached 13.1%, which is almost three times as high as the adult unemployment rate (ILO, 2014). It is particularly high in the Middle East (27.2%) and North Africa (29.4%).

The figures on youth unemployment in OIC countries are even less promising. It remained constantly above 16% and also well above the averages of other developing and developed countries until the global financial crisis in 2008, but then it decreased to below 16%. After the crisis, the problem of youth unemployment in developed countries became even more serious compared to that in OIC countries (Figure 1.15). As of 2012, youth unemployment in OIC countries estimated at 15.6%, in developed countries at 17.2% and in other developing countries at 10.9%.

As in other major labour market indicators, despite some improvement since 2005, female unemployment among young people is highest in OIC countries. It fell to 17.6% in 2012 from its

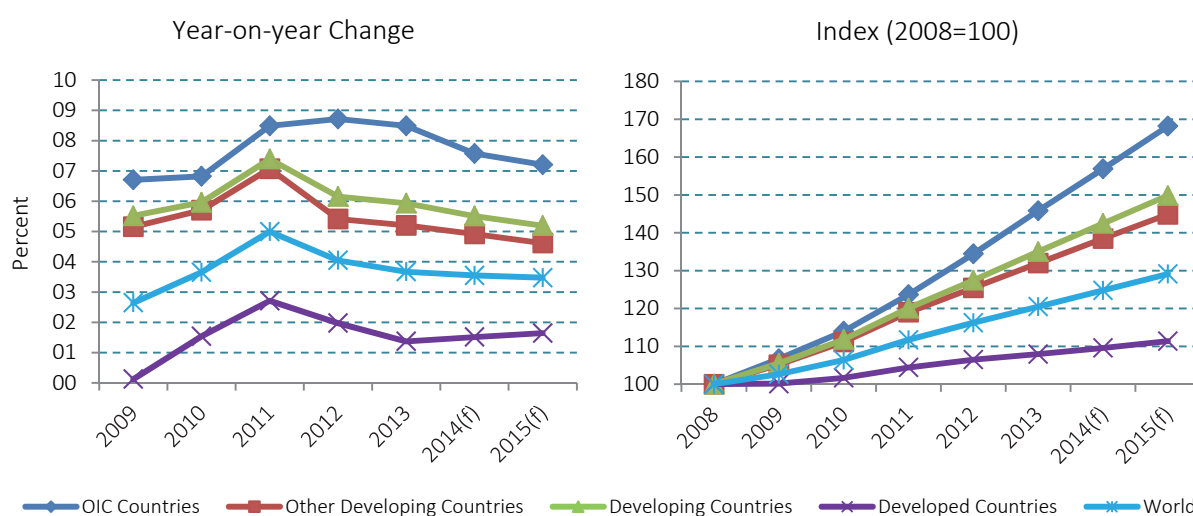
**Figure 1.16: Top 10 Countries with Lowest Rates of Youth Unemployment**



Source: ILO, KILM 8th Edition.

level of 21.3% in 2005. While female unemployment among youth has been decreasing in other developing countries during the period under consideration, it followed an upward trend in developed countries. As of 2012, it was estimated at 11.1% in other developing countries and 15.8% in developed countries. With respect to male unemployment among youth as of 2012, it decreased to 14.5% in OIC countries and 10.7% in other developing countries, but increased to 18.4% in developed countries (SESRIC, 2014).

*More educated youth may not possess the right skills to qualify for the existing and potential job openings, creating further challenges for education and vocational training systems. In order to tackle such challenges, proper labour market information is required to avoid skill mismatch in the labour market and for effective educational and training systems.*

**Figure 1.17: Annual Average Inflation (Consumer Prices)**

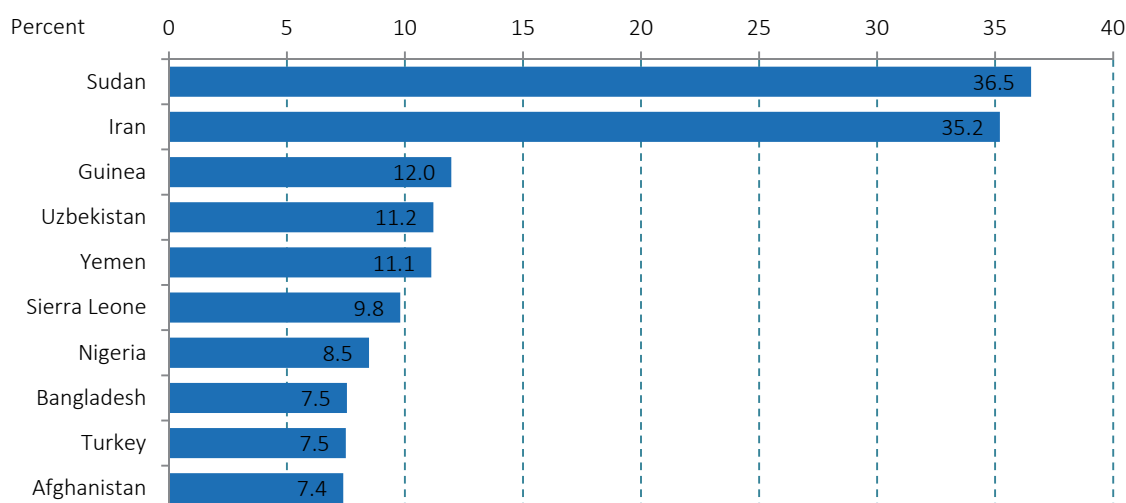
Source: IMF WEO Database April 2014 and SESRIC BASEIND Database.

There are again wide discrepancies in youth unemployment rates across OIC countries. Qatar (1.7%) and Benin (1.8%) are the countries with lowest unemployment rates in 2012, which are also among top three countries in the world (Figure 1.16). Kazakhstan (4.2%), Guinea (4.7%) and Sierra Leone (5%) were also recorded to have low youth unemployment rates. In contrast, the highest youth unemployment rate was estimated in Mauritania (45.3%), followed by Guyana (42%), Gabon (36.8%), Egypt (35.7%) and Yemen (34.8%). In 24 OIC countries, youth unemployment rate was above 20% and in 33 countries above the world average of 12.9% in 2012.

**B**ecause of the supply-side shocks, global inflation increased to 5.0% in 2011. With the tightening fiscal policies and limited monetary expansion in accordance with the output growth seem to stabilize the consumer prices on average in the world. As a result, inflation rate decreased to 4.0% in 2012 and 3.7% in 2013, and it is expected to be around 3.5% in 2014 and 2015.

As seen in Figure 1.17, price volatility is not foreseen to be a major concern for developed and developing countries. In the aftermath of the crisis, developed countries did not follow an uncontrolled monetary expansion, despite the existence of high pressure from public. As a result, the change in consumer prices will remain low and the inflation rate is expected to be 1.5 and 1.6% in 2014 and 2015, respectively. In developing countries, the inflation rate decreased from 7.4% in 2011 to 5.9% in 2013. The expected inflation in 2014 and 2015 is 5.5% and 5.2% respectively.

In the OIC countries, average inflation rate has been significantly higher than the average of the developed and developing economies. In line with the global trends, inflation in the OIC countries climbed to 8.7% in 2012 before moderately declining to 8.5% in 2013. The overall inflation figures marked an increase of 45.8% in consumer prices in the OIC countries during the period under consideration (Figure 1.17, right). This is well above the average increase recorded in other developing countries

**Figure 1.18: Top 10 OIC Countries by Annual Average Inflation (2013)**

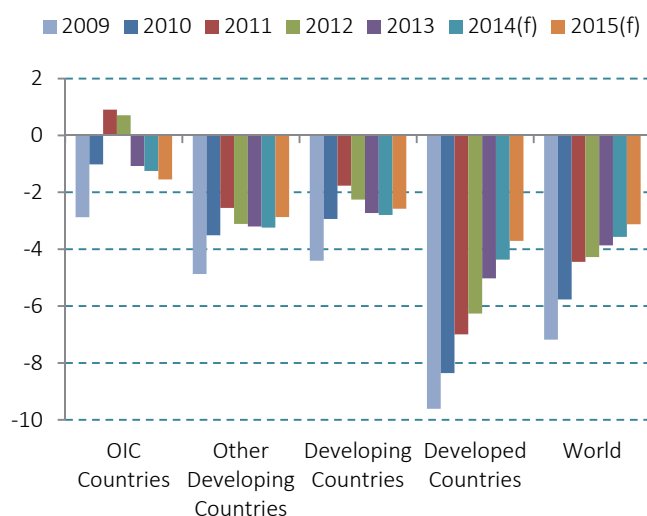
Source: IMF WEO Database April 2014 and SESRIC BASEIND Database.

(32%) as well as the world average (20.5%) in the same period.

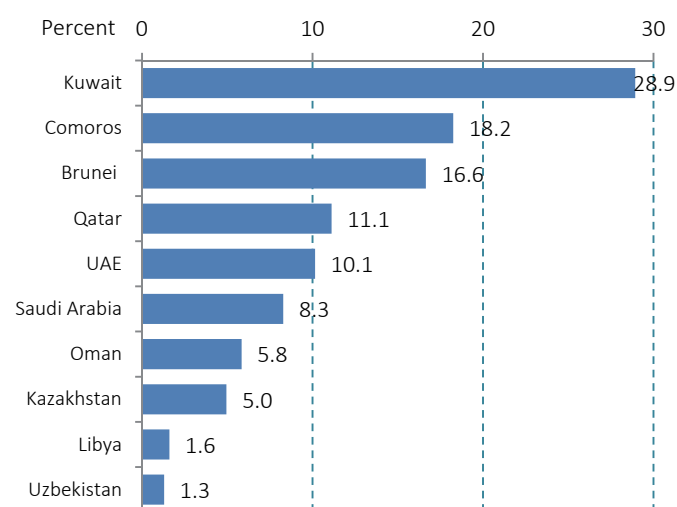
In the short-term outlook, inflationary pressures are projected to remain contained in the OIC countries, supported by the recent slowdown and lower food and energy prices. The forecasts show that the growth in average consumer prices in the OIC countries will decelerate to 7.6% in 2014 and a further deceleration to 7.2% is expected for 2015 (Figure 1.17, left).

At the individual OIC country level, Sudan recorded the highest average consumer prices inflation rate of 36.5% in 2013, which was also the 2nd highest in the world (Figure 1.18). Afghanistan, with an average inflation rate of 7.4%, was ranked 10<sup>th</sup> within the OIC group and 31<sup>st</sup> in the world.

High levels of **unemployment**, especially the youth unemployment, remain as a major problem and challenge facing both developed and developing countries, including OIC members. In this regard, OIC member countries should focus on capacity building by taking necessary policy actions to develop and sustain an effective Vocational Education and Training (VET) system. Furthermore, efforts should be made to promote entrepreneurship and encourage self-employment through innovative approaches.

**Figure 1.19: Fiscal Balances (% of GDP)**

Source: IMF WEO Database April 2014 and SESRIC BASEIND Database.

**Figure 1.20: Top 10 OIC Countries by Fiscal Balance % of GDP (2013)**

Latest statistics show that the fiscal tightening policies especially in developed countries have achieved the expected effect and global fiscal balances are improving. As shown in Figure 1.19, World fiscal balance deficit as a percentage of GDP witnessed a declining trend from -7.2% in 2009 to -3.9% in 2013. The forecast shows that a further decrease is expected in coming years where the ratio is projected at -3.6% for 2014 and -3.1% for 2015. A similar trend is being observed in the developed countries group where fiscal balance deficit as % of GDP has declined from -9.6% in 2009 to -5.0% in 2013. This ratio is expected to be -4.4% in 2014 and -3.7% in 2015 for these countries. Developing countries have also recorded negative fiscal balances but are in relatively better position than the developed countries. In 2013, the ratio was observed as -2.7% for developing countries group and it is expected to be -2.8% and 2.6% in 2014 and 2015, respectively.

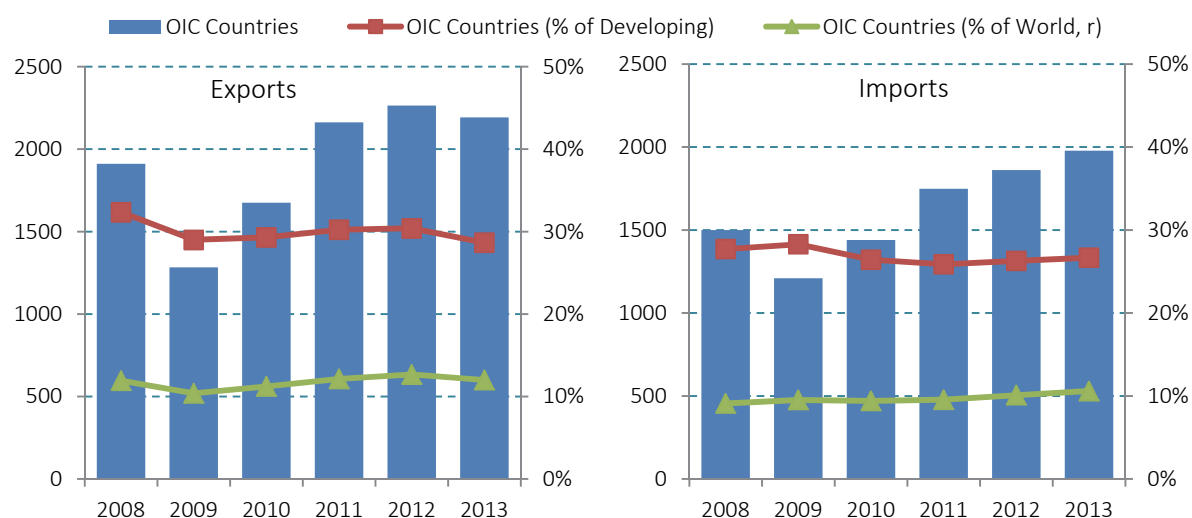
During the period under consideration, OIC member countries outperformed all other country groups and registered comparatively

very low negative fiscal balances. In fact, OIC countries registered fiscal balance surplus for year 2011 and 2012 before it decreased to negative territory. In 2013, OIC countries recorded fiscal balance deficit of -1.1% of GDP. The fiscal deficit is expected to increase slightly to -1.3% in 2014 and -1.5% in 2015.

At the individual country level, 13 OIC member countries, out of the 54 member countries, for which data are available, recorded fiscal balance surplus in 2013 (Figure 1.20). Among these countries, highest fiscal surplus was recorded by Kuwait (28.9%), followed by Comoros (18.2%), Brunei (16.6%), Qatar (11.1%) and United Arab Emirates (10.1%). All OIC top 10 countries were ranked among the world top 20 countries with respect to fiscal balance surplus. Kuwait was ranked 2nd in the world whereas Comoros and Brunei were ranked 3<sup>rd</sup> and 4<sup>th</sup>, respectively.

# Trade and Finance



**Figure 2.1: Merchandise Exports and Imports**

Source: IMF Directions of Trade Statistics (DOTS).

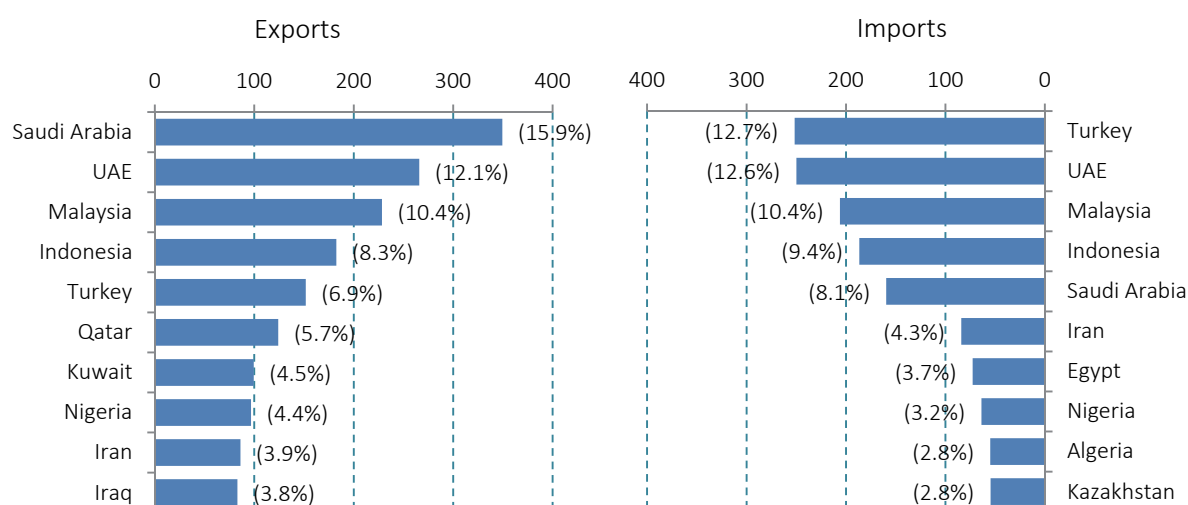
According to the IMF Directions of Trade Statistics (DOTS), the total value of world **merchandise exports** was recorded at US\$ 18.3 trillion in 2013, as compared to US\$ 17.9 trillion in 2012. The 2% increase, despite comparing favourably to last year's increase, is still much lower than the 20% annual average growth observed in years 2010 and 2011.

After the sharp fall in 2009, from \$1.9 trillion to US\$ 1.3 trillion, total merchandise exports from OIC countries increased significantly and reached US\$ 1.7 trillion in 2010 (Figure 2.1, left). Pursuing a continuous upward trend till 2012, merchandise exports from OIC countries reached their historically highest level of US\$ 2.3 trillion in 2012, surpassing the pre-crisis peak of US\$ 1.9 trillion observed in 2008. This upward trend was stronger than those observed in other developing countries and the world as a whole, resulting in an increase in the shares of OIC countries in total developing country and world exports. In 2013, however, total merchandise exports from OIC countries fell to US\$ 2.2 trillion. Accordingly, the share of OIC countries in total exports of developing countries

contracted to 28.7% in the same year, compared to 30.4% in 2012, and continued to remain below its pre-crisis level of 32.4% observed in 2008. OIC countries' collective share in total world merchandise exports also followed a similar trend between 2012 and 2013 and decreased to 12 % in 2013, following the recent peak of 12.7% in 2012. Moving forward, to achieve long-term sustainable growth in merchandise trade and higher share in total world exports, OIC countries will apparently need more competitive economic sectors with significant diversification levels and higher technological intensity.

On the other hand, total **merchandise imports** of OIC countries experienced a stronger post-crisis bounce-back and increased from \$1.2 trillion in 2009 to \$2.0 trillion in 2013 (Figure 2.1, right), recording a double-digit compound annual increase during this period. The share of OIC countries in global merchandise imports continued to expand, though at a slower pace, throughout the period under consideration and reached 10.6% in 2013, compared to 9.1% in 2008. Their share in total developing country

**Figure 2.2: Top OIC Merchandise Exporters and Importers**



Source: IMF Directions of Trade Statistics (DOTS).

merchandise imports, on the other hand, was recorded at 26.7% in 2013, sustaining its expansion for two years in a row since 2011.

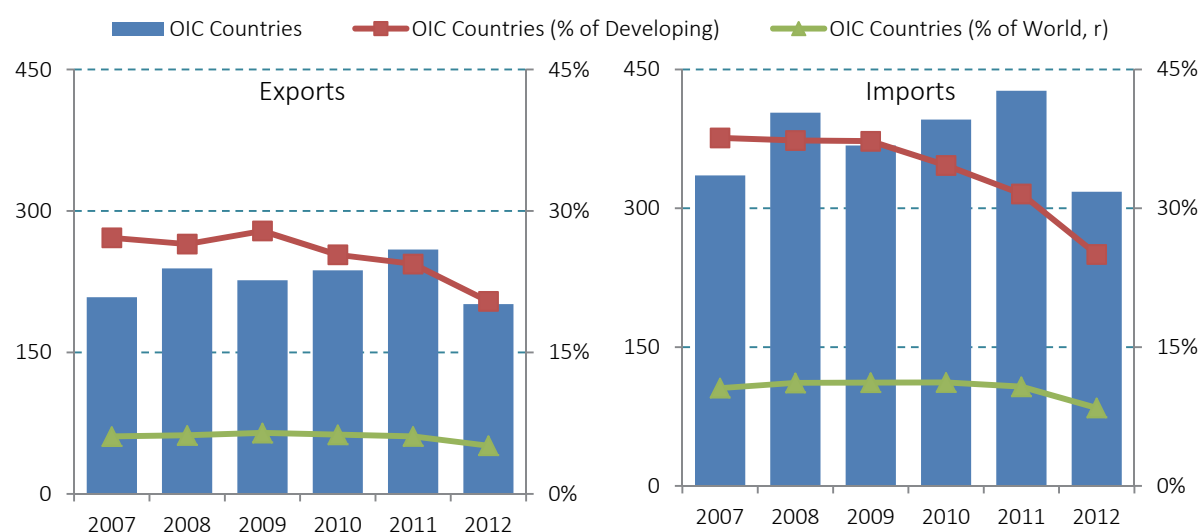
In terms of the shares of the individual member countries in total merchandise exports from the OIC region, it has been observed that the bulk of total exports from the OIC countries continued to be concentrated in a few countries (Figure 2.2, left). In 2013, the top 5 largest OIC exporters accounted for 53.7% of total merchandise exports of all member countries whereas the top 10 countries accounted for 76.1%. Saudi Arabia, with US\$ 349 billion of merchandise exports and 15.9% share in total OIC exports, became once again the largest exporter in 2013. It was followed by the United Arab Emirates (US\$ 266 billion, 12.1%), Malaysia (US\$ 228 billion, 10.4%), Indonesia (US\$ 183 billion, 8.3%) and Turkey (US\$ 152 billion, 6.9%).

As in the case of exports, merchandise imports of OIC countries were also heavily concentrated in a few countries. As depicted in the right panel of Figure 2.2, with US\$ 252 billion and US\$ 250 billion of imports, Turkey and the United Arab Emirates, respectively, took the lead in 2013 in

terms of monetary volume of merchandise imports and together accounted for 25.4% of total OIC merchandise imports. They were followed by Malaysia (US\$ 206 billion, 10.4%), Indonesia (US\$ 187 billion, 9.4%) and Saudi Arabia (US\$ 160 billion, 8.1%) which collectively accounted for a further 27.9% share in the OIC merchandise imports. Again, the top 5 OIC importers accounted for 53.3% of total OIC merchandise imports, whereas the top 10 countries accounted for 69.9%.

To sustain long-term economic growth, OIC countries will need to reduce the high reliance on exports of mineral fuels and non-fuel primary commodities, which involve the least technological intensity, and devise and implement specific policies for adopting more advanced manufacturing methods to increase the share of more technology intensive commodities in exports. This is also necessary for increasing competitiveness of tradable products in international export markets.

**Figure 2.3: Services Exports and Imports (US\$ Billion)**



Source: UN Service Trade Database.

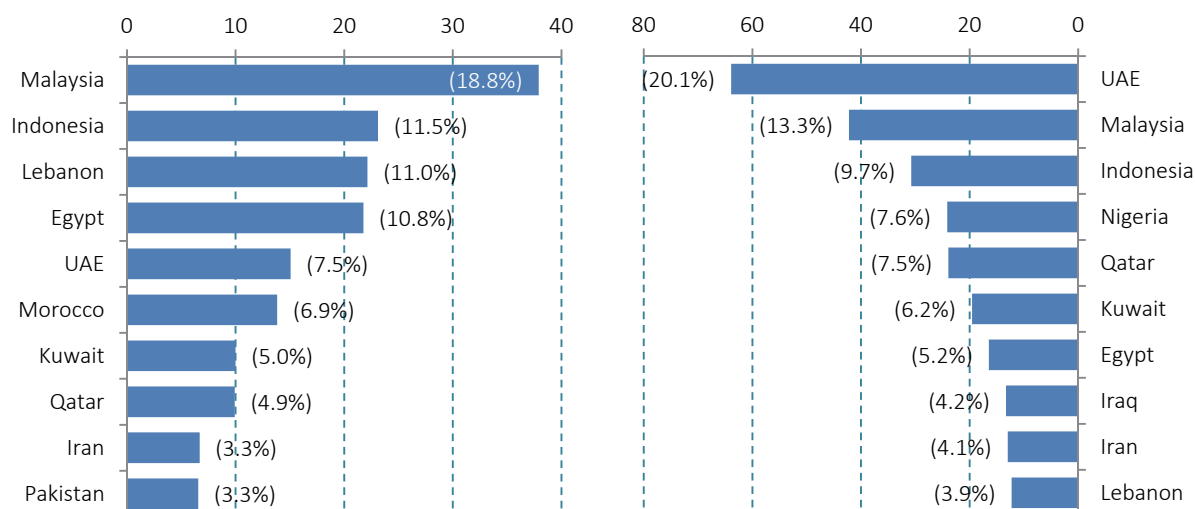
The services sector plays an increasingly important role in the global economy and the growth and development of countries. It is also a crucial component in poverty reduction and access to basic services, including education, water and health services. The services sector has emerged as the largest segment of the economy, contributing growing shares in gross domestic product (GDP), trade and employment. According to 2014 editions of the World Bank's World Development Indicators and United Nations' National Accounts Main Aggregates Databases the services sector accounted on average for 65%-70% of the global value-added during 2011-2012 and it is expanding more rapidly than the other two main sectors of the economy, namely, agriculture and the industry. The sector accounts for 44% of employment worldwide, and trade in services constitutes nearly 20% of world trade of goods and services, with two thirds of global foreign direct investment (FDI) flowing into the sector (UNCTAD, 2013).

Yet these figures do not translate into a strong presence in world trade. In 2012, world **services exports** totalled only US\$ 3.8 trillion, compared to

US\$ 17.9 trillion of merchandise exports in the same year. As a group, the OIC countries remained net importers of services. Collectively, they exported US\$ 201 billion worth of services in 2012, whereas the OIC services imports were recorded at US\$ 318 billion in the same year (Figure 2.3). The OIC services trade volume exhibited a significant decrease over its 2011 value, when the OIC exports and imports of services were recorded at US\$ 259 billion and US\$ 427 billion, respectively.

The share of OIC member countries in both services exports and imports of developing countries have followed a downward trend during the period under consideration (Figure 2.3). While OIC countries accounted for 27.9% and 37.2% shares in developing country services exports and imports in 2009, respectively, these shares dropped to 20.4% and 25.0% in 2012. The collective share of OIC member countries in the total world services exports and imports, again, fell from 6.5% and 11.2% in 2009, respectively, to 5.1% and 8.4% in 2012.

**Figure 2.4: Top 10 OIC Services Exporters and Importers (US\$ Billion)**

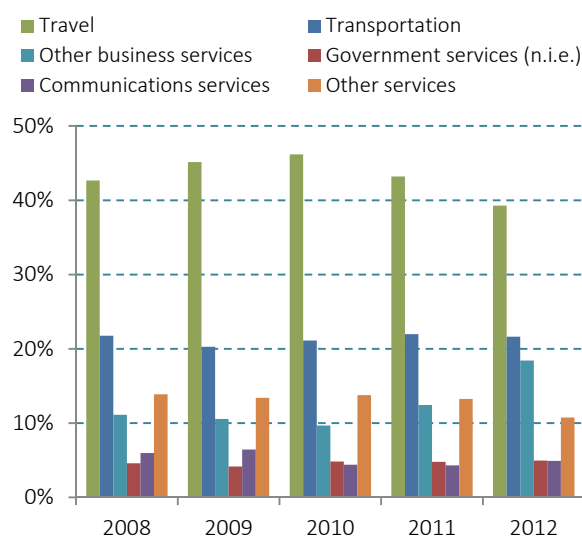


Source: UN Service Trade Database.

Figure 2.4 shows the top 10 OIC countries according to the sizes of their services exports and imports. Malaysia, with US\$ 38 billion exports and 18.8% share in total OIC services exports, was the top exporter in services in 2012 (Figure 2. 4, left). It was followed by Indonesia (US\$ 23 billion, 11.5%), Lebanon (US\$ 22 billion, 11.0%), Egypt (US\$ 22 billion, 10.8%) and the United Arab Emirates (US\$ 15 billion, 7.5%). In 2012, top 10 OIC countries accounted for 83.0% of total OIC services exports. As far as the service imports are concerned, the UAE registered the highest service imports with a cumulative amount of US\$ 64 billion and 20.1% share in OIC total services imports. It was followed by Malaysia (US\$ 42 billion, 13.3%), Indonesia (US\$ 31 billion, 9.7%), Nigeria (US\$ 24 billion, 7.6%) and Qatar (US\$ 24 billion, 7.5%). The top 10 OIC services importers collectively accounted for 81.6% of total services imports of OIC countries.

As depicted in Figure 2.5, the bulk of the OIC services exports are concentrated in travel and transportation services. During the period under examination, the share of travel-related services exports has generally been above 40.0%, with the

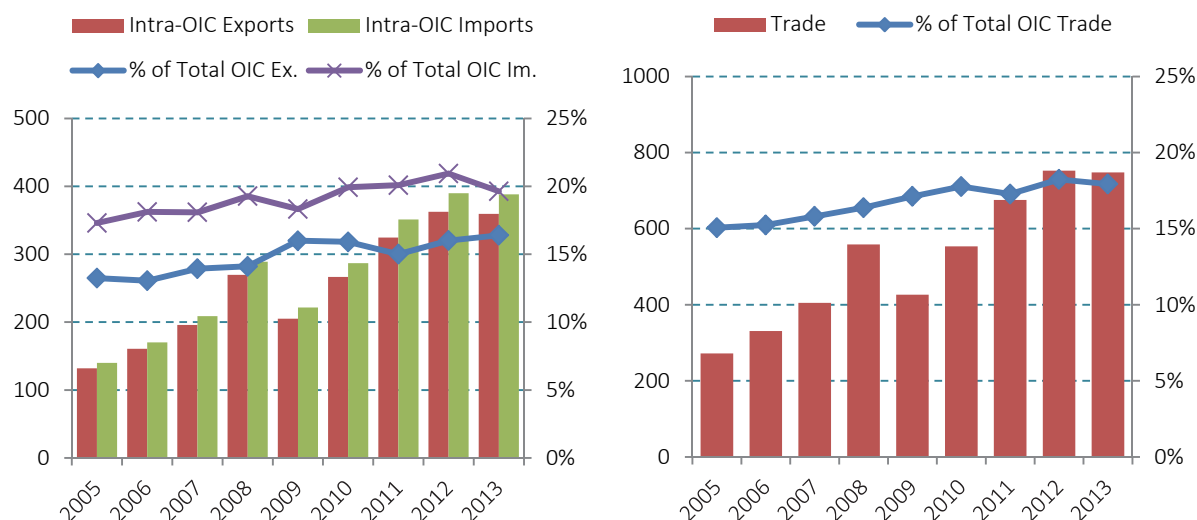
**Figure 2.5: Services Exports and Imports (US\$ Billion)**



Source: UN Service Trade Database.

exception of 2012. The travel sector was followed by transportation sector, whose share has been steady around 20.0%. The share of other business services category, including, but not limited to, research and development, and legal services, in total OIC services exports has also been significant as the subsector increased its share to a level close to that of the transportation services.

**Figure 2.6: Intra-OIC Merchandise Exports and Imports (US\$ Billion)**



Source: IMF Directions of Trade Statistics (DOTS).

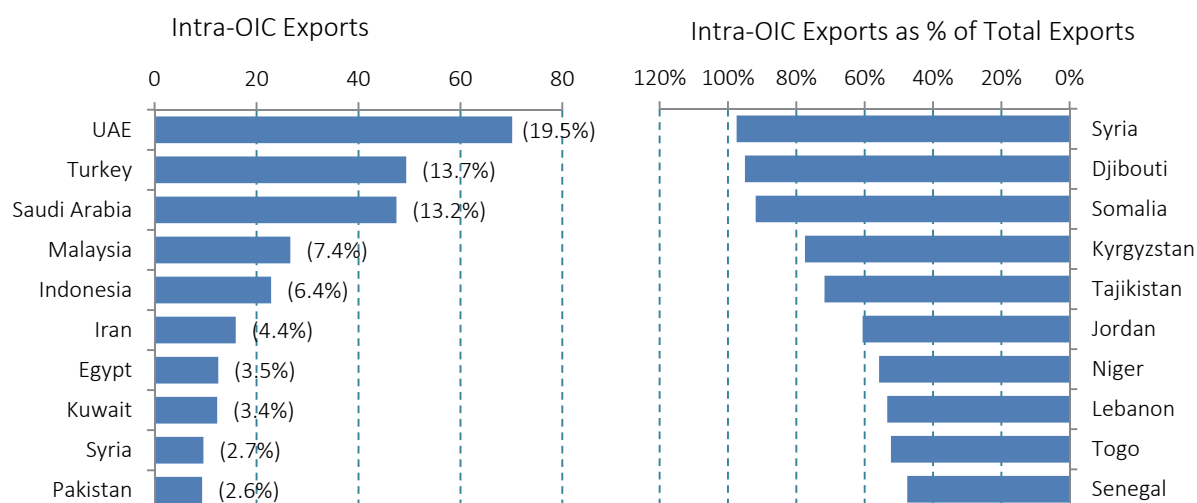
After witnessing a sharp fall in 2009, total merchandise trade among the OIC countries recovered quickly and, following a steep upward trend, reached US\$ 752 billion in 2012 (Figure 2.6, left). In 2013, however, this number decreased slightly to US\$ 748 billion. Although the overall increase was conjecturally parallel to the global economic recovery and improvements in global trade, intra-OIC trade registered a relatively stronger upturn compared to the OIC countries' trade with the rest of the world. As a result of this, the share of intra-OIC trade in total OIC trade with the world increased from 17.1% in 2009 to 18.2% in 2012, despite an interruption in 2011, and remained around that level in 2013 (17.9%). Although a significant distance has been covered since the adoption of the 20% target in the OIC Ten-Year Programme of Action in 2005, given the current circumstances, it seems that the target of 20% is still a serious challenge for the OIC countries to be reached by 2015.

On the other hand, intra-OIC exports were recorded at US\$ 363 billion in 2012 and US\$ 359 billion in 2013, as compared to as low as US\$

205 billion in 2009, which had been preceded by a substantial decrease from its 2008 level of US\$ 270 billion, and only US\$ 132 billion in 2005 (Figure 2.6, right). The share of intra-OIC exports in total OIC exports increased for the second consecutive year since 2011 and reached 16.4% in 2013. Intra-OIC imports reached US\$ 390 billion in 2012 and slightly decreased to US\$ 388 billion in 2013 (Figure 2.6, right). Again, these figures compared favourably to US\$ 222 billion bottom observed in 2009, when the global economic crisis were unfolding in its most severe form, and only US\$ 140 billion in 2005. The share of intra-OIC imports in total OIC imports reversed its increasing trend which had been observed since 2009 and declined from 20.9% to 19.6% between 2012 and 2013.

To increase the share of trade among them in their total merchandise trade to desired levels, OIC countries should not only focus on operationalizing the OIC Trade Preferential System (TPS-OIC) with broader participation from the member countries, but also promote diversification and competitiveness of their

**Figure 2.7: Intra-OIC Merchandise Exports, 2013, US\$ Billion**



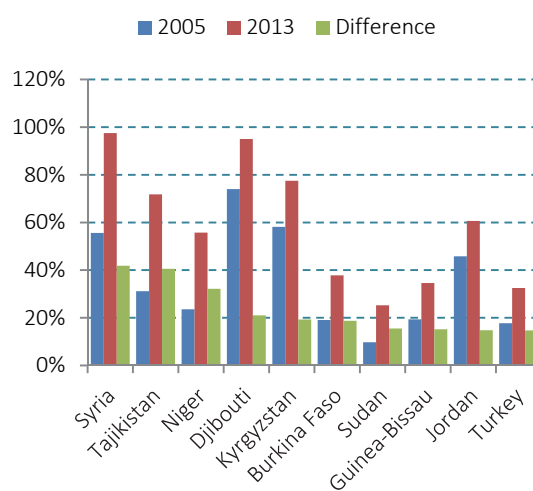
Source: IMF Directions of Trade Statistics (DOTS).

tradable products taking into account their mutual needs and benefits from trade.

Figure 2.7 (left) depicts the top 10 member countries in terms of the volume of their intra-OIC exports. In 2013, top 5 OIC intra-OIC exporters accounted for as much as 60.2% of total intra-OIC exports whereas the top 10 exporters for 76.8%. The United Arab Emirates ranked first with US\$ 70 billion, and 19.5%, of total intra-OIC exports and it was followed by Turkey (US\$ 49 billion, 13.7%), Saudi Arabia (US\$ 47 billion, 13.2%), Malaysia (US\$ 27 billion, 7.4%) and Indonesia (US\$ 23 billion, 6.4%).

More interestingly, as depicted in Figure 2.7 (right), some OIC countries with relatively lower volumes of intra-OIC exports apparently reported higher shares of intra-OIC exports in their total merchandise exports. For instance, despite its low trade volumes in absolute terms, in 2013, 97.5% of Syria's merchandise exports were destined for the OIC countries (only 55.6% in 2005). In the same year, share of intra-OIC exports in total country exports reached 95.0% in Djibouti (74.0% in 2005), 91.9% in Somalia (89.4% in 2005), 77.5% in Kyrgyzstan (58.2% in

**Figure 2.8: OIC Countries with Fastest Increase in the Share of Intra-OIC Exports in Total Exports**

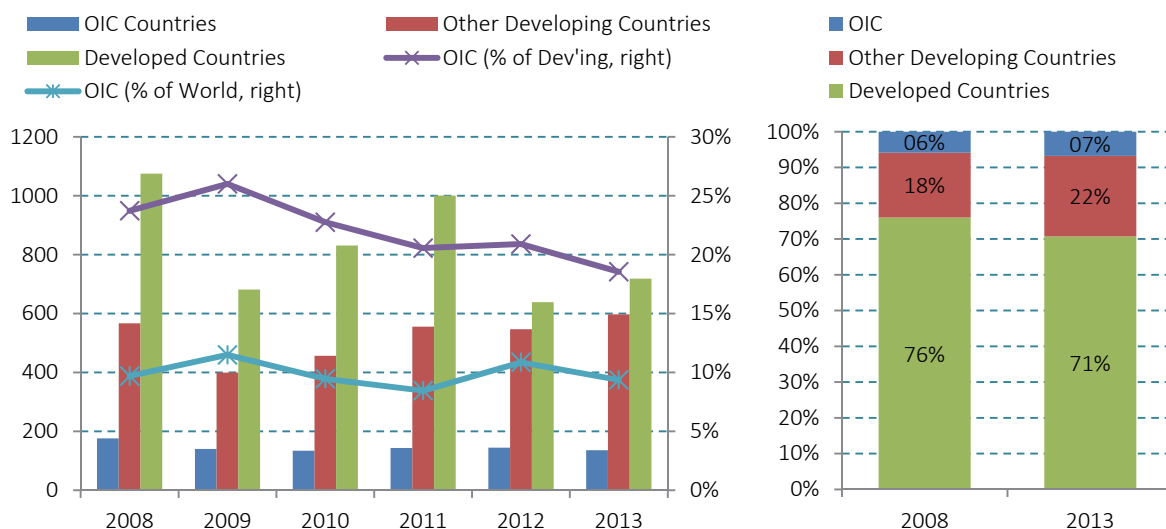


Source: UN Service Trade Database.

2005) and 71.8% in Tajikistan (only 31.2% in 2005).

To illustrate this point further, in Figure 2.8, the OIC countries which have experienced the most rapid increase in the size of their intra-OIC exports (relative to their total exports) are shown. Apparently, Syria and Turkey are the only OIC countries which are among the top 10 in terms of both the volume (Figure 2.7., left) and increase in the share of their intra-OIC exports. Countries such as Tajikistan, Niger and

**Figure 2.9: Inward FDI Flow (left) and Stock (right) (US\$ Billion)**



Source: UNCTAD STAT.

Djibouti, despite low export sizes, have also increased significantly their exports to OIC countries, relative to their exports to the world.

**W**orld total foreign direct investment (FDI) inflows amounted to US\$ 1452 billion in 2013, marking a more than US\$ 100 billion increase over previous year's value of US\$ 1330 billion. As of 2008, 55.8% of global FDI inflows, which was then worth of US\$ 1222 billion, were destined for developed countries, while the rest (i.e., 44.2%) for developing economies. For the first time after a long period, in 2012, developing countries accounted for more than half of the global FDI inflows by increasing their share to 52.0% in that year. In 2013, however, the share of developing countries declined to 50.5% showing the signs of a looming reversal in this emerging trend.

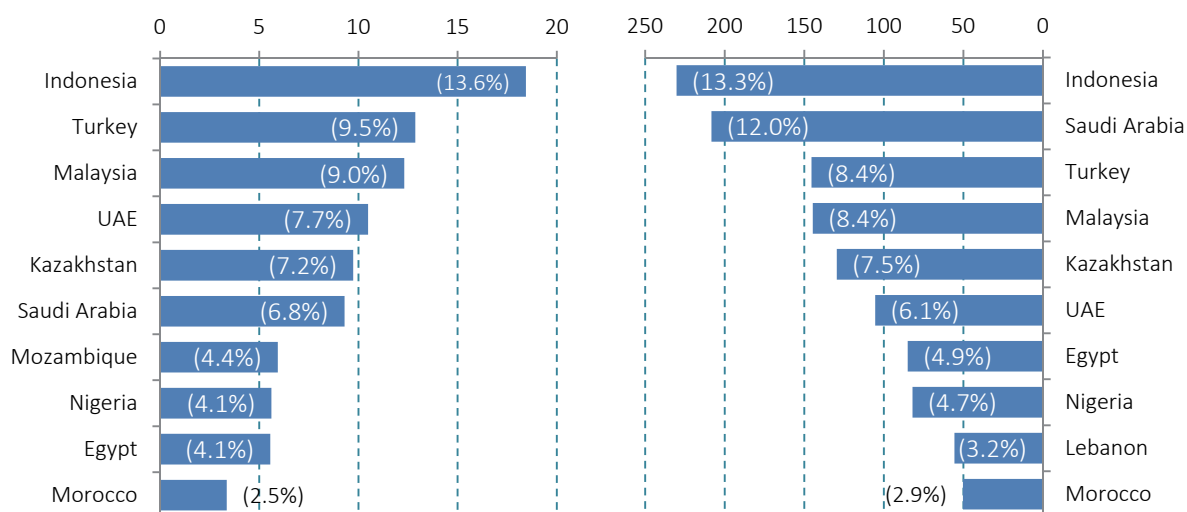
Figure 2.9, left panel, depicts the total FDI flows to OIC countries in comparison to other developing and developed countries. It is observed from the figure that, during the period under consideration, FDI flows to OIC countries generally remained sub-potential. The total US\$ value of FDI inflows to OIC member countries

was recorded at US\$ 140 billion in 2009 following an across-the-board decline in global FDI flows and, since then, remained in the US\$ 135-145 billion band. In 2013, the total monetary value of FDI flows to OIC countries was recorded at US\$ 136 billion, registering a decrease from its 2012 value of US\$ 145 billion. The shares of OIC countries in both developing country and global FDI inflows, on the other hand, have generally been on decline since 2009, despite an improvement in 2012, and were recorded at 18.6% and 9.4% in 2013, respectively. It is apparent from the figure that the share of member countries in total FDI flows to developing economies exhibited a faster decline during the examined period as compared to their share in global FDI inflows.

Global inward FDI stock reached US\$ 25.4 trillion in 2013. OIC countries, on the other hand, collectively hosted 6.8% of the global FDI stock, which marked an improvement over their share of 5.9% in 2008 (Figure 2.9, right). Furthermore, the bulk of the inward FDI stock in developing countries is hosted by non-OIC (other developing) countries, which collectively



**Figure 2.10: Top 10 Hosts of Inward FDI Flows (left) and Stock (right)**  
(US\$ Billion, 2013)



Source: UNCTAD STAT.

recorded a 22.5% share in global inward FDI stock in 2013. Overall, developing countries increased their share in the world from 24.0% to 29.3% between 2008 and 2013, which was largely offset by a decrease in the share of developed countries.

Like in the case of other major macroeconomic aggregates of the OIC group, FDI flows to OIC countries also exhibited a high level of concentration, with bulk of it persistently being directed to a few of them. The top 5 OIC countries with largest inward FDI flows together accounted for 46.9% of total FDI flows to OIC countries, whereas the top 10 countries accounted for 68.8% (Figure 2.10, left). In 2013, Indonesia took the lead in FDI inflows with US\$ 18.4 billion of inward FDI flow, and a 13.6% share in total FDI flows to OIC countries. Indonesia was followed by Turkey (US\$ 12.9 billion, 9.5%), Malaysia (US\$ 12.3 billion, 9.0%), the United Arab Emirates (US\$ 10.5 billion, 7.7%) and Kazakhstan (US\$ 9.7 billion, 7.2%).

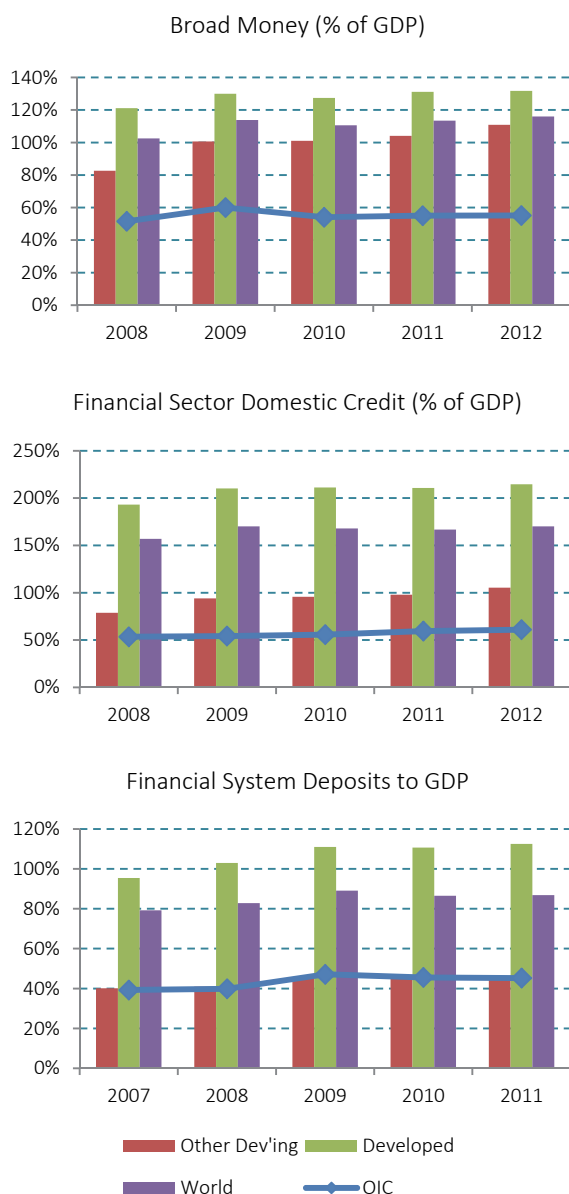
A similar picture is observed in the case of inward FDI stock as well: top 5 countries hosted 49.6% of total OIC inward FDI stocks whereas

the top 10 countries 71.5%. With US\$ 230 billion of inward FDI stocks (13.3% of the OIC total), again, Indonesia ranked first among the list of OIC countries with largest inward FDI stock in 2013. Indonesia was followed by Saudi Arabia (US\$ 208 billion, 12.0%), Turkey and Malaysia (US\$ 145 billion, 8.4%, each) and Kazakhstan (US\$ 130 billion, 7.5%).

Overall, this state of affairs suggests that a significant majority of the OIC countries are still not able to set up favourable economic frameworks and to provide the foreign businesses with adequate regulatory as well as physical infrastructure to attract more FDI flows. Consequently, OIC countries, in general, need to take swift measures to foster an environment conducive to attracting more foreign investments. To achieve this goal, reforms are needed to improve the business climate and to introduce investment incentives tailored to the needs of both domestic and foreign investors. This, in turn, requires building adequate infrastructure as well as investing in modern technologies to enhance their productive



**Figure 2.11: Financial Sector Development**

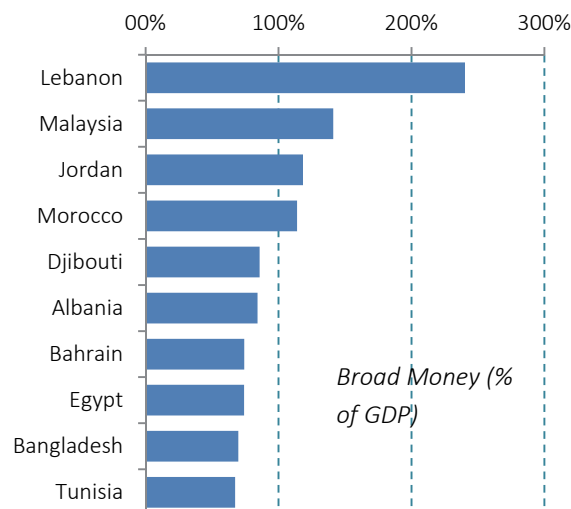


Source: World Bank WDI, World Bank Global Financial Development Database.

capacities, which is still a significant challenge to majority of them.

A well-functioning financial system can pave the way for rapid economic development through, inter alia, the efficient allocation of domestic savings into productive economic activities. The importance of this role has indeed gained much attention in the recent literature on economic growth, and a

**Figure 2.12: Financial Sector Development**



Source: World Bank WDI.

strong consensus has emerged in the last decade that well-functioning financial intermediaries have a significant impact on economic growth (Levine, 2004).

A commonly used indicator for determining the degree of **financial deepening** is the ratio of broad money to GDP. A higher ratio is generally associated with greater financial liquidity and depth. As shown in Figure 2.11 (top), the average volume of broad money relative to the GDP of OIC countries was recorded at 55.1% in 2012, compared to as much as 110.9% in other developing countries and 131.8% in developed countries. Apparently, the financial sector in the member countries lag behind in the provision of sufficient liquidity and better investment opportunities to the economy at lower cost. This state of affairs partially manifests itself in low levels of credit provided by the financial sector as % of GDP. In 2012, the financial sector on average provided credit to the domestic economy as much as 60.9% of the GDP in OIC countries whereas, in other developing countries, this figure was 105.3% (Figure 2.11, middle). Domestic credit by financial sector in

**Figure 2.13: Liquidity versus domestic credit**

Source: World Bank WDI.

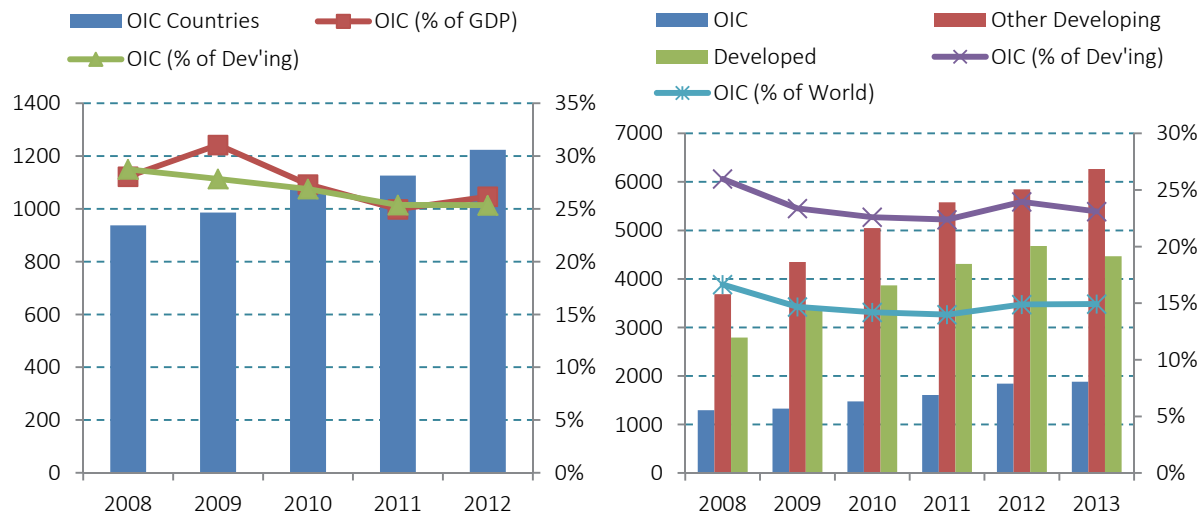
developed countries, on the other hand, was on average in the excess of twice the size of GDP in 2012 (215%). On the savings side, the financial system in OIC countries was home to financial savings which was equivalent on average to 45.2% of the GDP in 2011 (Figure 2.9, bottom). Although this figure did not differ too much in the case of other developing countries, the average size of financial system deposits in developed countries was bigger than the GDP in the same year.

The degree of **financial development** varies substantially across the OIC countries. While some member countries have relatively more advanced financial systems including vibrant banking, insurance and other financial institutions, and effective financial regulatory and supervisory regimes; many others lag behind in terms of their stages of financial development. This, in turn, offers a significant room for improvement of financial systems in OIC countries.

Taking into account the widely accepted view that the financial deepening confers important stability benefits to the economy, albeit with

caveats, many OIC countries are apparently deprived of these stability benefits. Yet, there are some exceptions to this such as Lebanon, Malaysia and Jordan where financial depth, as measured by the volume of broad money relative to GDP, is at developed country levels. In Lebanon, for instance, the total size of broad money which includes, inter alia, all narrow money and deposits, was more than twice the size of the GDP (240.2%), as shown in Figure 2.12. Similarly, in Malaysia, the size of liquidity in the economy corresponded to 141.2% of the GDP. In both Jordan and Morocco, the relative size of broad money to GDP was more than 100%.

A recent report by IMF argues that financial deepening, through an increase in financial transaction volumes, can enhance the capacity of the financial system of a country to intermediate capital flows without large swings in asset prices and exchange rates (IMF, 2011). Deeper financial markets are argued to provide alternative sources of funding domestic financial market during times of international stress, limiting adverse spill-overs, as evidenced in the

**Figure 2.14: External Debt (left) and Reserves including Gold (right)**

Source: World Bank WDI.

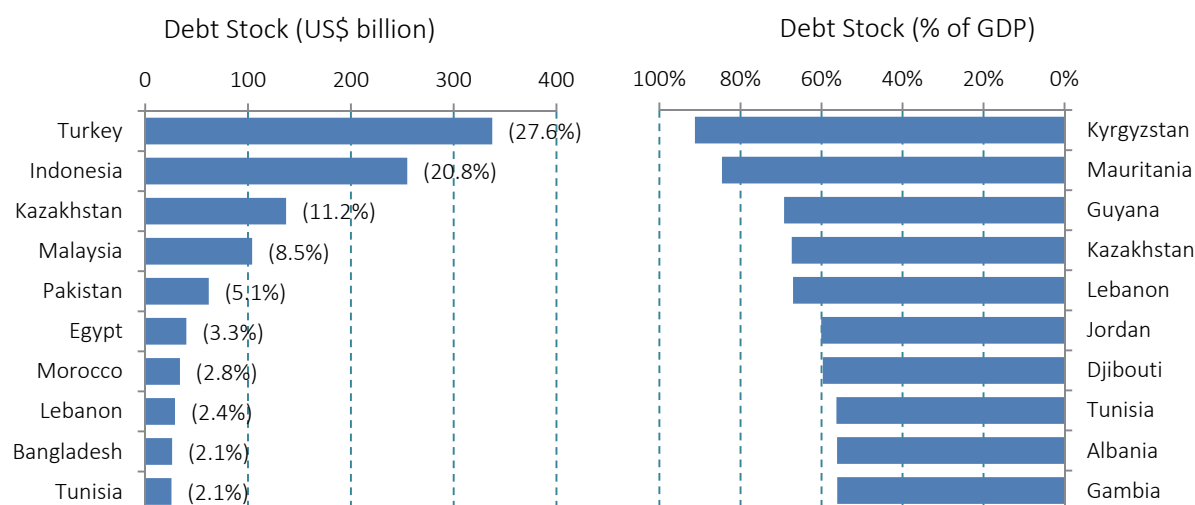
recent global financial crisis. Figure 2.13, in this regard, supports this argument for OIC countries by depicting the strength of relationship between broad money and availability of credit in 2012, which was measured as 0.79 in correlation terms.

Yet, the evidence suggests that deeper financial markets can also attract volatile capital inflows, complicating macroeconomic management of the country's economy. Moreover, financial deepening can occur too quickly, leading to credit booms and subsequent busts. At the systemic level, all these factors, if properly managed, can attenuate the need to accumulate foreign assets, and, at the global level, promote global adjustment (Maziad et al., 2011).

**T**he total external debt stock of OIC countries showed an increasing trend during the period under consideration. In 2012, the total external debt of OIC countries increased by almost US\$ 100 billion over the previous year's value and reached US\$ 1224 billion. On the other hand, 22 OIC countries still continue to be classified as Heavily Indebted Poor Countries (HIPC) by the World Bank. Notwithstanding the increasing amount of debt

in absolute terms, Figure 2.14 (left) illustrates that both the relative size of OIC debt to their GDP and their share in the total developing countries debt has been generally on decline since 2009. In this regard, average debt-to-GDP for the indebted OIC countries was 26.2% in 2012 compared to 31.1% in 2009. During 2008-2012, total external debt stock of OIC countries as percentage of total developing countries debt also declined from 28.7% to 25.3%.

**R**eserves are usually considered as an important instrument to safeguard the economy against abrupt external shocks. World total monetary reserves – including gold – increased from US\$ 7.8 trillion in 2008 to US\$ 12.6 trillion in 2013. Of this amount, US\$ 4.5 trillion are possessed by developed countries while the remaining US\$ 8.1 trillion are owned by developing countries (Figure 2.14, right). Total reserves of OIC countries increased from US\$ 1.3 trillion in 2008 to US\$ 1.9 trillion in 2013. However, the share of OIC countries in total reserves of the developing countries declined from 26.0% to 23.1% during this period. As of 2013, developing countries' share

**Figure 2.15: Top 10 Indebted OIC Countries by Debt Stock and Structure of Debt**

Source: World Bank WDI.

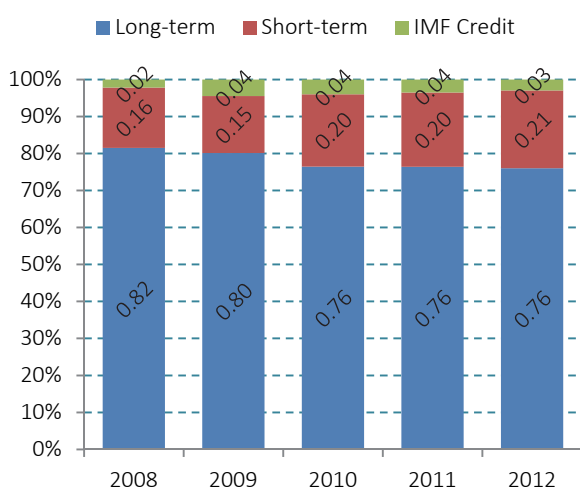
of world total reserves corresponded to around two thirds (64.6%). Although the bulk of this can be explained by the increasing trade flows from, and the resulting trade surpluses of, some emerging economies such as China, other newly industrialized countries of Asia, as well as oil exporting countries of the Middle East; the financial reform efforts in some developing countries (mainly, those with chronic current account deficits) to improve their reserves position also played a role. Capital account liberalization in some developing countries has apparently brought about the need for accumulating reserves as an insurance against financial volatilities including sudden stops/reversals of capital influx.

By debt stock in absolute terms, Turkey was the most indebted OIC country in 2012 (Figure 2.15, left). The country held US\$ 337 billion in debt which constituted 27.6% of total OIC external debt. Turkey was followed by Indonesia, Kazakhstan, Malaysia and Pakistan which had external debt levels varying from US\$ 255 to 62 billion. Top 5 OIC countries accounted for as much as 73.1% of total OIC external debt

whereas the top 10 countries for 85.8%. However, given the size of a country's economic output, looking at the absolute size of debt stock might be misleading. Debt-to-GDP ratio, in that sense, is argued to give a more accurate view of a country's indebtedness, adjusting it for the size of GDP. In terms of relative size of external debt to GDP, Kyrgyzstan, with a 91.2% debt-to-GDP, was the most indebted OIC country in 2012 (Figure 2.15, right). It was followed by Mauritania, Guyana, Kazakhstan and Lebanon, with debt-to-GDP ratios varying from 84.6% to 67.0%. Furthermore, as far as the term structure of external debt is concerned, long-term debt continued to account for the largest portion of total OIC external debt, with 76.0% share in 2012, whereas the shares of short-term debt and IMF credit were 21.0% and 3.0%, respectively (Figure 2.16).

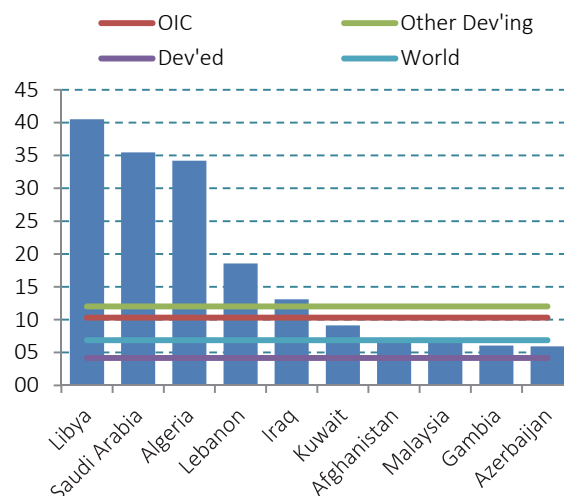
Figure 2.17, on the other hand, displays the top 10 OIC countries by volume of reserves in months of exports in 2012. Libya, with reserves equivalent to 40.5 months of exports, topped the list, whereas Saudi Arabia and Algeria, followed closely with reserves equivalent to 35.5

**Figure 2.16: Term Structure of External Debt**



Source: World Bank WDI.

**Figure 2.17: Top 10 OIC Countries by Total Reserves in Months of Exports**



Source: World Bank WDI.

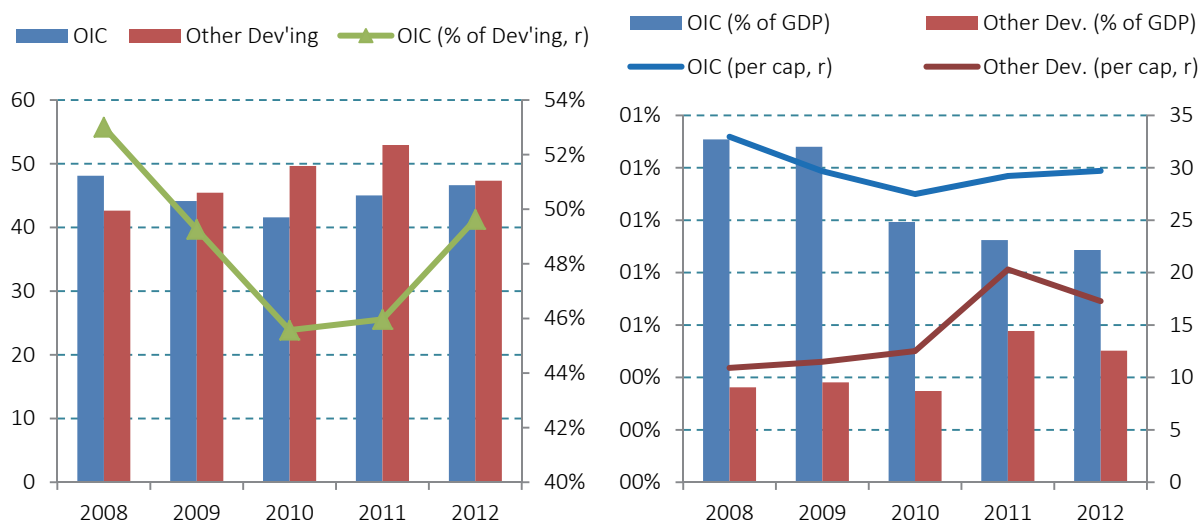
and 34.2 months of exports, respectively. Lebanon and Iraq were the other two countries with higher averages than that of the OIC (10.3 months) in 2012.

**O**fficial development assistance (ODA) continues to be an important source of financing for many developing countries, including OIC countries. In 2012, net ODA flows from all donors to developing countries reached US\$ 94 billion compared to US\$ 90 billion in 2008 (Figure 2.18, left). During this period, ODA flows to OIC countries exhibited a V-shaped trend, whereby they contracted between 2008 and 2010 and increased from 2010 onwards. As of 2012, OIC countries accounted for half of the total ODA flows to developing countries (49.6%). Although this level is lower than the 53.0% share observed in 2008, it is still higher than 45.6% bottom observed in 2010. Adjusting ODA for GDP and population indeed reveals more interesting facts (Figure 2.18, right). When considered relative to the size of GDP, ODA flows to OIC and other developing countries have exhibited a strong convergence during the last few years. In 2012, OIC countries

received ODA which was equivalent to 0.9% of their GDP, compared to 0.5% in other developing countries. This corresponds to US\$ 29.7 per capita ODA in the same year in OIC countries, and compares favourably to US\$ 17.3 of other developing countries.

Figure 2.19, on the other hand, shows that the inflows of personal remittances to OIC member countries in general followed an upward trend, despite a short interruption in 2009, and increased from US\$ 91 billion in 2008 to US\$ 112 billion in 2012. As the financial and economic crisis of 2008 affected the economies of the developed countries at first place, significant number of immigrant workers from developing countries lost their jobs and incomes as a major source of remittances to their home countries. This resulted in a decrease in remittance flows to OIC as well as other developing countries. Remittance flows to other developing countries, on the other hand, improved relatively more strongly during the examined period and increased from US\$ 211 billion in 2009 to US\$ 260 billion in 2012.

**Figure 2.18: Official Development Assistance**

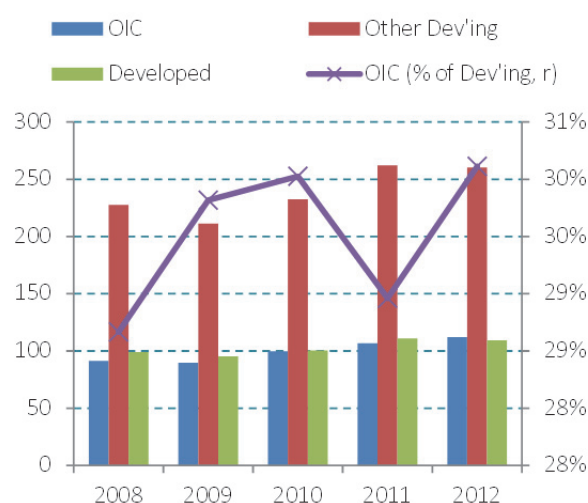


Source: World Bank WDI.

ODA inflows to OIC countries show similar characteristics, when their concentration level is concerned. In 2012, the top 5 member countries received 35.7% of total ODA flows to OIC countries whereas the top 10 did 55.9% of them (Figure 2.20). Afghanistan, with total inflows of US\$ 6.7 billion and 14.4% of OIC total, ranked first. Afghanistan was followed by Turkey (US\$ 3.0 billion, 6.5%), Cote d'Ivoire (US\$ 2.6 billion, 5.7%), Bangladesh (US\$ 2.2 billion, 4.6%) and Mozambique (US\$ 2.1 billion, 4.5%).

Again, at the individual country level, in 2012, ODA inflows were equivalent to 32.8% of GDP in Afghanistan, 19.5% in Palestine, 15.2% in Gambia, 14.6% in Mozambique and 13.3% in Niger. Notably, in 16 member countries, ODA flows accounted for less than one% of GDP in 2012. ODA flows per capita, on the other hand,

**Figure 2.19: Personal Remittances, US\$ Billion**

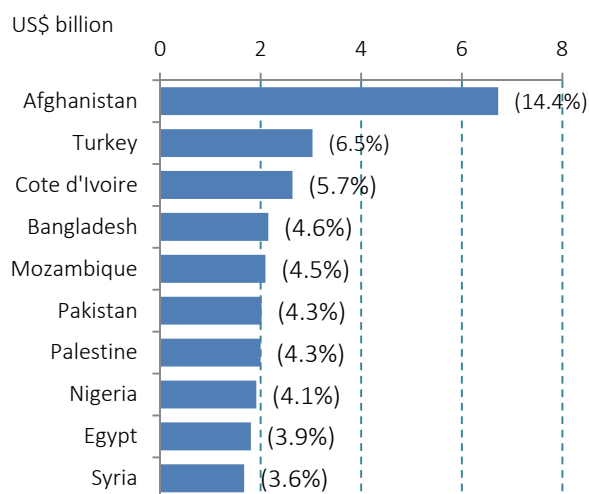


Source: World Bank WDI.

were highest in member countries such as

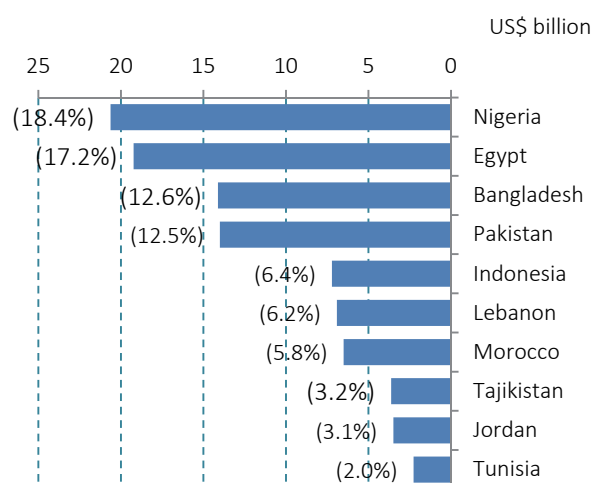
*The degree of **financial development** varies substantially across the OIC region, which, in turn, offers a significant room for improvement through effective intra-OIC cooperation. In this regard, the member countries should conjoin their efforts to enhance intra-OIC financial industry linkages through the exchange of know-how and best practices, as well as the mobilization of skilled human capital.*

**Figure 2.20: Top 10 OIC Countries by ODA Receipts**



Source: World Bank WDI.

**Figure 2.21: Top 10 OIC Countries by Remittances**



Source: World Bank WDI.

Palestine, Afghanistan, Jordan, Maldives and Djibouti, with per capita ODA inflows ranging from US\$ 495 to US\$ 171 in 2012.

Even a more significant portion of inward remittance flows to OIC countries concentrate on a few members. In year 2012, 67.1% of the remittance flows to OIC countries were accounted by the top 5 countries whereas 87.4% by the top 10 (Figure 2.21). In the list of top remittance receivers in the OIC region, Nigeria took the first place with US\$ 20.6 billion of remittances inflows or 18.4% of remittances inflows to OIC countries. Nigeria was followed by Egypt (US\$ 19.2 billion, 17.2%), Bangladesh (US\$ 14.1 billion, 12.6%), Pakistan (US\$ 14 billion, 12.5%) and Indonesia (US\$ 7.2 billion, 6.4%). However, as far as the relative size of the remittances to GDP is concerned, the list of top 10 OIC countries changes dramatically. In 2012, Tajikistan received remittances whose amount was equivalent to almost half of the country's GDP in that year (47.5%). Kyrgyzstan, Palestine, Guyana and Lebanon received remittances equivalent to as much as 30.8%, 20.1%, 16.5% and 16.0% of their GDPs, respectively. OIC

average in the same year was 2.1%, compared to 1.3% in other developing countries and 0.7% in the world.

*The comparatively low level of FDI inflows to OIC member countries and the high concentration of these inflows in a few of them reflect the fact that the majority of the OIC countries are still unable to create favourable economic environment and conditions to attract foreign investors. In general, economic and administrative reforms are needed to improve the business climate and to introduce investment incentives for both local and foreign investors.*

## Part II

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# Enhancing Productivity and Competitiveness in OIC Countries



This part includes:

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3. Role of Productivity and Competitiveness in Wealth Creation
4. Levels of Productivity and Competitiveness in OIC Countries
5. Fostering Productivity and Competitiveness
6. Policy Issues for Structural Transformation



## PART II

This special Part of OIC Economic Outlook 2014 provides a comprehensive treatment of productivity and competitiveness issues in OIC member countries. The issue is highly critical for OIC countries to achieve better standards of living and to position themselves in the world in a comparably better situation.

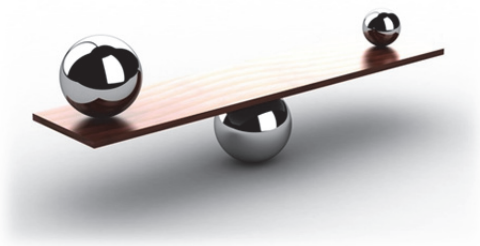
This Part is structured as follows. In section 3, a technical as well as summary of the literature on the importance of productivity and competitiveness for growth and wealth generation is provided. Section 4 presents main productivity and competitiveness indicators for OIC countries. Section 5 discusses major factors that influence productivity and competitiveness. Finally, section 6 discusses some policy issues to enhance productivity and competitiveness in OIC countries.

Evidence suggests that reform priorities for better productivity growth differ across countries. Low income countries are particularly in need of improved education and infrastructure, good quality economic institutions, reduced barriers for better market efficiency and effective competitiveness. On the other hand, middle income countries need, among others, effective policies for investment promotion, quality higher education, investment on research and development, deepening of financial markets, more flexible and competitive goods and labour markets.



## SECTION 3

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# Role of Productivity and Competitiveness in Wealth Creation

Reaching higher standards of living is an ultimate goal for all nations. In modern economics, the most commonly used indicator of standards of living is the real per capita GDP level. Frequently, it is also used as a proxy variable for measuring productivity level of a country in international comparisons due to the lack of comparable productivity data and the existence of strong positive correlation between per capita GDP level and productivity level in a given period.

In simple terms, any increase in real per capita GDP over a period of time is called the economic growth. However, the most frequently used version of the real per capita GDP growth is the 'annual economic growth rate' that measures the level of increase in real per capita GDP level compared with same period of the previous year. This indicates whether the welfare level and standards of living improved or deteriorated compared with the previous year in a country. As a result, the policy-makers can take any action accordingly to formulate their policy-solutions either to enhance the economic growth or to slow down the economy when concerns on inflation emerge.

This section first overviews selected economic growth theories in order to prepare a basis to explain the role of productivity and competitiveness in wealth creation. Then section 3.2 discusses implications of productivity and competitiveness on economic growth.

### 3.1 Productivity and Competitiveness: An Overview

The ultimate goal of all countries in the world is to enhance economic growth, to raise standards of living, and to overcome poverty and deprivation. Simply, productivity is the economic output per unit of input. The unit of input can be labour hours (labour productivity) or all production factors including labour, machines and energy (total factor of productivity).

Productivity growth is a crucial source to improve standards of living. Productivity growth means more value is added in production and more income is available for distribution (IDB, 2007). As suggested by the new economic growth theories, sustaining productivity growth is the only way to have positive economic growth rate in the long-run that will make nations more prosperous.

A nation can become more productive if its businesses generate more output from the same inputs. Both nation-wide and industry-wide policies can boost productivity. For instance, a nation's productivity level may increase stemming from the improved quality of education that leads to a rise in productivity both in low and high productivity sectors. Industry or sector specific policies may also help to increase productivity level of a nation. For instance, realizing a shift in the economy from low productive to high productive industries may boost productivity. A nation would experience a rise in its overall productivity level, when the mix of low and high-productivity industries changed. The on-going shift from agriculture (traditionally a low productive industry) to manufacturing and services (high-productive sectors) is an example of this.

Many OIC member countries experience shortages either in natural sources, physical capital or human resources. Therefore in order to generate more goods and services with the existing sources, which ultimately will help to eradicate poverty and to reach higher standards of living, policies to increase productivity growth carry a particular importance.

Michael Porter from Harvard University states that "the only meaningful concept of competitiveness at the national level is productivity". But while these terms are related, competitiveness should not be equated with productivity or GDP growth. IMD's World Competitiveness Yearbook defines competitiveness similarly, but more broadly, as "how an economy manages the totality of its resources and competencies to increase the prosperity of its population". The World Economic Forum's Global Competitiveness Report defines competitiveness as "the set of institutions, policies and factors that determine the level of productivity of a country". Therefore, it is clear that there are slight differences across scholars and institutions on the definition of competitiveness and how it should be measured. However, independent from how competitiveness is defined, it becomes evident that competitiveness and productivity are two closely interlinked concepts that are critical for sustaining economic growth and generating wealth.

### 3.2 Connectivity between Productivity and Competitiveness

In modern economics, if a country can produce the same good or services at a lower cost than other nations, then this country is perceived to be more competitive than others. Productivity is the main factor that makes countries different in terms of competitiveness in the international markets. In other words, increased productivity also contributes to international competitiveness of the economy; the more productive a business is, the better it is able to compete in international markets. In this regard, there is a close link between productivity and competitiveness. More productive countries either use their capital or labour in a more effective way than others which make their goods and services more competitive in international markets. Therefore, their national income from exporting goes up with increased productivity and competitiveness; and this, in turn, reflects in higher levels of welfare and standards of living. Such competitive economies also attract more foreign capital that implies additional capital for host countries.

Aside from cross-country productivity differences, some other factors such as institutions, culture, trade barriers, and quality of infrastructure also have an impact on the competitiveness of a country. Therefore enhancing productivity in businesses in order to boost competitiveness is a necessary but not a sufficient condition. In particular, countries need to eliminate factors that constitute barrier for international trade such as high logistic costs, high tariff rates, complex bureaucratic steps for customs clarification, and corruption. These are some of the well-known challenges that reduce the competitiveness of countries in international markets that ultimately hit countries' welfare creation and standards of living.

According to Atkinson (2013), a competitive economy is the one with a trade surplus, few barriers to import, and limited "discount" to exporters. Productivity growth can enable competitiveness, especially if it is concentrated in traded sectors, which lowers costs and enables firms to sell more in global markets without relying on government provided discounts. The productivity level also determines the rates of return obtained by investments in an economy, which in turn are the fundamental drivers of its growth rates. This implies that a more competitive economy is one that is likely to grow faster over time.

All in all, enhancing productivity and boosting competitiveness are critical factors for sustaining economic growth and generating sources to overcome national bottlenecks such as poverty and deprivation. In this way, countries can generate more wealth utilizing the available resources and therefore reach better standards of living for their people.

### 3.3 Economic Growth and Technological Progress

Economic growth models aim to explore the determinants of economic growth analytically. In a basic economic growth model, three sources of economic growth exist: growth in capital stock, growth in labour stock and growth in productivity (technology). Both the Neoclassical and the new growth models confirm that if there is no technology growth, the economy suffers from diminishing returns to capital and therefore economic growth (the speed of increasing the welfare) slows down and comes to an end over time. It is shown technically in Box 3.1.

The only way to cope with this challenge (i.e. diminishing returns to capital), is to enhance productivity growth and the factors that trigger productivity (i.e. competitiveness). The new economic growth models vary in their explanation of which factors enhance productivity and how they can boost economic growth. This is shortly discussed in Box 3.1. The key take away message is that without technological progress (i.e. productivity growth) it is unlikely to sustain economic growth in the long-run. Therefore, a special attention should be given to the planning and implementation of policies for enhancing productivity and boosting competitiveness in developing countries.

In this context, there are areas for policy development with significant potential for productivity growth at the national scale, such as education and health policies. On the other hand, sector specific policies are also important to address problems in less-productive industries. For instance, infrastructure projects in irrigation would be crucial to boost productivity in the agriculture sector. Overall, without innovation and improvement in productivity levels, countries cannot carry their standards of living to a higher level.

### Box 3.1: Economic Growth and Technological Progress

In a country where there is no technological progress (i.e. no growth in productivity), the basic model of economic growth model or so-called the neoclassical economic growth model states that GDP of a country can be measured as (with a Cobb-Douglas type production function):

$$(Eq. 1) \quad Y = F(K, L) = K^{\alpha}(L)^{1-\alpha}, 0 < \alpha < 1$$

where  $Y$ = GDP;  $K$ = Capital Stock;  $L$ = Labour Stock, assuming that  $L$  represents the whole population. The growth rate of population ( $\dot{L}/L$ ) is equal to  $n$ .

Per capita income and per capita capital can be defined as  $y=Y/L$ ,  $k=K/L$ , respectively. Hence per capita production function, equation 2 can be written:

$$(Eq. 2) \quad y = f(k) = k^{\alpha}$$

In the country saving raises at a rate of  $s$ . Thus the rate of saving per person is equal to  $sy$ . However, the capital depreciation rate ( $\delta$ ) causes a fall in capital per person ( $k$ ). In addition to depreciation in capital, population growth will cause a reduction in capital per person ( $k$ ) that more people need to share the existing capital stock. Overall, three forces affect the net rate of increase in capital per person ( $k$ ).

$$(Eq. 3) \quad \dot{k} = sf(k) - (n + \delta)k$$

At steady state where,  $sf(k) = (n + \delta)k$ . It implies that  $y^* = f(k^*)$  at steady state where the capital stock and output stock will continue to grow only at the rate of population growth. As a natural result, the long run growth rate of capital per person will cease in the long run stemming from diminishing returns to capital that hinders the nation reaching a higher welfare level or standards of living. The only way to overcome this challenge is to allow for technological change in the production function. If there is technology or productivity growth in the economy, the economy can get rid of the trap of diminishing returns to capital and will continue to grow that eventually leads to a higher per capita income level. In order to illustrate this, a productivity (technology) parameter  $A$  is introduced into equation 1, in where the growth of productivity is denoted by  $g$ :

$$(Eq. 4) \quad Y = K^{\alpha}(AL)^{1-\alpha}$$

where  $Y$ = GDP;  $K$ = Capital Stock;  $L$ = Labour Stock (assuming that  $L$  represents the whole population).  $A$ = Productivity (Technology) parameter in where the growth of productivity is equal to  $g$ .

In equation 4, unlike in equation 1, the production function grows at the rate of growth of population plus the growth rate of productivity ( $n + g$ ). By using equation 4, it can be reached a production function in per effective labour terms.

In this case, GDP is given by  $\varphi = \kappa^{\alpha}$ ; in where  $\varphi = Y/AL$  (output per effective labour) and  $\kappa = K/AL$  (capital per effective labour).

Hence equation 4 can be re-written as:

$$(Eq. 5) \quad Y/L = A\varphi = A\kappa$$

Under these conditions, the net rate of change in  $\kappa$  is determined by the population growth, depreciation rate, and the growth rate of productivity:  $\dot{\kappa} = s\kappa^{\alpha} - (n + \delta + g)\kappa$ . As before, in the long-run,  $\kappa$  will approach its steady state value  $\kappa^*$  that leads to  $\varphi^* = (\kappa^*)^{\alpha}$ . Therefore in the long-run the growth rate of equation 5 becomes equal to:

$$(Eq. 6) \quad G = \dot{A}/A + \alpha \dot{\kappa}/\kappa = g + \alpha \dot{\kappa}/\kappa$$

where  $G$ = growth rate of the economy;  $g$  = growth rate of technology ( $\dot{A}/A$ );  $\dot{\kappa}/\kappa$  = growth rate of per effective labor capital stock.

In the Solow growth model, due to the existence of diminishing returns the growth rate of per effective labour capital stock approaches zero. This implies that the long-run growth rate of the economy becomes equivalent to the growth rate of technology ( $\dot{A}/A$ ) that is determined exogenously. In other words, the only way to accelerate economic growth rate of a country is to enhance technology (productivity) growth. Otherwise, the country would not reach a higher level of per capita income level where it can only keep its existing steady state level of standards of living all else equal.

The new economic growth models explain the factors that govern the growth rate of technology as an endogenous parameter rather than exogenous. Therefore, the new growth models sometimes labelled as “endogenous growth models”.

According to these models, there can be two major ways to increase productivity growth in a country, which help countries to become more prosperous or to grow faster.

### 3.3.1 Enhancing research and development (R&D) and increasing absorption capacity

The AK growth model of Frankel (1962) and Romer (1986) is known as the first wave of endogenous growth models that assumes during capital accumulation, externalities may help capital from falling into diminishing returns. In these models, externalities are created by “learning-by-doing” argument of Arrow (1962) and knowledge spill-overs effect. Therefore, according to the AK growth model, by attracting foreign direct investment (FDI) the country enlarges its capital stock and enhances its productivity that is stemming from learning by doing externalities. Therefore the country can keep growing both in the short and long-run since its productivity (technology) grows as it continues attracting foreign capital.

The product variety model of Romer (1990) argues that “productivity growth comes from an expanding variety of specialized intermediate products” (Aghion & Howitt, 2009, p.69). Therefore, in a closed economy the only way of increasing the variety of intermediate products is conducting research and development activities in a productive manner. By opening the economy, however, the country can reap the benefits of research and development activities which are conducted in other countries. The country may transfer different types of intermediate goods either through imports or through FDI. Thus, it is expected that imports and FDI induce economy-wide productivity and economic growth by expanding the variety of intermediate products. In this respect, technology spillover externalities would also increase the knowledge stock of researchers and productivity of research activities in the host country. As a result, researchers might become more likely to invent new intermediate products which again trigger productivity and therefore economic growth.

The Schumpeterian model of Aghion and Howitt (1992) constitutes the second wave of endogenous growth models together with the product variety model of Romer (1990). Basically, both models point out the importance of research and development activities for sustained long-run growth rates and they explicitly explain the mechanisms through which research and development activities affect economic growth. The key difference between the product variety and Schumpeterian models lies in their assumption on how capital goods enhance the economic growth. As mentioned above, in the Romer model, invention of “new” capital goods triggers productivity and economic growth. Nonetheless, the Schumpeterian model concentrates on the improvement of the quality of the existing types of capital goods.

In other words, by conducting research and development activities, firms would become able to improve the quality of existing capital goods which makes old ones obsolete. This process is called “creative destruction” by Schumpeter (1942). Therefore, the economy can sustain long-run growth as it innovates by carrying out research and development activities. By using a similar argument above, in an open economy, the country would transfer the innovative technology and new quality improving mechanisms via import and FDI inflows that would enhance productivity and economic growth.

### 3.3.2 Increasing labour productivity by investing in human capital development

Countries do not have an absolute power to change or transfer their physical capital including all natural resources such as land, water, minerals etc. However, they have an option to upgrade the

skills of their human capital which helps them to increase their output per labour. Skilled (educated) workers use the existing sources in a more productive way. They are also more capable of capturing “learning by doing externalities” which is being generated via foreign capital, as mentioned in the Romer (1990) model.

It is also clear that while conducting research and development (R&D) activities, which are key for sustainable productivity and economic growth in the new growth models, only skilled personnel can be employed. Only with such skilled labour force, new products can be innovated and the quality of existing services can be improved. Moreover, only through high quality education, students can be taught to work for innovative ideas and solutions. Therefore, transforming a nation’s mindset concerning the importance of R&D activities and innovation would only be achieved through education.

### 3.3.3 Other factors that boosts productivity

In addition to these two factors, there are several other factors identified as crucial in further improving the productivity. These include the quality of the institutions, infrastructure development, economic stability and market efficiency. In one way or another, all these factors are closely related to each other. For instance, if a company experience unexpected delays on its intermediate goods import due to non-standard customs procedures, the average productivity will be affected negatively that ultimately will be noticed as a drop in the economy-wide productivity levels. If institutions work properly with proper infrastructure, markets will work more efficiently and economy will become more stable and competitive. Detailed discussion of all these factors will be provided in section 5 of the report.

## SECTION 4

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# Levels of Productivity and Competitiveness in OIC Countries

This section examines the productivity and competitiveness of the OIC member countries in a comparative manner with other developing countries, developed countries and the world average through analysing some selected productivity and competitiveness indicators and some growth indicators during the period 1990-2013.

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### 4.1 Productivity in OIC Member Countries

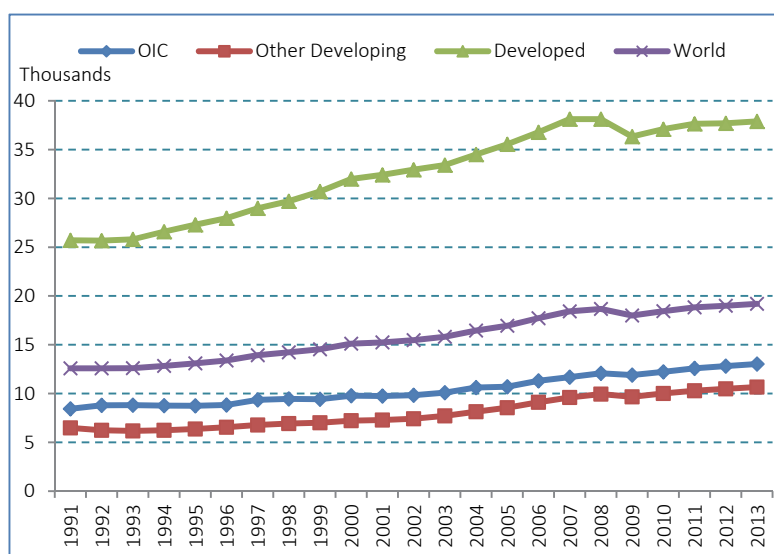
As explained in section 3, without technological progress or increasing productivity, economic growth may slow down over time due to diminishing returns to capital. Therefore, sustaining productivity growth should be a priority to ensure positive economic growth rates over the long-run.

Figure 4.1a presents the evolution of the average real GDP per capita in four country groups (OIC countries, other developing countries, developed countries and the world) during the period 1990-2013. It is evident that, despite some annual cyclical movements, there is a positive long-run trend in average real GDP per capita in all the groups. The average of OIC group climbed from \$8,441 in 1990 to \$13,024 in 2013 corresponding to a 54% increase in 24 years. In the same period, other developing countries recorded an increase from \$6,474 to \$10,660 corresponding to a 65% increase, whereas developed countries could increase their average real GDP per capita only by 47% from \$25,702 to \$37,892. Overall, the world average GDP per capita level went up by 52% from \$12,587 to \$19,189 in the same period.

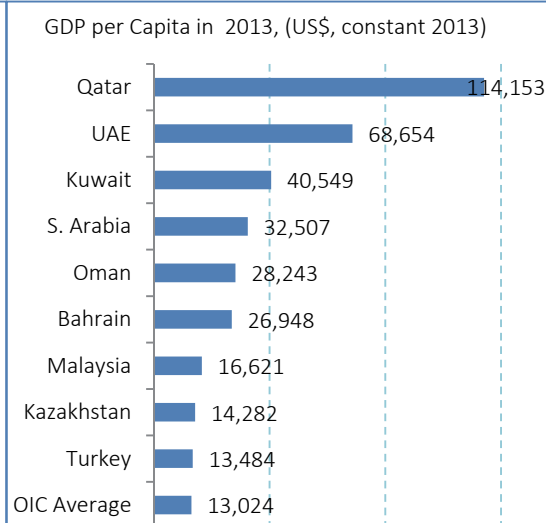


Figure 4.1

(a) GDP per Capita between 1990 and 2013  
(2013 constant US\$)



(b) Highest GDP per Capita Levels in OIC  
Member Countries, 2013



Source: SESRIC Staff Calculations from the Total Economy Database. Data were available for 37 OIC member countries and 122 countries in total.  
Note: 2013 US\$ converted to 2013 price level with updated 2005 PPPs.

Two main messages emerge from this analysis. First, OIC member countries, on average, have showed a striking performance in terms of change in GDP per capita levels. Second, despite having a higher average GDP per capita level than other developing countries, OIC member countries still have remarkably lower average GDP per capita level than the average of developed countries and the world average. However, in 2013, three OIC member countries namely Qatar, United Arab Emirates and Kuwait recorded higher real per capita GDP levels than the average of the developed countries that is higher than \$37,892 (Figure 4.1b). In the same year, nine OIC member countries also have a higher GDP per capita level than the OIC average of \$13,024.

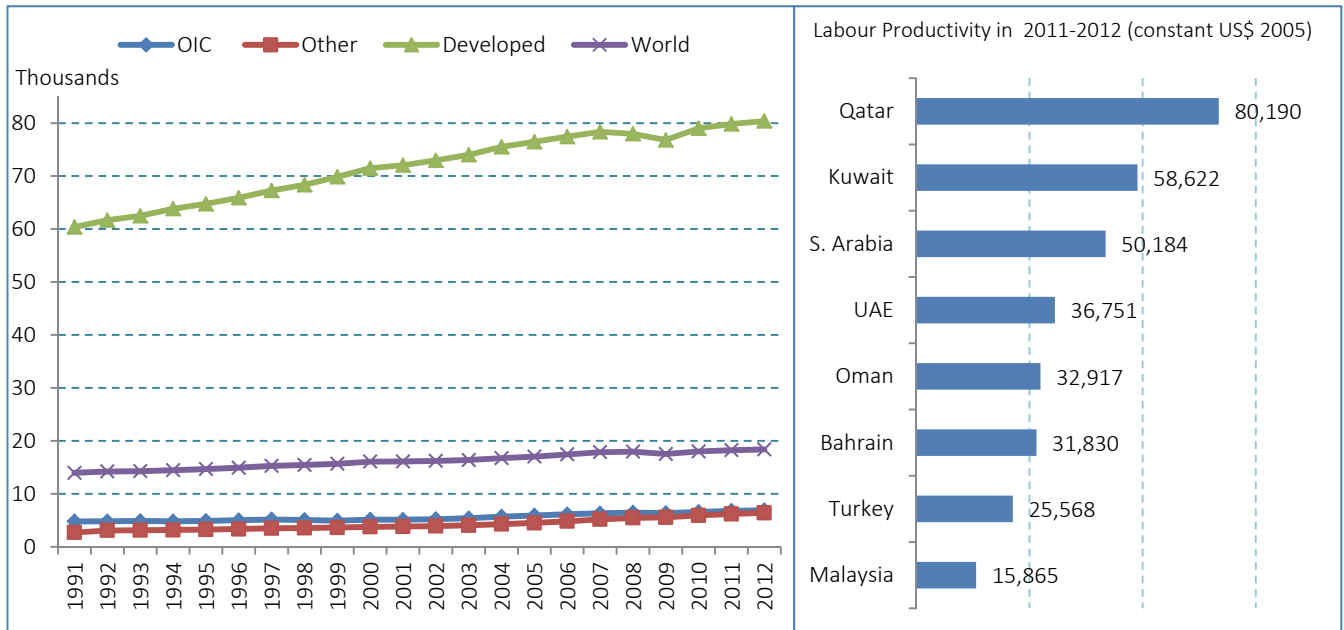
Figure 4.2a presents the evolution of the labour productivity during the period 1991-2012, measured in terms of GDP per person employed, in the same four country groups. Overall, the evolution of labour productivity showed a very similar pattern to that of the evolution of GDP per capita. The OIC average labour productivity level climbed from \$4,783 in 1991 to \$6,897 in 2012, corresponding to a 44.1% increase. In the same period, other developing countries raised their average from \$2703 to \$6,399, corresponding to a 136% increase, while the average of developed countries and the world increased by 33% and 31%, respectively. Therefore, the biggest level change was observed in other developing countries group. However, the change in the OIC group (44.1%) was larger than the change in the average of developed countries (33%) and the world average (31%).

It was also observed that there are remarkable differences among the OIC member countries. For instance, in the 2011-2012, three OIC member countries, namely Qatar, Kuwait and Saudi Arabia had an average labour productivity level above the \$50,000 (Figure 4.2b). In the same period, 17 OIC member countries recorded higher labour productivity levels than the OIC average level of \$6,835.

Figure 4.2

(a) Labour Productivity (GDP per Person Employed) between 1990 and 2013 (2005 constant US\$)

(b) Highest Labour Productivity Levels in OIC Countries, 2011-2012



Source: SESRIC Staff Calculations from the World Bank Development Indicators and ILO.

Overall, on average, the OIC countries showed a good performance in increasing their per capita GDP and labour productivity levels compared to other developing countries, developed countries and the world. Yet, in absolute terms, the levels achieved by the OIC countries, are still well below the world averages. This indicates the necessity of further progress in OIC member countries to reach higher standards of living both in terms of per capita GDP and productivity. It also became clear that the existence of cross-country differences among OIC member countries should not be neglected. Many OIC member countries are still classified as low-income countries that need to undertake major changes in their economic growth policies, particularly in the policies related to enhancing their productivity and competitiveness.

The analytical presentation in section 3 (equation 8) showed that over the long-run the economic growth will be mainly governed by the productivity growth. Figures 4.1a and 4.2a also confirmed that per capita GDP levels and labour productivity levels followed a similar pattern in the 1990s and 2000s that implies the existence of a close link between productivity and economic growth in all the four country groups.

#### 4.1.1 Labour Productivity and Total Factor Productivity (TFP) Growth

Figure 4.3a presents the growth of labour productivity (GDP per person employed) and total factor productivity (multifactor productivity) for the periods 1991-2000 and 2001-2012 for four country groups. The figure shows the long-run dynamics of the productivity growth of the OIC group in comparison with other developing countries, developed countries and the world.

Many economists acknowledge that the growth of labour productivity is a weak proxy to measure the technological progress of a country in empirical studies. Therefore, these scholars strongly suggest using the growth of total factor productivity to measure the technological progress, which

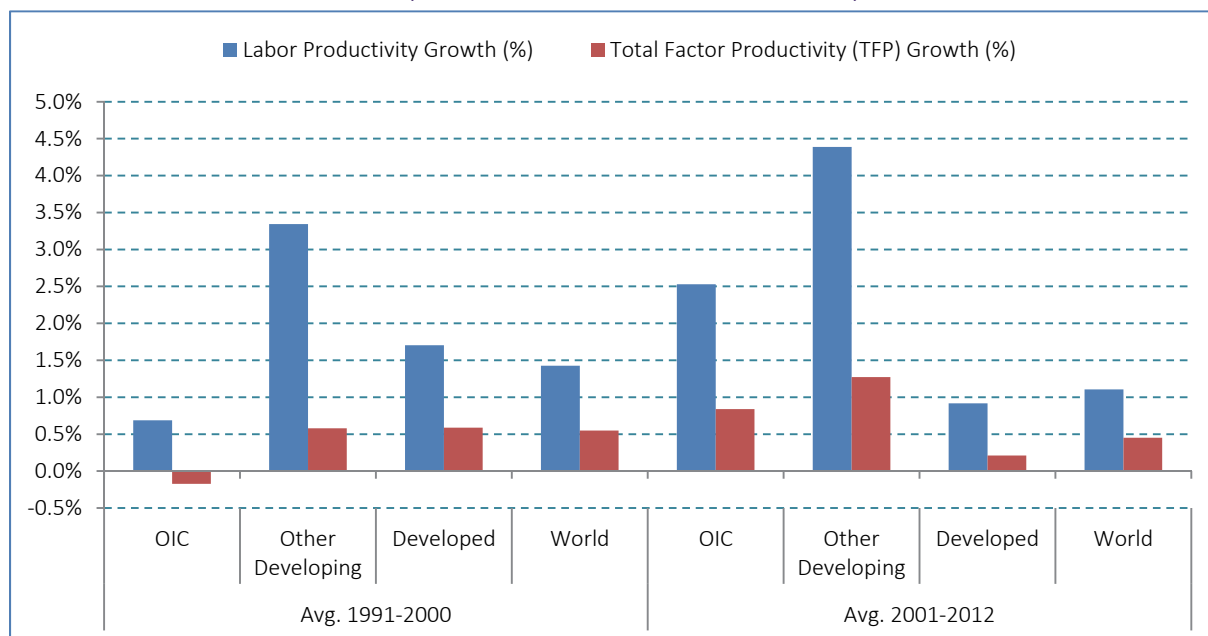
is measured by using a growth accounting scheme. In simple terms, the TFP growth is the portion of economic growth that cannot be explained by a change in capital and labour stock. In other words, it is a measure of technological progress that allows countries to generate a higher output level by using the same level of capital and labour. Therefore, it is a productivity measure that is calculated by using both capital and labour. In this regard, it is usually called multifactor productivity.

As shown in Figure 4.3, the average annual labour productivity growth of the OIC group was 0.69% in the period 1991-2000, a rate which is smaller than the averages of other groups. In this period, the highest average growth rate of 3.34% was recorded in other developing countries group. Despite having a lower average labour productivity growth rate in the period 1991-2000, the OIC group increased this rate from 0.69% to 2.53% in the period 2001-2012. The group of other developing countries also recorded a high average labour productivity growth rate of 4.39% in the same period, which might stem from the effective use of the workforce in labour abundant countries like China, Russia and India. The average labour productivity growth rate of the developed countries and the world went down in the period 2001-2012 compared with the period 1991-2000. As a result, in the period 2001-2012, OIC member countries and other developing countries recorded higher average labour productivity growth rates than the world average and the average of the developed countries.

In summary, the OIC group improved its labour productivity growth performance in the last decade

**Figure 4.3**

Labour Productivity Growth and Total Factor Productivity Growth Rates



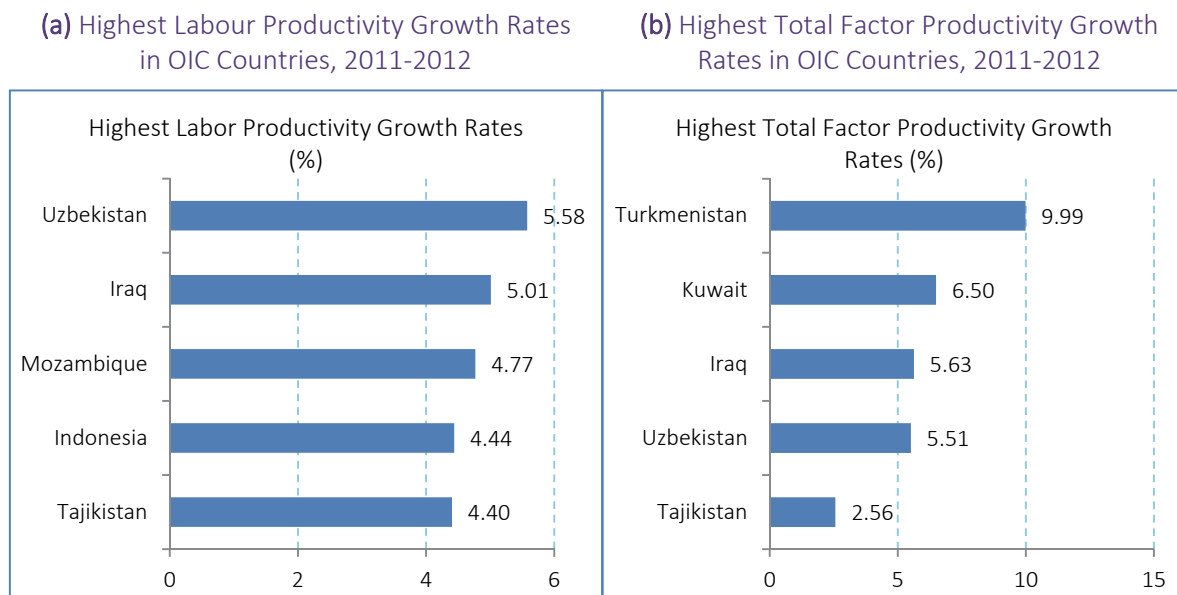
Source: SESRIC Staff Calculations from the Total Economy Database.

compared with the 1990s. However, there are wide disparities across OIC member countries over time. In the recent two-years (2011-2012), Uzbekistan showed the highest labour productivity growth rate together with Iraq, 5.6% and 5%, respectively (Figure 4.4a).

As shown in Figure 4.3, while the OIC group recorded a negative average annual total productivity growth rate of -0.17% in the period 1991-2000, the averages of other groups were all positive around 0.5% with the highest rate of 0.59% recorded in developed countries. Yet, in the period 2001-2012, the average annual TFP growth rate of the OIC group turned back to a positive rate of 0.87%, a rate which was higher than that of both developed countries (0.21%) and the world average (0.45%), but lower than that of the other developing countries group (1.27%). As in the case of labour productivity growth rates, TFP growth rates differ widely across OIC member countries over time. For example, in 2011-2012, Turkmenistan and Kuwait had the highest rates of 9.9% and 6.5%, respectively (Figure 4.4b).

In summary, the OIC group improved its TFP growth performance in the last decade compared with the 1990s where the average rate increased from -0.17% to 0.84%. There are important reasons behind this improvement. Over the last decade, OIC member countries have become more integrated with the world economy in terms of trade, technology transfer and capital flows. Therefore, many OIC countries started to benefit from technologies or mechanisms that are being

Figure 4.4



Source: SESRIC Staff Calculations from the Total Economy Database.

produced abroad that enhance the TFP growth.

Another reason behind the increase in TFP growth rates in OIC member countries is the increased investment in human capital (education) and health. Many OIC member countries increased their attainment ratios to schools at all levels. Basic health services have become available for a larger portion of the OIC population. Also increased cooperation between OIC member countries and international institutions such as IsDB, UN, UNDP, OECD, etc. as well as with the donor countries contributed to the improvement in infrastructure and institutional quality. Yet, despite achieving an average TFP growth rate that is higher than the world average, OIC member countries still need to exert more efforts in order to sustain and accelerate the TFP growth. Any lax policies on the reforms and paying insufficient attention to education or health policies will likely to lead to a

reduction in the TFP growth that will ultimately put a pressure on the wealth creation and standards of living in OIC member countries.

#### 4.1.2 Growth Accounting

As shown in section 3, the growth of GDP under a Cobb-Douglas type production is governed by the growth of capital (K), (L), and A (technology). By using a growth accounting scheme, the sources of growth can be identified. The total economy database presents the dataset for the growth of capital (K), (L), and A (technology). It further classifies the capital stock of a country as non-ICT (information and communication technologies) and ICT capital. The ICT capital stock includes stock that covers ICT related goods and products. Therefore, a higher share of ICT capital growth implies growth stemming from a capital stock with higher density of research and development activities and higher value-added goods.

In a similar fashion, the labour stock is divided into two groups as labour quantity and labour composition. Growth of labour quantity represents the economic growth stemming from the change in the total stock of labour. Change in labour composition explains the growth of economy (GDP) stemming from the changes in the labour skills (education level). The final term in the growth accounting is the technology growth (total factor productivity, TFP) that is the portion of the economic growth that cannot be explained neither by a change in the capital stock nor a change in labour stock. In summary, the growth accounting equation can be written as:

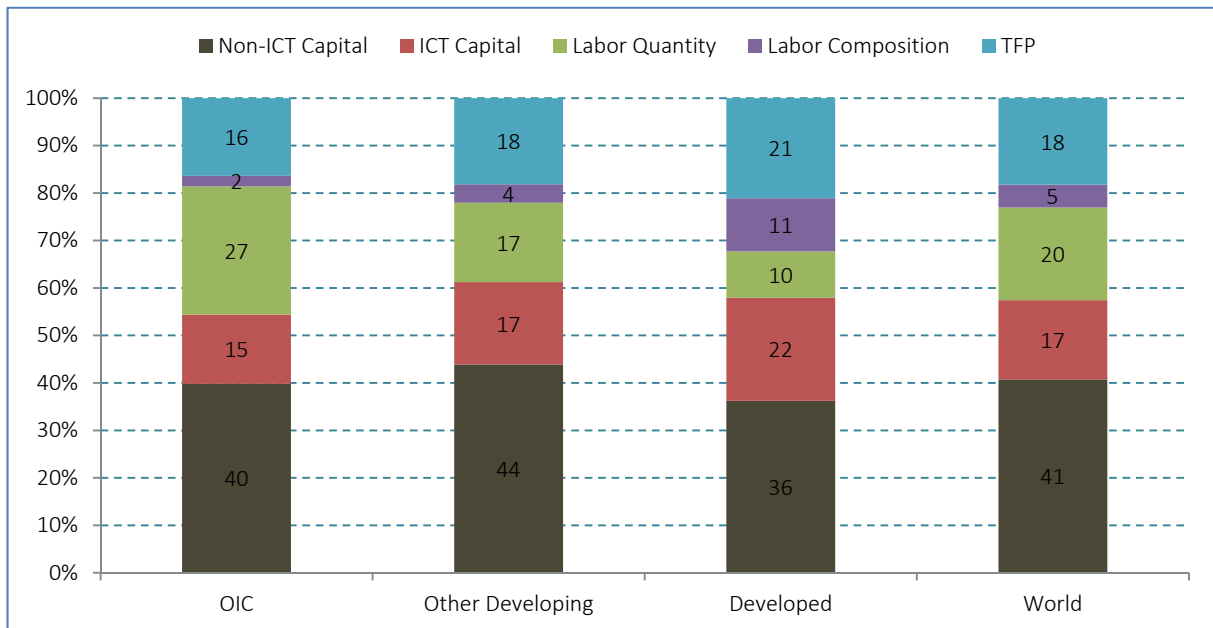
*Growth of GDP = Growth of Capital + Growth Labour + Growth of Technology (TFP)*

*Growth of GDP = Growth of Non-ICT Capital + Growth of ICT Capital + Growth of Labour Quantity + Growth of Labour Composition + Growth of Technology (TFP)*

By using a dataset between 1990 and 2013 retrieved from the Total Economy Database, the result of growth accounting scheme is depicted for four country groups in Figure 4.5. According to Figure 4.5, the growth of non-ICT capital is the main engine for economic growth in all country groups that its contribution to growth ranges between 36.2% and 43.9%. The average of the OIC group is 39.8%, which is lower than the average of other developing countries and the world average. The growth of ICT capital makes a contribution to economic growth within the range of 14.6% and 21.7%. The highest contribution rate of the ICT capital to the economic growth is observed in the developed countries group with 21.7%. The OIC group average ranked at the bottom among four country groups that the ICT capital growth only explains 14.6% of the economic growth.

*Low labour productivity remains one of the biggest challenges faced by the OIC member countries. Promoting and encouraging lifelong learning culture, skill enhancement and hence productivity by devising an enabling policy framework are all necessary measures to be taken by the member countries. National labour policies should focus on quality assurance of training and certification of skills obtained by workers, incentives for the employers to train their workforce especially by targeting low skilled workers, implementation and enforcement of international labour policies and standards and investment in research and development.*

**Figure 4.5**  
Growth Accounting: Sources of Economic Growth, 1990-2013



Source: SESRIC Staff Calculations from the Total Economy Database. Data were available for 37 OIC member countries and 122 countries in total.

The growth of labour quantity is the second major factor that explains the economic growth in the OIC group with an average contribution rate of 27%. With the highest population growth among the four groups, the increase in labour quantity in the OIC group explains a larger portion of economic growth (27%) compared with the world average (19.5%). In other developing countries, the average is recorded at 16.7%. In contrast, in developed countries, the growth of labour quantity only explains 9.8% of the economic growth over the entire period. However, in developed countries, the growth of labour composition (improvement in labour skills) is responsible for 11.2% of the economic growth. In the group of OIC and other developing countries, the averages are only 2.2% and 3.9%, respectively for the contribution of labour composition. In other words, these countries have some problems associated with formal education and vocational training that they require to pay attention to upgrade their respective workers' skills.

Finally, the TFP growth contributes 16.4% to the economic growth in the OIC group, whereas the world average and the average of other developing countries is 18.2%. In developed countries, the TFP growth makes the highest contribution (21.1%) to the economic growth compared with other groups. This is not surprising that both contribution of the labour composition and the ICT-capital are the highest in developed countries.

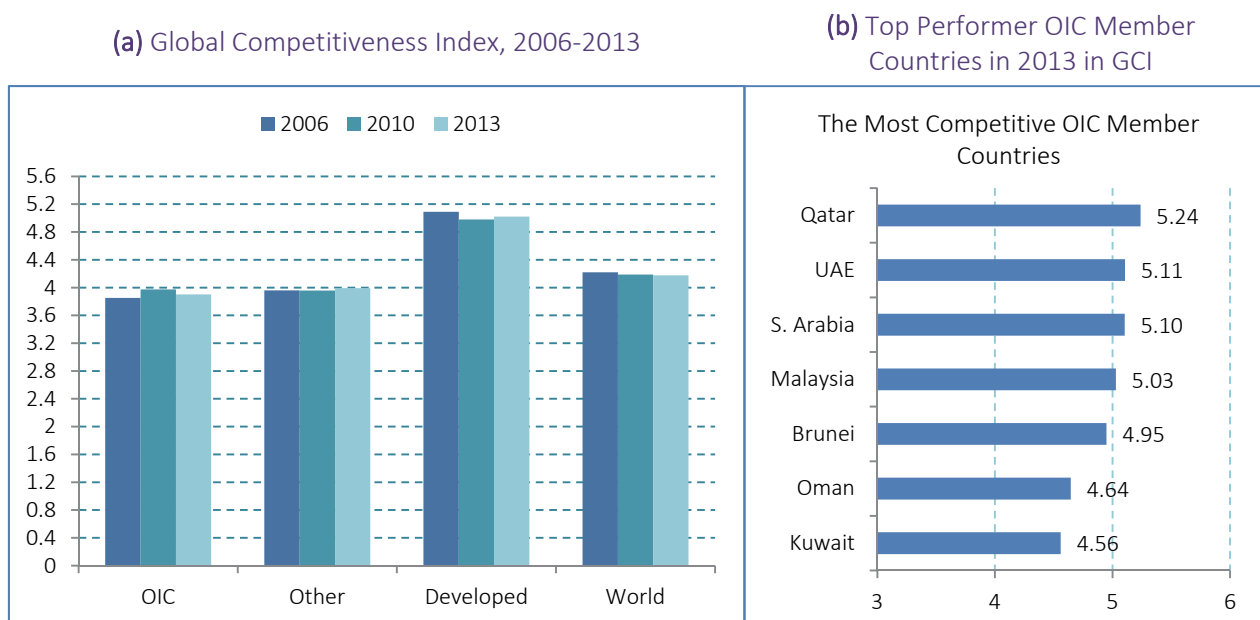
## 4.2 Competitiveness in OIC Member Countries

As discussed in section 3, productivity is an important component of competitiveness. However, competitiveness is associated with a larger set of indicators range from infrastructure to legal barriers. In this section, two internationally recognized competitiveness indicators are analysed for four country groups.

The Global Competitiveness Index (GCI) was developed by the World Economic Forum. The index covers 114 indicators under 12 pillars namely “institutions, infrastructure, macroeconomic environment, health and primary education, higher education and training, goods market efficiency, labour market efficiency, financial market development, technological readiness, market size, business sophistication and innovation”. The GCI of the World Economic Forum describes competitiveness as “the set of factors, policies and institutions that determine the level of productivity of a country taking into account its level of development”. The GCI takes values from 1 to 7, where 1 indicates the worst score and 7 represents the best score.

Figure 4.6a presents the average GCI scores for four country groups between 2006 and 2013. The average GCI scores recorded small changes in all country groups in the given period. Despite having the smallest average GCI score of 3.90 in 2013, the OIC group increased its score from 3.85 in 2006. This change corresponds to a 1.31% increase in the average of OIC between 2006 and 2013. In other developing countries also improved their GCI score by 0.84% between 2006 and 2013 (from 3.95 to 3.99). However, both the average GCI score of developed countries and the world average

**Figure 4.6**



Source: SESRIC Staff Calculations from the World Economic Forum Global Competitiveness Database that have data for 42 OIC member countries and 147 countries in total.

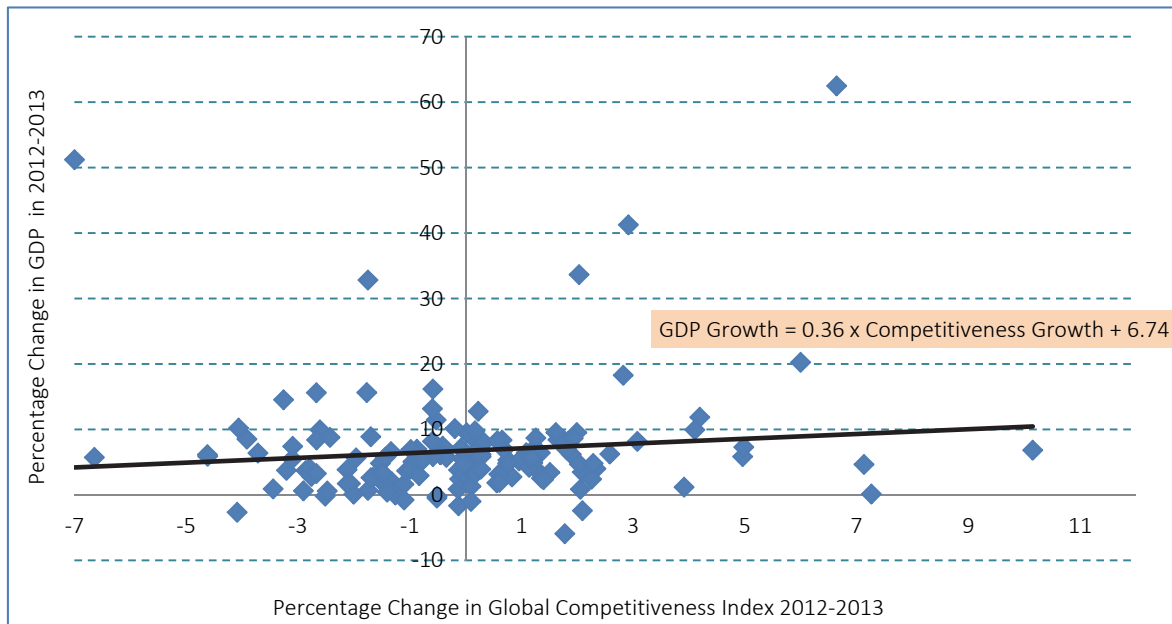
GCI score decreased by 1.33% and 1.02%, which implies deterioration in their competitiveness. Finally, Figure 4.6b shows the most competitive OIC member countries in 2013 according to their GCI scores. Qatar and United Arab Emirates ranked the first and the second with scores of 5.24 and 5.11, respectively. These are followed by Malaysia and Brunei with scores of 5.03 and 4.95, respectively.

The positive association between competitiveness and GDP growth is confirmed in Figure 4.7 by using a dataset for 148 countries over the period 2012-2013. The data for growth in GCI are regressed on the data for GDP growth. The regression analysis has shown that a 10% increase in GCI leads to a 3% increase in GDP growth. Therefore, policies to enhance competitiveness would likely to boost economic growth both in developing and developed countries.

The Ease of Doing Business Index (EDBI) is another indicator that can be used to assess a country's competitiveness internationally. The EDBI was developed by the World Bank that ranks economies from 1 to 183 (in 2012), with the first place being the best. A high ranking (a low numerical rank) means that the regulatory environment is conducive to business operation.

Figure 4.7

Global Competitiveness Index vs. GDP Growth in the World



Source: SESRIC Staff Calculations from the World Economic Forum Global Competitiveness Database.

The ease of doing business index is meant to measure regulations directly affecting businesses and does not directly measure more general conditions such as a nation's proximity to large markets, quality of infrastructure, inflation, or crime. A nation's ranking on the index is based on the average of 10 sub-indices:

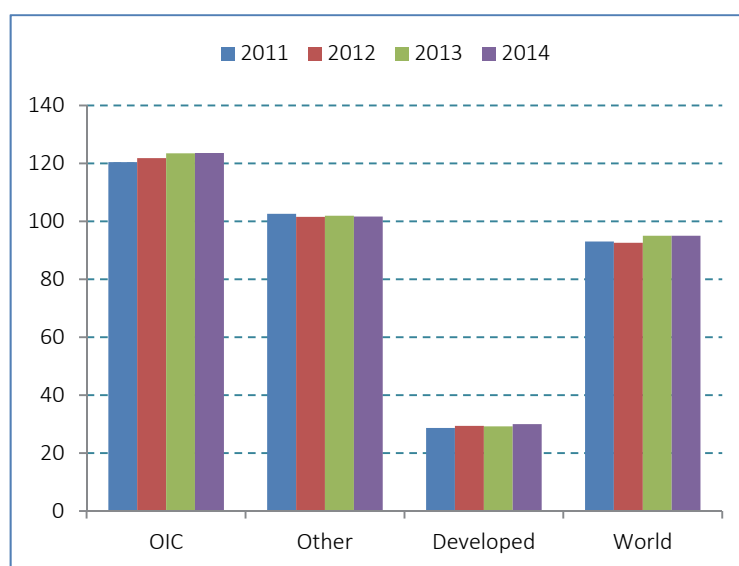
1. Starting a business – Procedures, time, cost and minimum capital to open a new business;
2. Dealing with construction permits – Procedures, time and cost to build a warehouse;
3. Getting electricity – procedures, time and cost required for a business to obtain a permanent electricity connection for a newly constructed warehouse;
4. Registering property – Procedures, time and cost to register commercial real estate;
5. Getting credit – Strength of legal rights index, depth of credit information index;
6. Protecting investors – Indices on the extent of disclosure, extent of director liability and ease of shareholder suits;
7. Paying taxes – Number of taxes paid, hours per year spent preparing tax returns and total tax payable as share of gross profit;
8. Trading across borders – Number of documents, cost and time necessary to export and import;
9. Enforcing contracts – Procedures, time and cost to enforce a debt contract; and
10. Resolving insolvency – The time, cost and recovery rate (%) under bankruptcy proceeding.



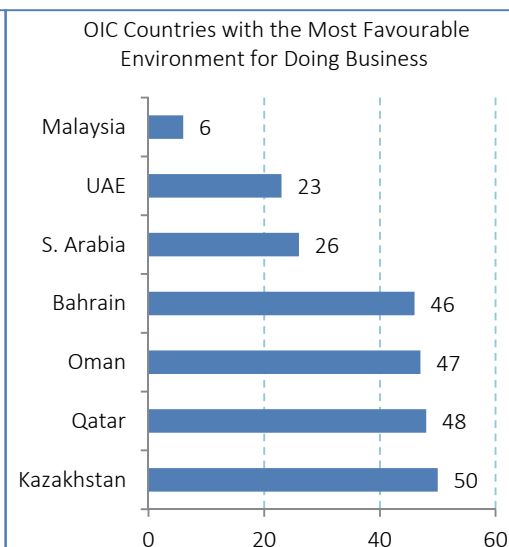
Figure 4.8a presents the average EDBI scores for four country groups between 2011 and 2014. Only small changes were observed in the average EDBI scores of country groups. The average of other developing countries and the world average of the EDBI went down between 2011 and 2012 indicating an improvement in doing business environment. However, the average of the OIC group went up from 120.4 in 2011 to 121.8 in 2012, on average, doing business in OIC economies became slightly more difficult. In a similar fashion, both in 2013 and 2014 the average of the OIC group continued to increase which means that their competitiveness deteriorated. In other developing

Figure 4.8

(a) Ease of Doing Business, 2011-2012



(b) Top Performer OIC Countries in 2012 in Ease of Doing Business Index



Source: SESRIC Staff Calculations from the World Bank Ease of Doing Business Database that have data for 57 OIC member countries and 214 countries in total. Note: Ease of doing business index (1=easiest to 183=most difficult).

countries, the EDBI score went down from 102.5 in 2011 to 101.5 in 2012. The average score of other developing countries went down from 101.9 in 2013 to 101.6 in 2014. The world average also decreased from 93 in 2011 to 92.5 in 2012. In 2013 and 2014, the world average was measured as 95. In 2014, among OIC member countries, Malaysia, United Arab Emirates and Saudi Arabia were ranked as the countries with the most business friendly environment, followed by Bahrain, Oman and Qatar (Figure 4.8b).

As shown in Figures 4.6b and Figure 4.8b, Qatar, United Arab Emirates, Saudi Arabia, Malaysia, Oman are five OIC member countries that ranked in top seven among OIC member countries both in terms of the GCI and EDBI scores. Therefore, these five countries are very competitive economies independent from how their competitiveness is measured. This reveals that different competitiveness indicators based on different methodologies gave a similar message. Therefore efforts of policy-makers to improve competitiveness bear positive results that make their countries more competitive, which ultimately carry them to higher standards of living.

## SECTION 5

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## Fostering Productivity and Competitiveness

Competitiveness is a reflection of the overall circumstances including institutions, policies and factors that have impact on the level of productivity. While the level of productivity is critical in determining the returns to investments, higher returns to investments bring higher growth rates. Therefore, more competitive economies with higher productivity levels are expected to generate higher income levels for their citizens. It is well-known that productivity is the main determinant of economic growth.

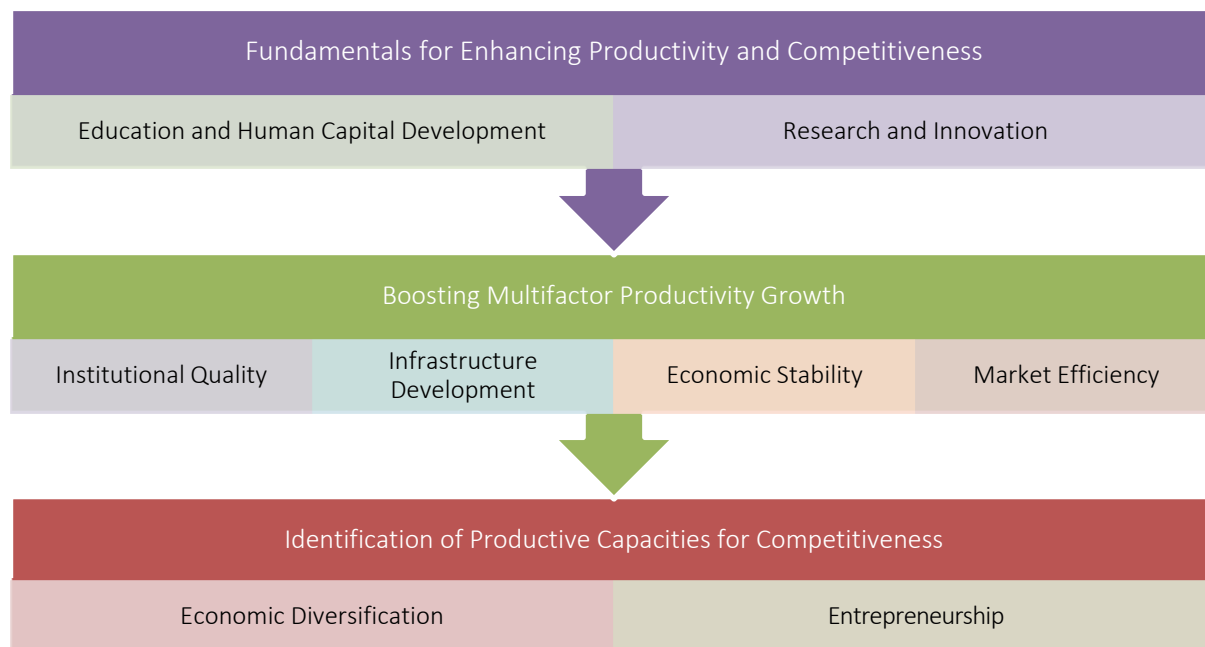
Countries develop and become more competitive as they move from factor-driven economic structure to innovation-driven economic structure. Countries abundant with natural resources and unskilled labour can only compete on the basis of prices. As they become more efficient in production processes, quality of goods can be improved and become more sophisticated with intermediate technologies and relatively skilled labour force. This increases their competitiveness on the basis of quality as well as prices. Countries with innovation capabilities, on the other hand, can compete with new and original products, but they require constant investment in research and innovation to maintain their level of competitiveness.

Whatever the levels of development economies achieve, they need certain strategies to maintain existing level of competitiveness but also to improve it further. At every stage, human capital development and investment in research and development is critical to improve existing capacities. However, these are not the only critical factors in productivity enhancement. In order to attain higher efficiency in production processes, some other factors that have impact on the overall productivity should be taken into account. In this context, if factors that are highly instrumental for efficiency in business such as institutions, infrastructure, economic environment, financial sector

and labour market are not well developed to boost the productivity growth, then investments in human capital and research and innovation would not yield the desired outcome.

**Figure 5.1**

Critical Factors in Fostering Productivity and Competitiveness



The critical step to boost productivity is therefore the creation of an environment that is conducive to productivity improvement. The conditions of such an environment depend largely on the country characteristics. Market size, population, market potential and connectivity with neighbouring economies, and factor endowments and their characteristics are some of the factors that affect the actions to be taken to make the environment conducive to productivity improvement at country level. The requirements for the development and deepness of financial sector, for instance, may vary from country to country depending on the needs of the private sector.

Even if the environment is ready for productivity improvement, countries may not be focusing on the 'right' activities that will bring real competitive and productivity advantages. For that reason, countries should allow for an identification process of productive capacities through supporting entrepreneurship and economic diversification. Dynamic entrepreneurial activities in an environment conducive to productivity growth (with good quality institutions, infrastructure, economic stability and efficient markets) will help countries to find their true potentials. An economic diversification process supported by governments and dynamic entrepreneurship will at the end help countries to identify their productive capacities for competitiveness.

This line of reasoning brings us to a three-step approach in discussing the issue of fostering productivity and competitiveness and Figure 5.1 shows all the factors that are considered in this report as critical. Each of the factors listed in the chart are definitely interconnected and well-dependent on each other. Therefore, it does not imply a step by step approach in fostering productivity and competitiveness. Countries may well be engaged in activities that promote, for example, human capital development, institutional quality and economic diversification at the

same time, but the purpose of this endeavour will be to improve the conditions for better educated labour force to identify and then engage in new productive activities that can foster the overall productivity in the country. For that reason, what is provided in Figure 5.1 is to merely guide us on the relative significance of factors in the process of economic development.

In this context, this section is organized as follows. The next subsection deals with the fundamental factors identified as critical for enhancing productivity and competitiveness, which are education and human capital development and research and innovation. Subsection 5.2 tackles the factors that are necessary to create an environment conducive to multifactor productivity growth. These include institutional quality, infrastructure development, economic stability and market efficiency. Finally, two main constituents of identification process of productive capacities, namely economic diversification and entrepreneurship, are discussed in subsection 5.3.

### 5.1 Fundamentals for Enhancing Productivity and Competitiveness

The critical question is what determines the growth rate of the economy over the long run and how can it be affected through policy measures? This is an important question in identifying what makes some countries rich and other poor. Technically, a standard production function depends on the total amount of labour and capital and the total productivity of these factors. As highlighted in section 3, using the most commonly used production function in the literature, the Cobb-Douglas production function, it can be depicted that  $Y_t = A_t K_t^\alpha L_t^{1-\alpha}$ , where  $Y_t$  is total output,  $K_t$  is capital,  $L_t$  is labour and  $A_t$  is total productivity at year  $t$ . An increase in  $A_t$  increases the productivity of the other factors and usually called as total factor productivity, or multifactor productivity. An increase in  $A_t$  results in higher output as it increases the capabilities of other factors of production to produce one unit of output with fewer amounts of manpower and capital stock.

Long-run growth is determined by the level of technological progress, because growth cannot be sustained by increases in capital per worker or increases in the number of workers. In order to expand the efficiency with which an economy uses its inputs, productive capacities of each production factors should be improved. In this context, in order to improve the level of labour productivity, the capacity of labour force should be developed through increasing their skills and knowledge. This can be achieved through human capital development and quality education. Higher productivity of labour may be reflected in rates, stability of employment, job satisfaction or employability across jobs or industries. On the other hand, productivity of capital can be increased through technological advancement. This requires investment in research and development activities to promote innovation of new technologies and processes and to increase firm productivity. The productivity of firms, in addition to output per worker, may be reflected in market share and export performance. The overall benefits from higher labour and firm productivity may be evident in increased competitiveness and employment or in a shift of employment from low to higher productivity sectors.

In this context, human capital development and technological innovation are considered to be the essential factors in enhancing productivity and competitiveness. Accordingly, this subsection investigates the role of education and research and innovation in enhancing the productive capacities and improving competitiveness.

### 5.1.1 Education and Human Capital Development

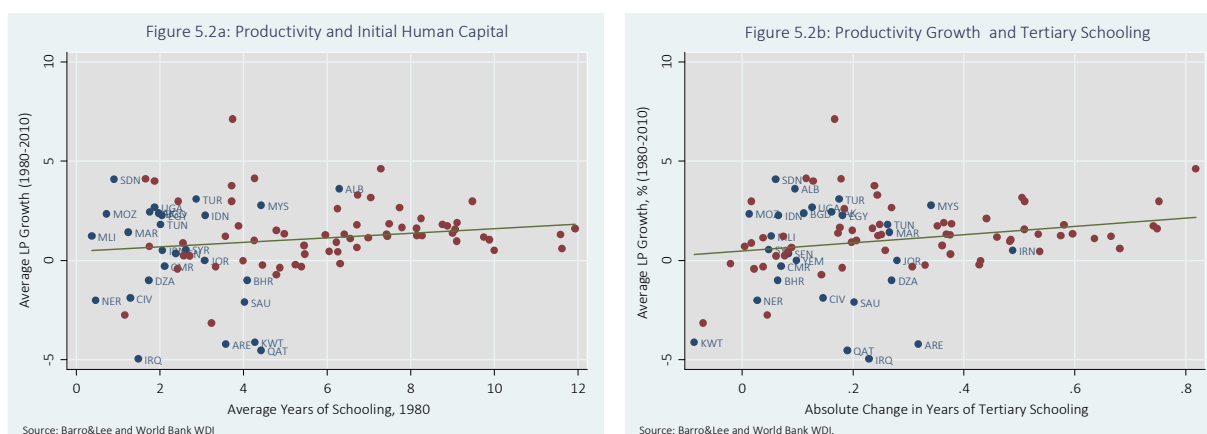
Formal education is highly instrumental to improve the production capacity of a society. Better education improves the production processes in several ways. Educated, or skilled, workers are able to perform complex tasks and thereby contribute to producing more technologically sophisticated products. Especially in developing countries, skilled workers increase the absorptive capacity of the country by acquiring and implementing the foreign knowledge and technology, which is of crucial importance in successful economic diversification and development.

A qualified workforce, also called human capital, is for that reason crucial for improving productive capacities. Human capital is used to refer to the knowledge and capabilities embodied in people that can be utilized to advance the production techniques and contribute to the social and economic development. The term “human capital” is used because people cannot be separated from their knowledge or skills in the way they can be separated from their financial and tangible assets. Along with physical capital stock, human capital stock is one of the factors of production in determining the economic prosperity and progression, with the stock of human capital playing an important role in determining the ability to absorb new knowledge and technologies, and thus increasing labour productivity (Mankiw et al., 1992). Productivity growth in turn is a key factor in promoting long-term economic growth.

The role of education in increasing the productivity and efficiency of labour force by increasing the cognitive stock of economically productive human capability is well acknowledged. A survey of the empirical results conducted by Sianesi and Van Reenen (2000) shows that an overall 1 % increase in school enrolment rates leads to an increase in GDP per capita growth of between 1% and 3 %. An additional year of secondary education leads to more than a 1 % increase in economic growth each year. Jorgenson *et al.* (2005) find that the increase in the employment of college-educated workers contributed significantly to the increase in US productivity growth since 1995. Human capital accumulated through on-the-job-training (OTJT), especially for workers with low qualifications, increases productivity at the firm level. OTJT is also a direct source of innovation for firms that strengthen their long-term competitiveness (Blundell et al., 1999). Konings and Vanormelingen (2011), by using the data from 1997-2006 of Belgium, concluded that productivity increases by 1.4%-1.8% in response to an increase of 10 percentage points in the share of trained workers.

A simple scatter plot of initial human capital levels and subsequent growth in labour productivity,

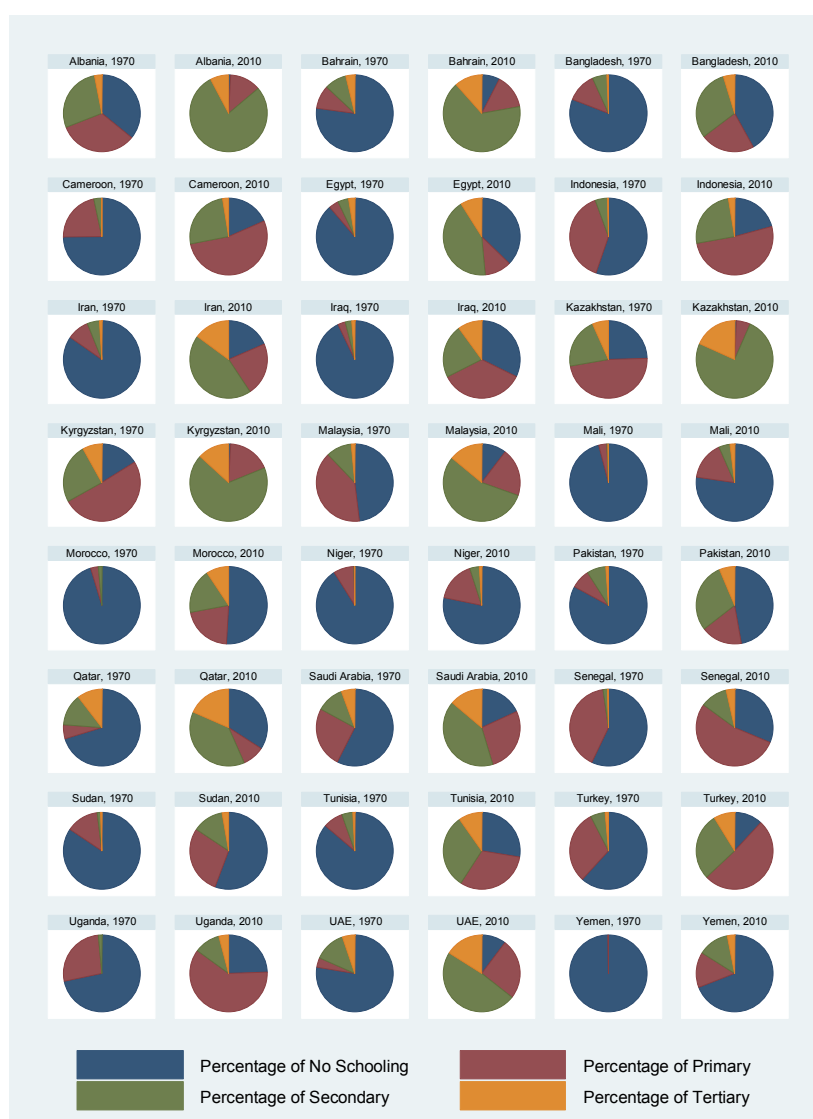
**Figure 5.2**  
Labour Productivity and Schooling



measured as the average income growth per worker, over 1980–2010 is shown in Figure 5.2a. The raw correlation between these two variables is clearly positive, suggesting that economies with larger initial human capital stocks tend to exhibit higher productivity growth, holding all else constant. Figure 5.2b shows that an increase in tertiary schooling is also positively correlated with productivity growth. In fact, there is substantial controversy in the literature about whether it is the level of years of schooling or the change in years of schooling that is the more important driver of economic growth. It has been also suggested in the literature that education is important in facilitating research and development and the diffusion of technologies, with initial phases of education more important for imitation, and higher education more important for innovation (Vandenbussche, et al., 2006).

For the development of human capital, key prerequisite is not only to increase the access and participation to education, but also to improve the progression and quality in education. OIC countries have made significant progress in improving the participation to education over that last four decades. Figure 5.3 compares the schooling ratios with respect to the levels attained for the years 1970 and 2010, in selected OIC countries. Four decades ago, a large share of the labour force had no school education at all, particularly in sub-Saharan African countries. In some countries, including Burkina Faso, Cote d'Ivoire, Mali, Niger and Senegal, this share was more than 80% and reaching as high as 99%. Central Asian countries had the most favourable picture in terms of school attendance, followed by Southeast Asian countries like Indonesia and Malaysia. Comparing the level of achievements in secondary school participation among the all OIC countries, Yemen had the lowest share in 1970 with only 0.04% and

**Figure 5.3**  
Schooling Ratios in OIC Countries, 1970 vs. 2010



Source: Barro and Lee (2013).

Tajikistan had the highest with 36%.

This picture has substantially changed during the last four decades. The share of population with no schooling has considerably shrunk in many of the countries. Most of the central Asian, Gulf and Southeast Asian countries achieved high participation rates in secondary and tertiary level schooling and most of the sub-Saharan African countries made good progress in increasing the participation to primary schools. Comparing again the level of achievements in secondary school participation among the all OIC countries in 2010, Mozambique had the lowest participation with 3% and Tajikistan achieved a participation level of 83%. This shows the large discrepancies among the OIC member countries with regard to school participation and educational achievements.

It has been observed that although many countries have made impressive progress over the past four decades, disparities remain between countries. Moreover, whatever gains made in access to education, it should be supported with a parallel improvement in quality. Only with good quality education, productive capacities of the people can be increased. Measuring and comparing the quality of education across the world is, however, not an easy task. A programme pursued by OECD, known as the Programme for International Student Assessment (PISA), is one of the major

**Table 5.1**  
Comparing Performances in Education for Selected Countries

	Mathematics		Reading		Science	
	Mean score	Annualised change	Mean score	Annualised change	Mean score	Annualised change
OECD average	494	-0.3	496	0.3	501	0.5
Singapore	573	3.8	542	5.4	551	3.3
Korea	554	1.1	536	0.9	538	2.6
Japan	536	0.4	538	1.5	547	2.6
Switzerland	531	0.6	509	1	515	0.6
Germany	514	1.4	508	1.8	524	1.4
United Kingdom	494	-0.3	499	0.7	514	-0.1
United States	481	0.3	498	-0.3	497	1.4
Sweden	478	-3.3	483	-2.8	485	-3.1
Greece	453	1.1	477	0.5	467	-1.1
<b>Turkey</b>	<b>448</b>	<b>3.2</b>	<b>475</b>	<b>4.1</b>	<b>463</b>	<b>6.4</b>
Romania	445	4.9	438	1.1	439	3.4
Bulgaria	439	4.2	436	0.4	446	2
<b>United Arab Emirates</b>	<b>434</b>	<b>NA</b>	<b>442</b>	<b>NA</b>	<b>448</b>	<b>NA</b>
<b>Kazakhstan</b>	<b>432</b>	<b>9</b>	<b>393</b>	<b>0.8</b>	<b>425</b>	<b>8.1</b>
Thailand	427	1	441	1.1	444	3.9
Chile	423	1.9	441	3.1	445	1.1
<b>Malaysia</b>	<b>421</b>	<b>8.1</b>	<b>398</b>	<b>-7.8</b>	<b>420</b>	<b>-1.4</b>
Mexico	413	3.1	424	1.1	415	0.9
<b>Albania</b>	<b>394</b>	<b>5.6</b>	<b>394</b>	<b>4.1</b>	<b>397</b>	<b>2.2</b>
Brazil	391	4.1	410	1.2	405	2.3
Argentina	388	1.2	396	-1.6	406	2.4
<b>Tunisia</b>	<b>388</b>	<b>3.1</b>	<b>404</b>	<b>3.8</b>	<b>398</b>	<b>2.2</b>
<b>Jordan</b>	<b>386</b>	<b>0.2</b>	<b>399</b>	<b>-0.3</b>	<b>409</b>	<b>-2.1</b>
<b>Qatar</b>	<b>376</b>	<b>9.2</b>	<b>388</b>	<b>12</b>	<b>384</b>	<b>5.4</b>
<b>Indonesia</b>	<b>375</b>	<b>0.7</b>	<b>396</b>	<b>2.3</b>	<b>382</b>	<b>-1.9</b>
Peru	368	1	384	5.2	373	1.3

Source: OECD. Countries and economies are ranked in descending order of the mean mathematics score in PISA 2012. Annualised changes are compared to the test scores in 2009.

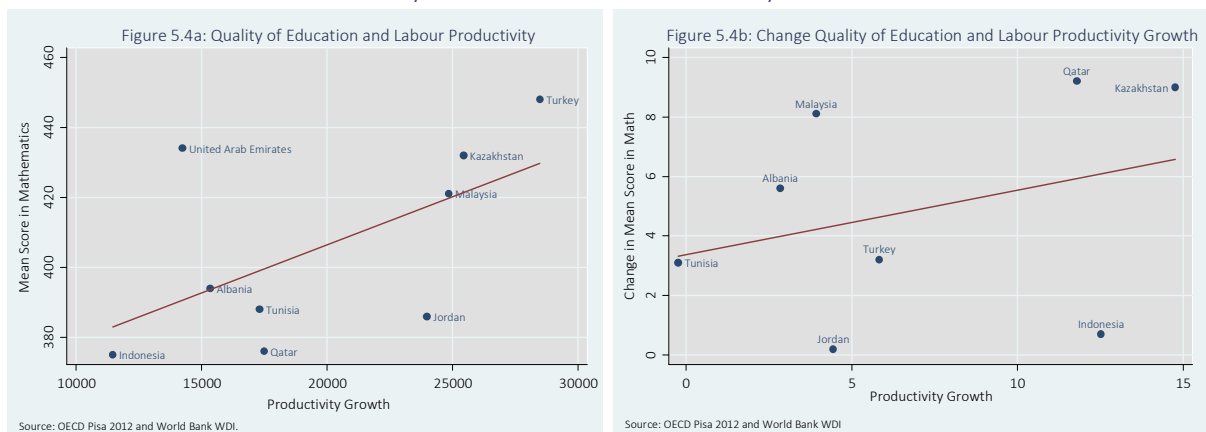
studies conducted to measure the quality of education.<sup>1</sup> Though the number of OIC countries included in the programme is limited, it provides an opportunity to compare the quality of education in human capital development in OIC countries with other countries.

Table 5.1 shows the mean performance of students on mathematics, reading and science for all 9 OIC countries taking part in the PISA 2012 study of OECD, along with some other comparison countries. The average score among OECD countries is approximately 500 points and the standard deviation is 100 points. About two-thirds of students across OECD countries score between 400 and 600 points. Among the OIC member countries, Turkey, United Arab Emirates, Kazakhstan and Malaysia have average performance over 400. Albania, Tunisia, Jordan, Qatar and Indonesia have average scores below 400 points. Turkey provides the highest quality education within the OIC countries but it is still below the OECD average. However, the annualized changes in the mean scores in the OIC countries are among the highest. Particularly, Kazakhstan, Malaysia and Qatar improved the quality of education at levels reaching up to 12% per year since last survey in 2009.

It is, however, worrying that among the 65 countries or economies surveyed in the study, 5 of the 10 worst performers on the overall reading scale are the OIC member countries. Turkey as the best performing OIC member country occupies only the 44<sup>th</sup> position. Several studies illustrate the seriousness of the learning challenge. More than 30% of Malian youths aged 15–19 years who completed six years of schooling could not read a simple sentence. In Pakistan, tests of grade 3 children found that only half could answer very basic multiplication questions (World Bank, 2011).

As noted earlier, it is recognized that there is a positive relationship between the quality of education and productivity. Figure 5.4a compares performance in mathematics in 2012 with average labour productivity in 2012 for participating OIC member countries and Figure 5.4b compares the annualized change in average score in mathematics and change in productivity growth between 2009 and 2012. Obviously, there is a positive relationship between the quality of education and labour productivity in OIC countries. For higher productivity and better economic performance, it is critical to improve the quality of education.

**Figure 5.4**  
Quality of Education and Productivity Growth



<sup>1</sup> PISA is an internationally standardised assessment that was jointly developed by participating economies and administered to 15-year-olds in schools to test reading, mathematical and scientific literacy in terms of general competencies. See <http://www.oecd.org/pisa/home/> for more information about the programme.



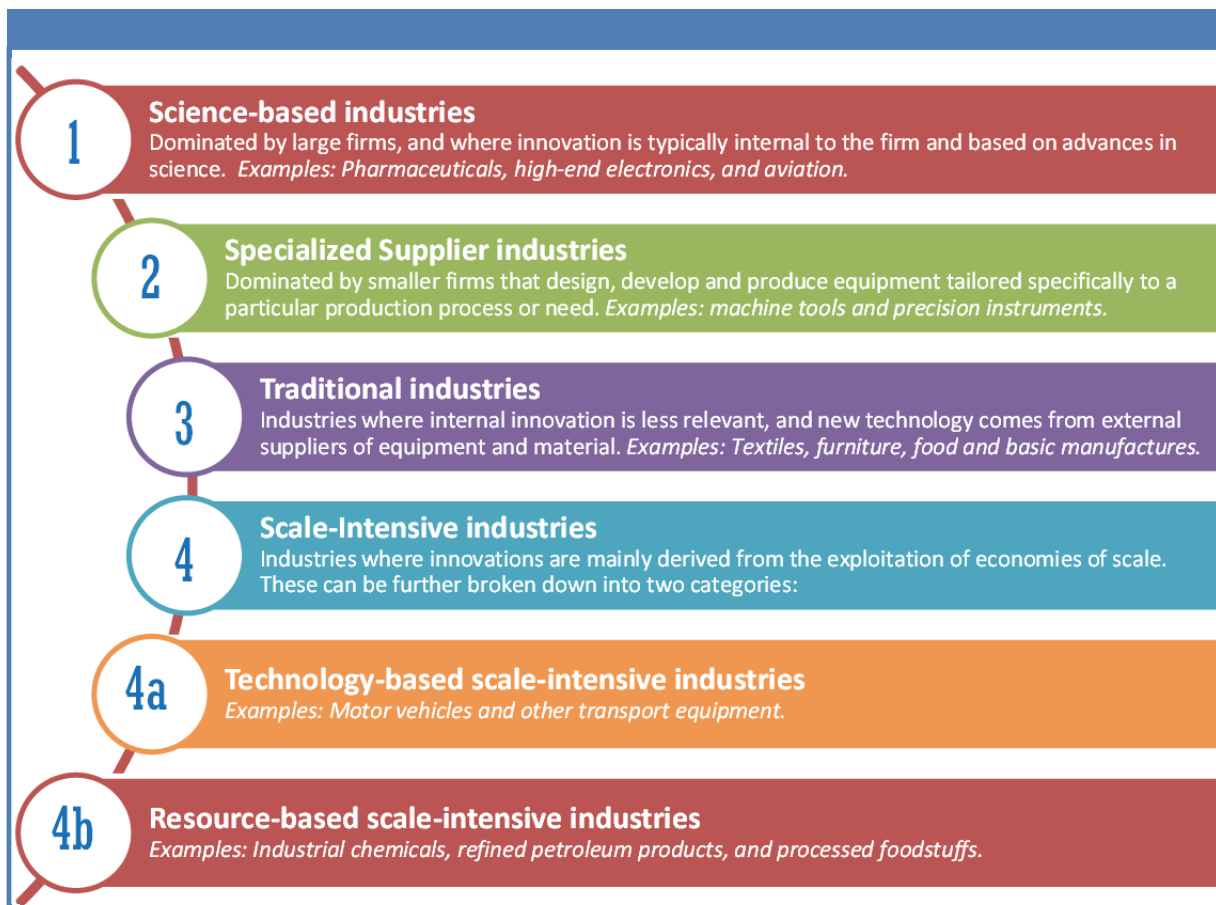
### 5.1.2 Research and Innovation

The ability to create, diffuse and implement knowledge and technology is critical for firms and countries to thrive in an increasingly competitive global economic environment. Competitiveness can be achieved in two ways, either developing new products (technological competitiveness) or improving efficiency and reducing labour costs (cost competitiveness). Technological competitiveness requires substantial investment in research and innovation. Behaviours of firms are substantially affected by the nature of competition and a favourable competition environment forces firms to become innovative and achieve productivity gains.

However, innovation requires significant investment and long-term perspective. Therefore, available resources for research and innovation need to be allocated according to national development strategies and priorities. Today's knowledge economies heavily rely on research and development activities and innovative technologies to sustain their competitive status vis-à-vis other countries. On the other hand, the expected benefits of investment in innovative activities in low income countries may be disappointing due to insufficient framework conditions. Establishing sound and sustainable ICT systems, building world-class universities and financing top research are expensive endeavours. Therefore, it is critical to allocate available resources in line with developmental needs and strategies.

In general, innovation refers to the creation of new or significantly improved products, processes,

**Figure 5.5**  
Industries by Their Sources of Innovation



organizations that adds value to society, markets and governments. Many of the techniques and processes are cumulative and interdependent. Educational system, research infrastructure, functioning of capital markets and availability of information and communication technologies are some of the external factors that influence the innovative capacities of firms. Investment needs to be fairly balanced across the areas of higher education, innovation and ICT, otherwise growth can seriously falter.

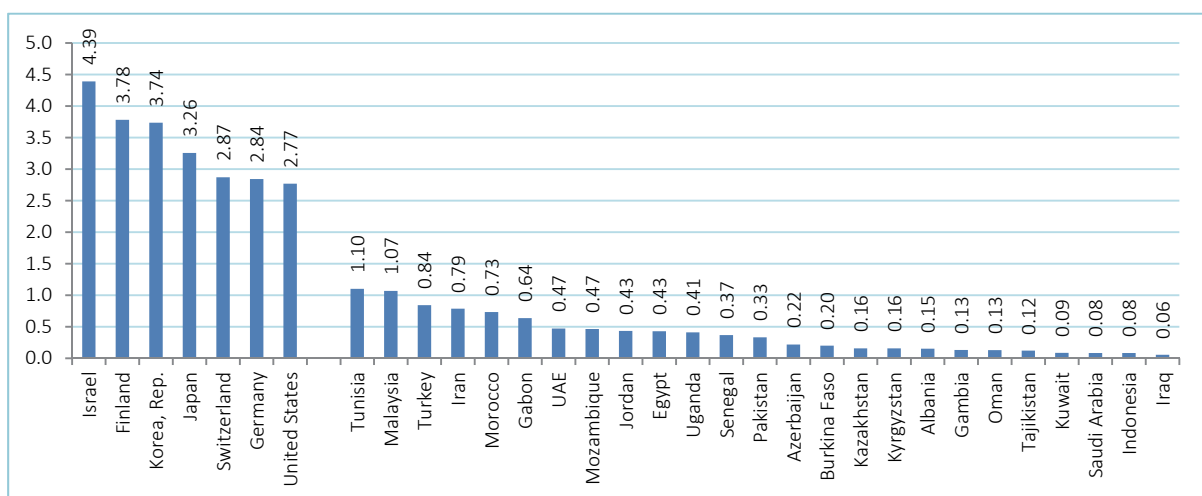
Technological progress can come from adopting knowledge that is globally available (“catching up”) or developing new knowledge. Both are relevant to OIC countries, depending on the state of development of each industry in each country. Industries in which innovation takes place depend on the level of development in each country. As highlighted in Tiffin (2014), innovation activities in each industry hinges on the nature of industry. Some industries are dominated by large innovative firms while others may be dominated by smaller firms with ability to provide specialized products. In other industries, capability to innovate is based on only the ability to exploit economies of scale. Figure 5.5 shows the classification of industries based on their source of innovation.

In advanced economies, the weight of resource-based scale-intensive industries is smaller compared to technology-based scale-intensive industries as well as science-based industries and a large proportion of innovation stems from specialized suppliers. In most OIC countries, traditional and resource-based industries are dominant. Specialized supplier industries have often viewed as one of the key sources of competitiveness. Firms in this sector tend to be small and medium in size, with a marked capacity for incremental innovation and a diversified range of high-quality, high-margin products with few substitutes (Tiffin, 2014). Therefore, OIC countries may focus more on supporting industries where there is room for innovation and competitiveness.

### Expenditure on Research and Development

Research and innovation are activities that have long been associated with strong economic activity and well-being. These activities typically account for between 1% and 4% of a country's gross

**Figure 5.6**  
Research and development expenditure (% of GDP), 2011 or latest after 2008



Source: World Bank WDI.

domestic product (GDP) in developed countries and below 1% in developing countries. Therefore, in developing countries many of current scientific activities are under-funded. Such activities are often driven by individual efforts and interests and for advancing the academic career. It is common to observe commitments by relevant ministers to strive towards investing at least 1% of GDP on research and development (R&D), but realization is usually much lower than that.

R&D expenditure in OIC countries increases from year to year but it is still unsatisfactory. According to SESRIC (2012), more than 76% of the global R&D expenditures is spent by developed countries, of which 31.7% by the USA, 23.2% by the EU, and 10.9% by Japan. The OIC countries account for only 2.1% of the world total Gross Domestic Expenditures on R&D (GERD), or 8.8% of the total GERD of developing countries. According to the latest data available, Israel (4.39%), Finland (3.78%) and Korea (3.74%) are the top countries in terms of allocating resources for R&D. Top countries in OIC are Tunisia (1.1%), Malaysia (1.07%) and Turkey (0.84%).

### Patent applications

While expenditure on R&D reflects the importance given to the research and innovation, the number of patent applications shows how successful are the investments in these areas. According to statistics from the World Intellectual Property Organization (WIPO), the total number of patent applications around the world between 2008 and 2012 is reported to exceed 10 million.<sup>2</sup> USA, Japan, China, and Republic of Korea accounted for almost 70% of the total patent

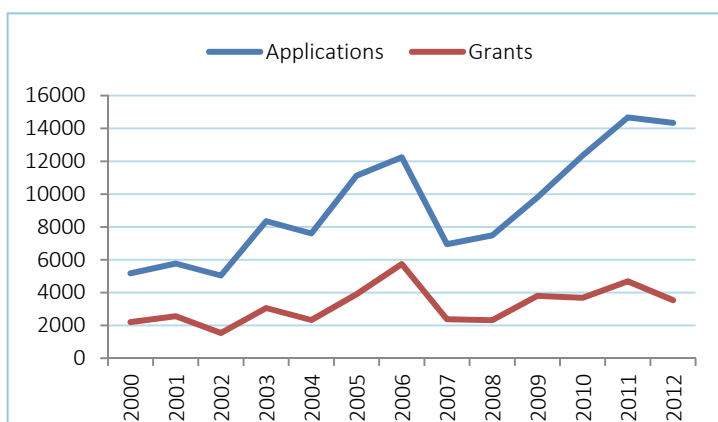
**Table 5.2**

Patent Applications and Grants,  
Top Countries (2008-2012)

Country	Applications	Grants
Turkey	21837	4168
Malaysia	8997	2698
Kazakhstan	6444	5740
Saudi Arabia	4014	977
Egypt	3280	443
Azerbaijan	2171	1136
Indonesia	1758	74
Uzbekistan	1466	620
Côte d'Ivoire	1161	10
Morocco	932	427
UAE	709	171
Kyrgyzstan	634	484
OIC Total	58646	18017
Source: WIPO statistics database.		

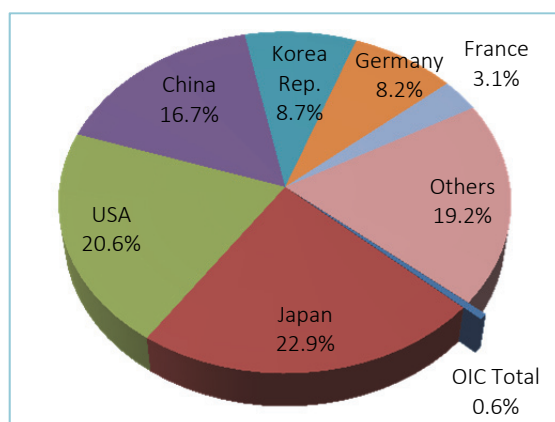
**Figure 5.7**

Total patent applications and grants in OIC countries  
(2000-2012)



Source: WIPO.

Total patent applications in the World during  
2008-2012



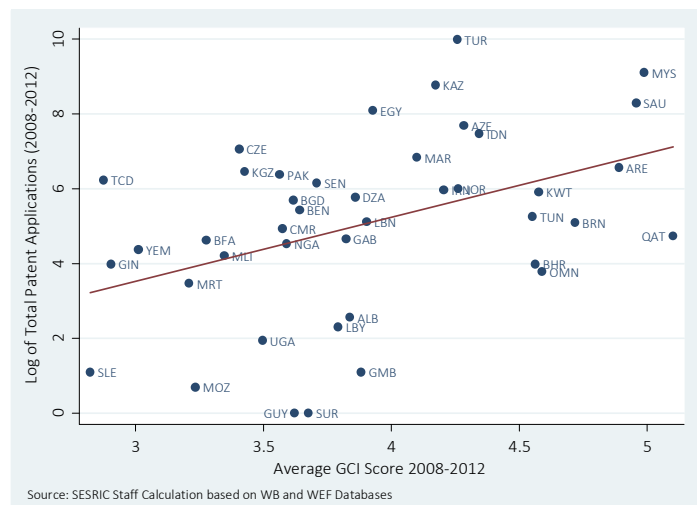
<sup>2</sup> The total of the period between 2008 and 2012 are considered in order to avoid any time specific fluctuations in the number of applications.

applications in the world (Figure 5.7).

In OIC countries, patent application (by residents and abroad) was highest in Turkey (21,837), Malaysia (8,997) and Kazakhstan (6,444). These three countries account for more than 60% of all patent applications made in the OIC countries (Table 5.2). The total patent applications in OIC countries reached almost 60,000; however, they account for only 0.6% of total applications filled in the world. When it comes to the number of grants, Kazakhstan stands as the most successful OIC country with 5,740 grants during the period of 2008-2012. Total grants in OIC countries barely exceeded 18,000 and accounting for only 0.4% of total grants worldwide.

Figure 5.8 depicts the relationship between total patent applications during the period of 2008-2012 and average global competitiveness score during the same period for the OIC countries. Countries with higher number of patent applications attained better positions in global competitiveness rankings. This clearly shows the importance of investment in research and innovation for better competitiveness in the world. Therefore, while focusing on increasing the expenditures and improving the environment for R&D, it must be ensured that satisfactory innovative outcomes are obtained from these activities.

**Figure 5.8**  
Patent Applications vs. Global Competitiveness



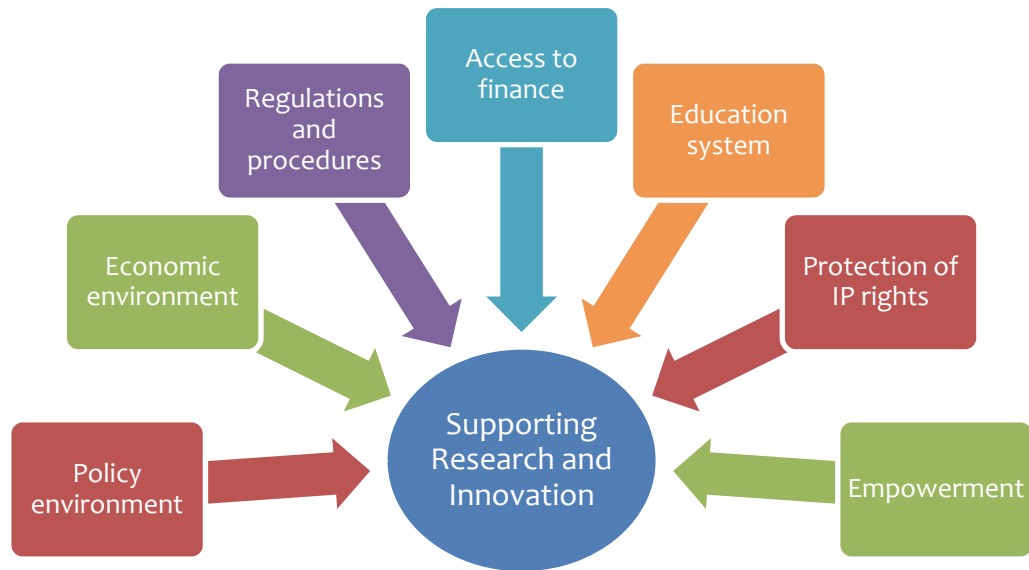
### Supporting Research and Innovation

Ideas need an innovation-friendly environment to grow and generate benefits to all societies through new products and/or services. If enterprises in OIC countries are to become competitive in the global economy, policies in OIC countries should focus on creating an environment that promotes innovation. The main factors and framework conditions in supporting research and innovation are provided in Figure 5.9. Most importantly, in order for innovative ideas to create growth and jobs through better products and services, access to finance for research and innovation should be improved, regulations and procedures should be in line with international standards, and education system should support creative capabilities. Policy and economic environment, protection of intellectual property rights and empowerment of people are also critical factors in research and innovation.

**Policy environment:** Even though innovation is led largely by firms, public policy can have significant impact on the environment in which firms operate by making it more conducive to innovation. It is necessary to ensure a better coordination in policymaking, establish stronger mechanisms for financing innovation and create coherence and synergy among public policy interventions. This is required particularly when the innovation depends on multisectoral coordination. Strengthening innovation does not necessarily rely on financial contribution of state authorities or any other kind

**Figure 5.9**

Critical Factors in Supporting Research and Innovation



of public investment. By taking some crucial structural policy reforms, policymakers can set the framework conditions that support innovation more effectively. This may include improving regulatory environment for innovation through entrepreneurship support programmes, better administrative regulations and tax reforms.

**Economic environment:** There must be enough demand for innovative products and services that meet national and global needs. A well-functioning market will also create the demand from firms, and even consumers, for such products and services due to competitive pressures. With clear economic policies and overall macroeconomic stability, firms are more likely to enter into research and innovation activities. Opening markets for competition, ensuring market-determined pricing mechanisms and devising standards and regulations that induce innovation are among the approaches that governments can adopt to improve the economic environment for innovation.

**Regulations and procedures:** Standards, design, accreditation and metrology are all deeply embedded in the modes and styles of innovation practice. If not properly formulated, regulations on these practices may hinder business' ability to innovate. Regulations created to protect only the rights of worker, public property or the environment may have produce negative stimulus on innovative activities. A good balance between diverse interests should be ensured to promote research and innovation. Regulations should be devised to manage intellectual property rights and encourage the transfer of know-how. Specific measures should also be formulated to narrow skills gaps and improve absorptive capacity in the productive sector to create demand for transfer of knowledge and technology, and how to share the monetary benefits coming from such transfers.

**Access to finance:** Innovation is inherently risky and may require long-term perspective. Therefore, access to finance is critical for such risky investments. Financial sector must be able to provide enough funds for healthy risk-taking, entrepreneurship and long term investment. Functioning of venture capital and angel investing as well as the securitization of innovation-related assets may well provide sources to innovative start-ups. When public funds come into play as an alternative

source of finance, they should be distributed based on a clear and well-formulated approach. Risk sharing instruments can also be used to support innovation of SMEs with significant research and innovation activities.

**Education system:** Increase in human capital can increase the innovative capacity of the economy and it can facilitate the diffusion and transmission of knowledge needed to understand and process new information and to implement new technologies (Benhabib and Spiegel, 2005). Broad and relevant education and development of comprehensive skills encourage people for innovative undertakings. Policies should be directed to improve the relevance and quality of curriculum, teaching methods as well as teacher quality with a view to meeting the requirements of society for a more productive and competitive economy.

**Protection of intellectual property rights:** Protecting the rights of the innovators after possibly very costly and timely process is of utmost importance. Without protection and appropriate enforcement of intellectual property rights (IPRs), an important incentive for innovation will be lost, because it will not be possible for firms to recover their investment costs. It is also important to keep a balance between incentives for innovation and the public benefit from the diffusion of new knowledge, particularly when developing patent systems.

**Empowering people:** In order to empower people to engage in innovation, education and training policies should be adapted to the needs of society. Greater attention should be given to supporting entrepreneurial activity and creation and growth of new firms, because entrepreneurship is critical for translating innovative ideas into jobs and prosperity. New firms are generally more proactive in exploiting technological and commercial opportunities compared to more established firms.

## 5.2 Boosting Multifactor Productivity Growth

The analysis in the previous subsection pointed to a number of factors which are fundamental for enhancing productivity and hence the degree of competitiveness in OIC countries. Better competitiveness can be achieved by increasing the productivity of the factors of production through supporting human capital development as well as research and innovation. While these factors are considered to be the essentials for any endeavour towards attaining higher productivity and growth, there are other factors that can further improve the efficiency and outcome of any investment made to support productivity.

In this subsection, a number of such factors for boosting productivity and competitiveness are examined. These include institutional quality, infrastructure development, economic stability and market efficiency. All of these factors are considered to be important dimensions of realizing higher multifactor productivity growth.

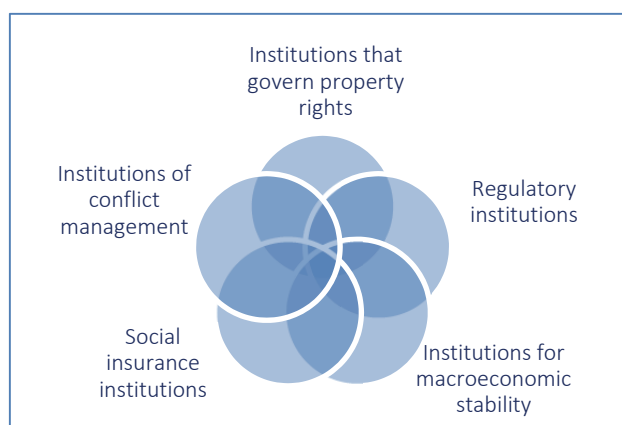
### 5.2.1 Institutional quality

In recent years, a large number of economic studies have highlighted the important role of institutions in economic development. Especially, cross-country empirical analyses find that income differences across countries are closely related to variations in institutional quality (Hall and Jones, 1999; Acemoglu, Johnson and Robinson, 2001). Also in line with new institutional economics, Rodrik, Subramanian and Trebbi (2002) assert that institutions, compared to geography and trade,

explain better the variation of income inequality between developed and developing countries in the world. However, before analysing the channels through which institutions may affect economic performance, it should be useful to begin with a definition of institutions.

Despite the fact that there is no consensus on the exact definition of institutions, the Nobel Prize-winning economist Douglas North's concept of institutions is frequently used in the economics literature. According to North (1990), institutions are "the rules of the game in a society or, more formally, are the humanly devised constraints that shape human interaction." In this definition, constraints cover formal (rules, laws, constitutions, regulations) and informal (norms of behaviour, conventions, codes of conduct) restrictions. At a more specific level, institutions can be defined in terms of property rights' protection and regulatory frameworks by which authorities defend their population against economic shocks and provide social protection.

In the light of the above definition, this subsection aims to accentuate the relationship between institutions and economic performance, specifically productivity and competitiveness. More precisely, institutions promote productivity and competitiveness by reducing transaction costs which cover search and information costs, negotiation costs, policing and enforcement costs (Coase, 1992). Institutions decrease transaction costs by setting up common legal frameworks (contracts, commercial norms and rules) and by encouraging trust with the establishment of policies and justice systems. In this context, the need for institutions will change over time and space through the country's history, geography, stage of development and its political will. For instance, small rural communities in least developed countries rely on kinship, ethnic and religious ties for economic exchange. In these communities where transaction costs are low, adhering to norms of behaviour may be enough to guarantee compliance with agreements on trade. However, large and modern societies require more information about trading partners, and for institutions which assure agreements in the form of contracts and compliance to the agreed conditions. In other words, economic exchange will not take place until individuals know that the decisions they take and the contracts they make will be protected by law. Given these challenges, as economic relations develop and become impersonal, transaction costs may be very high without institutions that reduce uncertainty and opportunistic behaviour (Bardhan and Udry, 1999).



Besides transaction costs, Rodrik (2008) affirms that markets are not self-creating, self-regulating, self-stabilizing and self-legitimizing. As a result of these problems, markets need institutions. In other words, without institutions, incentives and price signals that are essential to the functioning of a competitive market economy cannot work in a proper manner. In the literature, economists agree on at least five types of institutions that they consider vital for economic development (Rodrik, 2008; Rodrik and Subramanian, 2008). These are institutions that govern property rights;



regulatory institutions; institutions for macroeconomic stability; social insurance institutions and institutions of conflict management.

Alongside economic development, it is essential to have a most accurate measurement of the institutional quality. An indicator used in several economic studies is the aggregate governance index developed by Kaufmann, Kraay and Zoido-Lobaton (1999a). Kaufmann et al. (1999a) first define governance as “the traditions and institutions by which authority in a country is exercised.” This definition is then used to measure six broad categories of governance collected from several indicators. These are: 1) voice and accountability: ability of citizens to choose their leaders, enjoy civil and political rights and have an independent press; 2) political instability and absence of violence: probability that a state will not be overthrown by unconstitutional or violent means; 3) government effectiveness: quality of public service delivery and competence and independence of the civil service; 4) regulatory quality: relative absence of state regulation on goods markets, banking system and foreign trade; 5) rule of law: protection of persons and property against violence and theft, independence and efficiency of the judiciary and contract enforcement; and 6) control of corruption: public power is not abused for private gain or corruption. Kaufmann et al. (1999b) show that countries having higher values on these six measures tend to have lower infant mortality, higher literacy rates and higher per capita incomes. The study of Kaufmann and others serve as a reference for many empirical studies that explore the link between the quality of institutions and economic development.

Figure 5.10 compares the averages of the estimates under these six categories for OIC countries with other country groups in 2012. While developed countries outperform developing countries in all categories, other developing countries also do comparably better than OIC countries. In none of the categories, OIC countries as a group attain a positive score. Other developing countries could attain a positive score only in political stability category. Voice and accountability and political stability categories are the weakest categories for OIC countries. On the other hand, regulatory quality is the strongest category for OIC countries. All these reflect the lower level of institutional quality in OIC countries.

**Figure 5.10**  
Institutional Quality and Governance (2012)

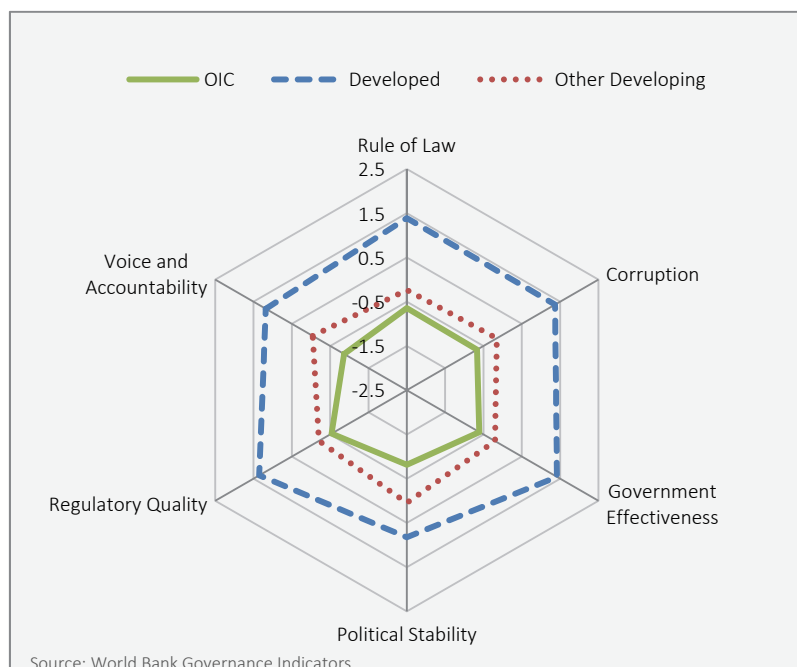




Figure 5.11

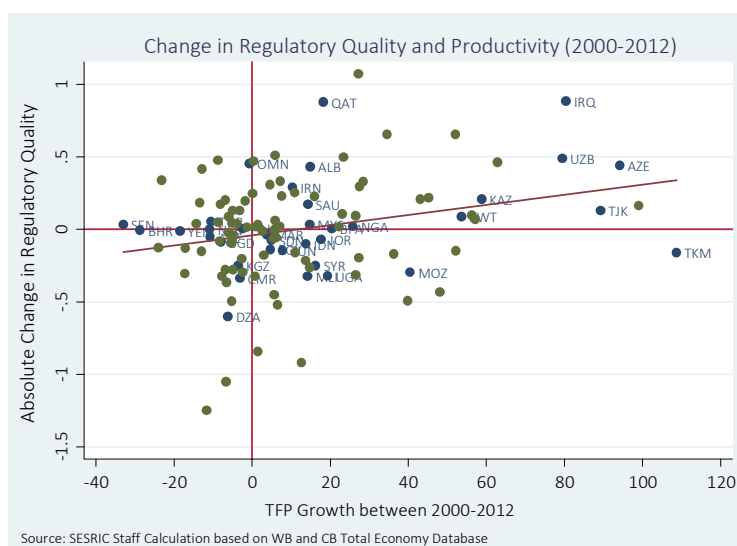
Distribution of Rule of Law and Regulatory Quality



For effectively enhancing productivity and competitiveness, although each of the categories is critical, two of them are of particular importance: regulatory quality and rule of law. In these categories, as depicted in Figures 5.11, only around 10 OIC member countries have positive scores. While more than one third of other developing countries and all developed countries have positive scores, the performance of OIC countries are not quite appealing in terms of promoting the development of domestic competitive industries.

The positive association between improvement in institutional quality and productivity growth can be observed in the past performance of countries. Positive change in regulatory quality between 2000 and 2012 is associated with higher productivity growth during the same period (Figure 5.12). Similarly, countries that improved their rule of law experienced higher productivity growth during this period (Figure 5.13). Even though these associations are not particularly

Figure 5.12  
Regulatory Quality and TFP Growth



strong, on average, countries that upgraded their institutional capacities during the period under consideration showed better performance in achieving higher total factor productivity growth.

### 5.2.2 Infrastructure development

A well-functioning and efficient infrastructure is highly instrumental for economic and social development. It increases living standards, attracts more businesses, and supports the production process of agricultural and manufactured goods by reducing costs. It also helps economic integration and facilitates trade as it

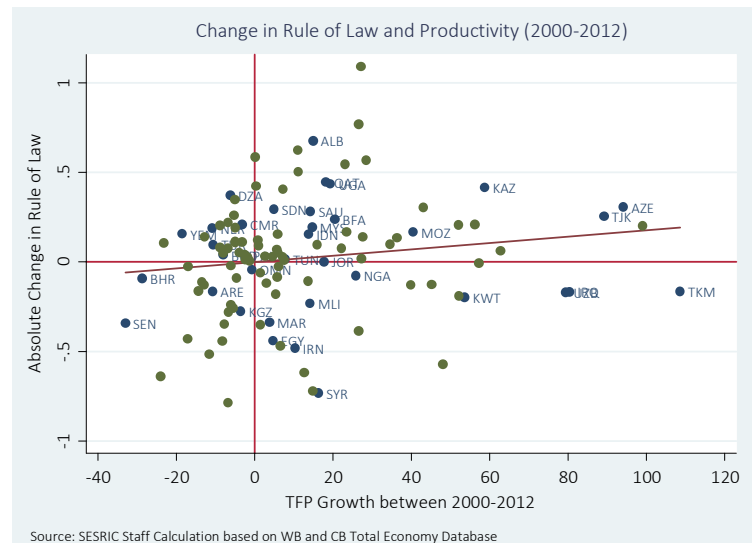
eases the access to goods and services. Better transport and communication links make it easier for many countries to access international markets, which is particularly important for landlocked countries. Infrastructure projects also have a stimulus effect in the economy and they are very likely to increase employment, not just for short term construction purposes but also for the longer term, as infrastructure facilities are believed to draw more companies in their areas.

In addition to its direct contribution to production process and GDP, infrastructure investment can increase total factor productivity by reducing cost of doing business and allowing effective use of resources. Empirical literature also generally suggests positive impact of infrastructure investment on productivity and growth (Romp and de Haan, 2005). Development of rural infrastructure allows rural communities and small businesses to engage in income-generating activities. Firms in operating in environment with underdeveloped infrastructure have to bear the burden of higher costs arising from their efforts to overcome infrastructural challenges. Such firms will suffer significant inefficiencies and will not be able to compete in global markets.

Well-developed and properly working infrastructure can also increase economic integration at regional and global level. Easy and cost-effective access to regional markets will enable firms to benefit from globalization through trade and investment. It will also increase the exposure of firms to foreign competition and force them to become more productive, and thus more competitive. All these will require efficient and well-functioning national and cross-border physical infrastructure.

Infrastructure can broadly be defined as various physical structures used by different economic sectors as inputs to the production of goods and services. They require substantial investments and operate in markets with high barriers to entry. They are generally long-term physical assets available for public and can be grouped under social infrastructure and economic infrastructure. Social infrastructure includes assets that accommodate social services, such as schools, universities, hospitals and other community facilities. Economic infrastructure is to support economic activities through network utilities, such as energy, transport, communications and water. In order to increase efficiency and create an environment conducive to productivity growth, interconnection

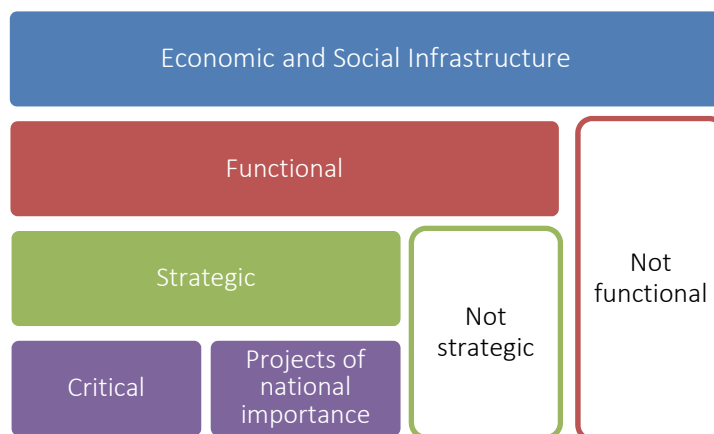
**Figure 5.13**  
Rule of Law and TFP Growth



and complementarities across different infrastructure sectors needs to be ensured. This report will focus on economic infrastructure.

Infrastructure can also be classified according to its importance as functional, strategic and critical infrastructure (WEF, 2012) (Figure 5.14). If infrastructure works properly and satisfies the common needs, it is considered as functional, such as electricity grids and motorways. It becomes non-functional when interdependencies come into play and one infrastructure affects the functionality of another one, such as rebuilding a road linked to an airport making the airport non-functional. A functional infrastructure investment is considered as strategic if it creates the greatest impact in terms of economic growth, social progress and sustainability. A strategic infrastructure investment is considered as critical if it is essential to support the country's socioeconomic development. Critical or strategic importance of an infrastructure projects depends on the country's level of development and developmental objectives.

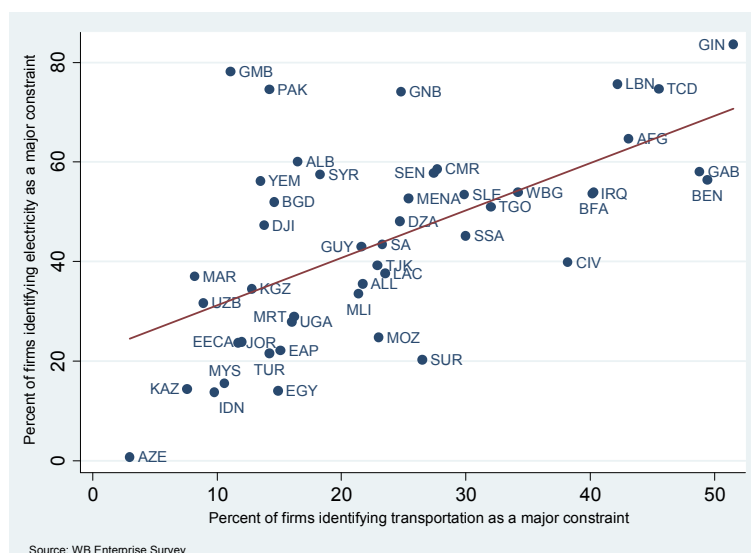
**Figure 5.14**  
Classification of Infrastructure



Source: WEF (2012).

Productivity growth is higher in countries with an adequate supply of infrastructure services (Calderón and Servén, 2004). Infrastructure therefore plays a critical role in boosting a country's competitiveness and in reducing the cost of doing business. However, in many countries, enterprises are facing more than one infrastructural challenge. According to the World Bank Enterprises Survey, at least 20% of enterprises in 21 OIC countries identified transportation infrastructure as a major constraint for their businesses (Figure 5.15).

**Figure 5.15**  
Infrastructure Development as a Constraint



Source: WB Enterprise Survey

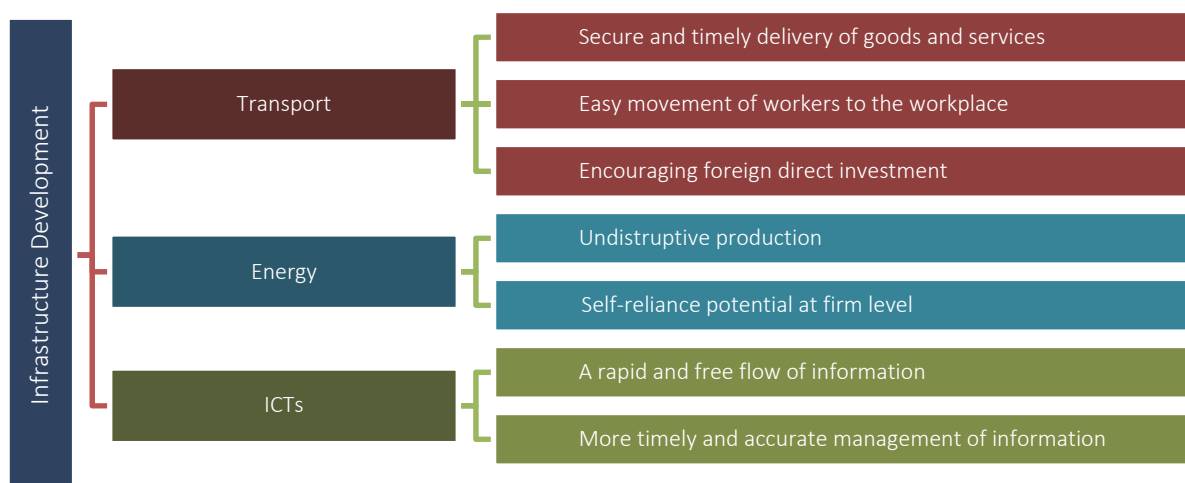
In Guinea, it reaches up to 51.5% of all enterprises, but it is a constraint for 3% of the enterprises in Azerbaijan. Similarly, at least 50% of enterprises in 20 OIC countries identified electricity infrastructure as major constraints for their businesses. The same countries remain in the top and the bottom. In Guinea, electricity is a major constraint for 83.6% of the enterprises, but it is a constraint for only 0.7% of the enterprises in Azerbaijan. On the other hand, in Gambia, 11.1% of

enterprises identify transportation infrastructure as a major constraint but 78.1% of them identify electricity infrastructure as a major constraint.

A major challenge in infrastructure development is financing large infrastructure projects, particularly in low-income developing countries. Sometimes governments will need to be innovative in finding alternative financing mechanisms for such projects. Private sector participation in infrastructure investments becomes crucial in such settings. In this context, private companies are increasingly given infrastructure projects by different contract types, varying according to the necessities of the particular project and country. Between 1990 and 2011, 885 privately funded infrastructure projects took place in 49 OIC countries, making up \$391.7 billion. \$214.6 billion of which was utilized to finance telecom infrastructure projects, accounting for 55% of total investment in OIC countries. The second biggest investment was made in energy infrastructure involving \$112.3 billion private investment with 379 projects. Transport and water infrastructure investment reached together to totally \$64.8 billion, pointing out the disproportionality of private infrastructure investment (SESRIC, 2013).

In what follows, critical components of economic infrastructure will be analysed. That will include transport, energy and communication. Figure 5.16 shows the critical features of these components for business development.

**Figure 5.16**  
Critical Components of Infrastructure Development

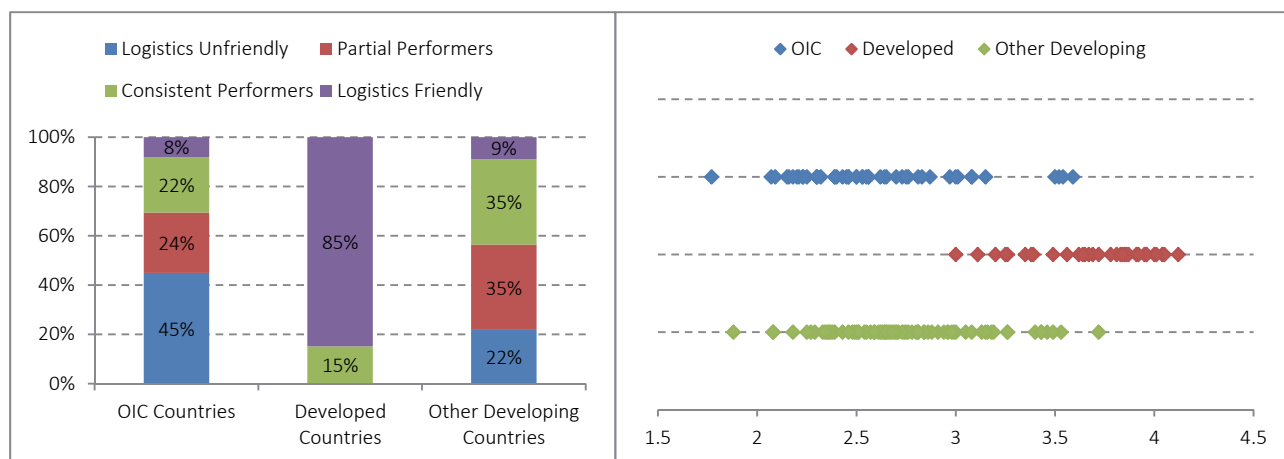


**Transport:** Sufficient and well-connected transport infrastructure is an essential component in boosting productivity and competitiveness. Roads, railways, air transport and sea ports are all needed to be well-functioning for effective production, distribution and marketing network. Trading companies not fulfilling their commitments for delivery due to poor transport infrastructure will lose their competitiveness vis-à-vis their rivals.

SESRIC (2011) provides an analysis on the capacity and performance of OIC countries in various modes of transport. It shows that road and rail network densities in the group of OIC countries, when standardized on a per capita basis, are lowest compared to other developing and developed country groups. The poor figures in the OIC countries are mainly caused by the stagnant road and rail line infrastructure growth coupled with the increasing population. It also shows low frequency

of air travel in the OIC countries, which can be attributed to the lack of infrastructure facilities, such as proper terminals and paved runways which are very low in number and size. Similarly, the majority of the OIC countries are found to have poor maritime fleet capacity and shipping connectivity performances.

**Figure 5.17**  
Logistics Performance Index, 2014

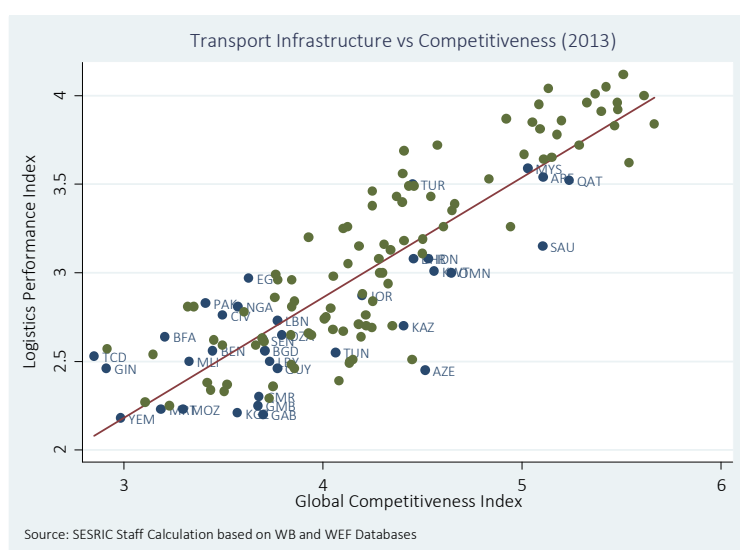


Source: World Bank WDI.

In order to evaluate the overall performance of transportation sector in OIC countries, Logistics Performance Index (LPI) of the World Bank is used. The index measures the performance of a country along its logistics supply chain and provides qualitative evaluations of that country. According to this index, as of 2014, 45% of the OIC member countries had poor logistics performance with score below 2.47 (Figure 5.17, left panel), while only 22% of other developing countries were below this threshold. Malaysia (3.59) and Somalia (1.77) were the two OIC member countries with the highest and lowest logistics performance index values, respectively (Figure 5.17, right panel). In contrast, 85% of the developed countries are considered to be logistics friendly with scores above 3.34. There is also very strong relationship between transport infrastructure and global competitiveness level. Countries that offer better infrastructure for logistics attain better positions in global competitiveness rankings (Figure 5.18).

The modest transport development figures in various transport modes indicate that transportation infrastructure in the OIC countries is incompetent and the transportation system as a whole offers poor connectivity, which is an essential ingredient of higher productivity and

**Figure 5.18**  
Transport Infrastructure and Competitiveness



Source: SESRIC Staff Calculation based on WB and WEF Databases

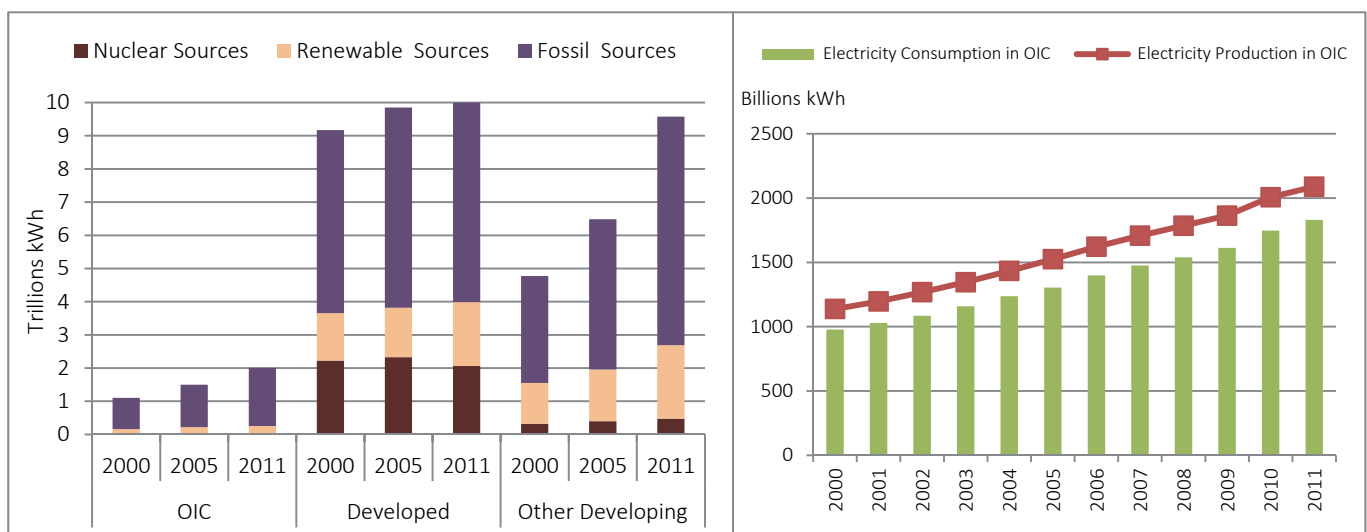
competitiveness. Underinvestment in transport infrastructure results in higher transport and trade costs in OIC countries than experienced by other developing countries. This poses fundamental limitation to global competitiveness and economic growth of OIC countries. Therefore, more efforts should be made to develop rural roads to provide economic opportunities and access to markets and improve urban roads with a focus on better cross-border connections. Similarly, railway networks, air connectivity and port capacities should be developed to promote trade and competitiveness.

**Energy:** A reliable energy infrastructure is required for uninterrupted production. Intermittent power cuts in industrial areas will damage the production processes and undermine competitiveness. Every investor needs a reliable source of energy for them to plan and organize their production and delivery. It is well known that strong economic growth will increase the demand for energy, particularly in developing economies. However, in order for infrastructure to support economic growth, it needs to be well aligned with the country's economic, social and environmental priorities. For this reason, developing with energy-efficient technologies is particularly important for energy importing countries.

Energy may come from three sources: fossil fuels, renewable energy and nuclear power. Fossil fuels – coal, petroleum and natural gas – are the remains of decomposition of plants and animals which forms in finite supply. Renewable energy can be generated from the natural sources such as wind, rain and sunlight. Nuclear power is, on the other hand, obtained through fission and fusion reactions to generate energy from uranium. Many OIC countries are rich in fossil fuels or have huge potential in renewable energy production.

Although most of the energy demand is met by fossil fuels, combustion of fossil fuels has negative impacts on planet such as acid precipitation, stratospheric ozone depletion, and, as a result, global climate change. To overcome these issues, safe energy policies have to be implemented. Renewable energy sources appear to be the most efficient option compared to the others. It could also be generated by individual firms to meet their energy requirements and reduce the dependence to external sources as well as the cost of access to energy. However, installation and

**Figure 5.19**  
Energy Production by Source and Consumption



Source: World Bank WDI.

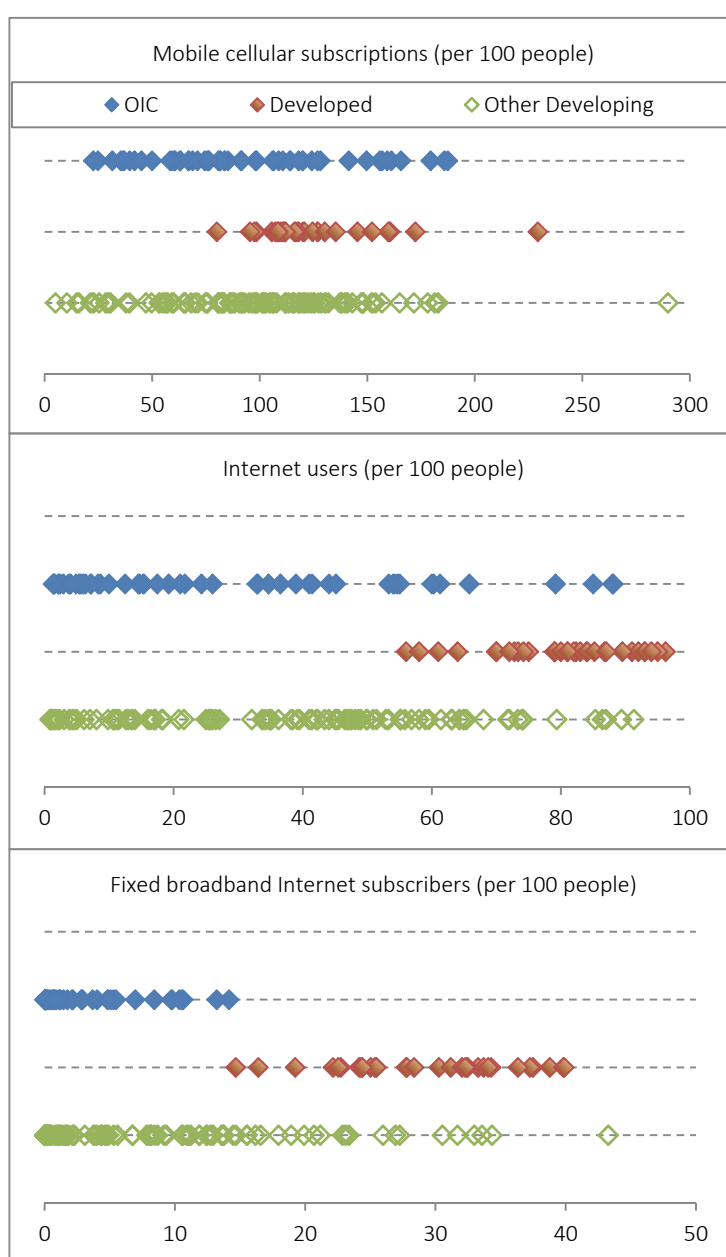
operating costs of some renewable energy facilities can be high for enterprises in some countries due to lack of technologies and also lack of policies, strategies and regulations that support investments in renewable energy infrastructure.

Electricity consumption and production in OIC countries are constantly increasing (Figure 5.19, right). Between 2000 and 2011, they are almost doubled. However, it is difficult to say whether these increases at aggregate level were enough to promote industrial development and productivity growth at individual country level. It is worth mentioning that other developing countries were producing just half of the electricity produced in developed countries, but they produce in 2011 almost as much as developed countries, indicating significant capacity improvement (Figure 5.19, left).

Another important insight from Figure 5.19 is the source of electricity production. Electricity generation from renewable sources has increased more than twice in OIC countries, but it accounts only around 12% of total production. Developed and other developing countries are investing more on renewable energy sources and producing larger shares of electricity from such sources. It is around 20% in developed countries and 25% in other developing countries. OIC countries need to promote generation of electricity from renewable energy sources through effective support programs and legislations. It will also facilitate electricity production at enterprise level and remove a major constraint for them due to intermittent blackouts harming their competitiveness.

**Information and Communication Technologies (ICTs):** Information and communication technologies (ICTs) generally refer to technologies that are used to process information and facilitate communication. These include computers, internet, telephone, radio or any other hardware, software and media used for transmission and presentation of information. Development of good quality ICT

**Figure 5.20**  
ICT Use in OIC Countries



Source: World Bank WDI.

infrastructure network will have direct impact on the level of development and productivity by creating an enabling environment. It will also support competitiveness by reducing communication costs.

The economic literature shows that ICTs are an important driver of productivity and growth. However, countries, industries and enterprises continue to show vast differences in the intensity of ICT use and in their capability to reap the productivity gains from ICTs. Among the major factors affecting the gain and performance from ICTs across countries include direct cost of using ICTs and associated networks, ability of firms to absorb new technology and information, and regulatory and competition environment. Benefiting from ICTs requires substantial complementary investments, particularly in learning and human capital development. Policies aiming at increasing competition, lowering barriers to trade and investment and increasing labour market flexibility would also help countries to use ICTs more effectively. Then, return to ICT investment will increase and the diffusion of ICT will encourage reorganisation of production and service delivery methods with higher productivity and emergence of competitive enterprises.

ICTs will continue to reduce the costs of collecting, storing, processing, analysing and transferring information for firms. This provides an opportunity to firms to complete the tasks more quickly, effectively and cheaply. Firms with better entrepreneurial capability can use ICTs to develop and introduce innovative products, services and organizational structures.

Among the potential impacts of increased ICT use include increased human capital, greater consistency of product quality and well as quality improvement, more timely and accurate management of information, development of customized products and services, outsourcing of certain functions, greater responsiveness to customer needs and more certainty in new product design and improved communication and reporting system (Productivity Commission, 2004). All these will facilitate productivity growth and increased competitiveness.

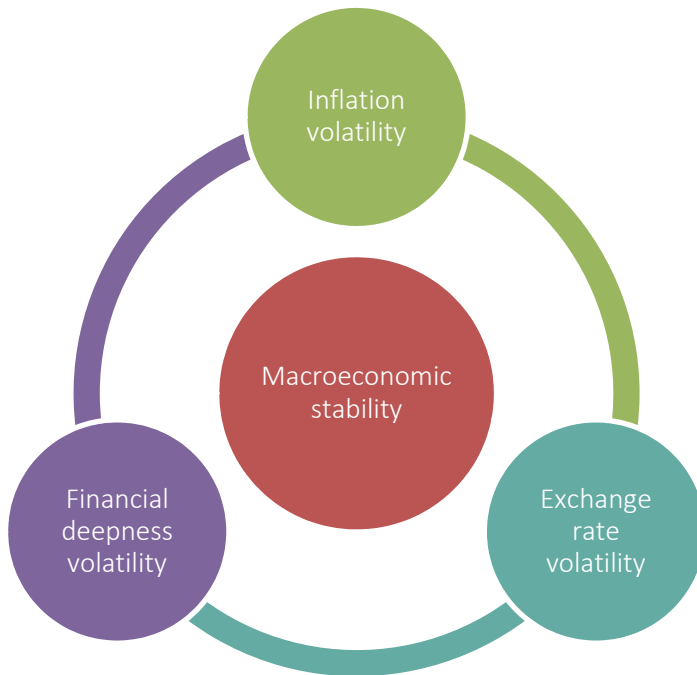
In order to evaluate the level of current use of ICTs in OIC countries, mobile cellular and internet use statistics are provided in Figure 5.20. With respect to mobile cellular subscriptions, OIC countries are performing fairly well. Some OIC countries show even better performance than developed countries. In terms of internet use, in 32 OIC countries number of internet users per 100 people does not reach 25. More than 85% of people in Qatar, Bahrain and UAE have internet access. When it comes to fixed broadband internet subscription, the current stance of OIC countries shows a gloomy picture. The penetration rate in best performing OIC country (Azerbaijan, 14.1%) is lower than the lowest rate in developed countries (Slovakia, 14.7%) and only five OIC countries (UAE, Qatar, Turkey, Bahrain and Azerbaijan) have a rate above 10%. Therefore, more investments in high speed fixed (wired) access to internet is needed in OIC countries.

### 5.2.3 Macroeconomic stability

An important element in the policy mix of boosting productivity and competitiveness is the need to maintain macroeconomic stability, since this would create a business environment free of uncertainty and unanticipated costs. A stable macroeconomic environment would entail lower volatility in inflation rate, interest rate, exchange rate and a low fiscal deficit as a percentage of GDP. It would also require less volatility in terms of the size of economic transactions with the rest of the world. In other words, low and predictable inflation rate, an appropriate real interest rate, and competitive and predictable real exchange rate are important elements of macroeconomic



**Figure 5.21**  
Key Factors in Macroeconomic Stability



stability. There are other factors related to macroeconomic stability including a viable situation in balance of payments, unemployment rates and fiscal balance, but for the purpose of this report, the focus will be limited to inflation volatility, openness and exchange rate volatility, and financial volatility.

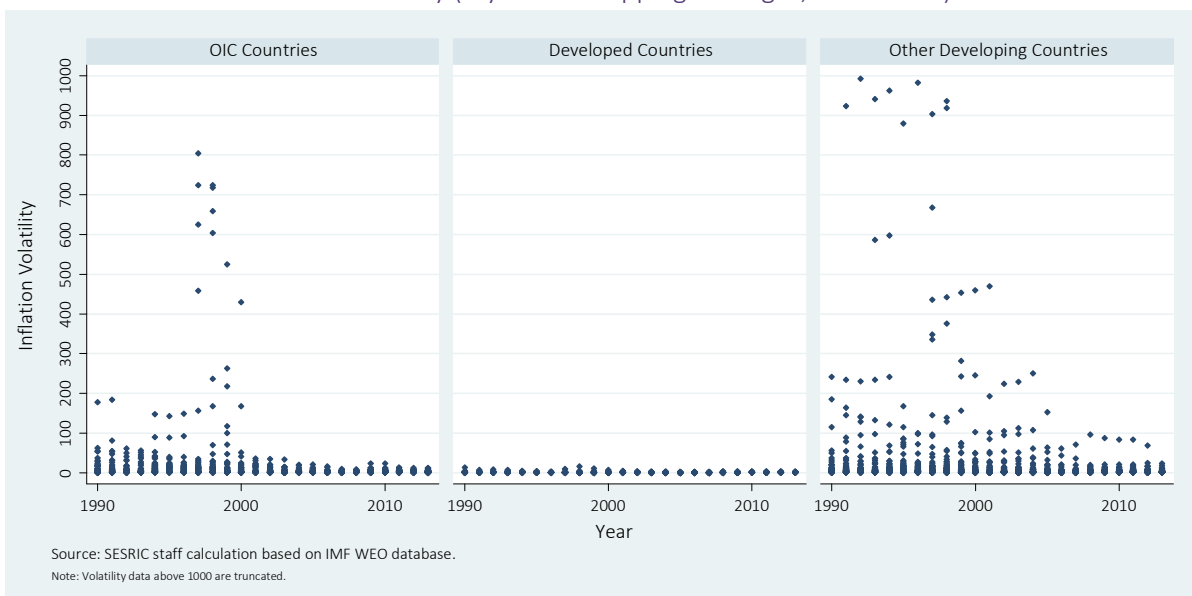
#### Inflation volatility

It is argued that inflation volatility adversely affects an effective allocation of resources, as it is not possible for firms to know the future prices and wages (Fischer, 1993). High volatility of inflation raises price level uncertainty and this uncertainty induces risk premia for long-term arrangements, raises costs for hedging against inflation risks and

leads to unanticipated redistribution of wealth. Thus, inflation volatility can impede growth even if inflation on average remains restrained (Rother, 2004). In an environment where it is not easy to foresee the relative prices of inputs and outputs, it will also not be easy to plan the production. By hampering the efficiency of the price system in effectively allocating resources, unanticipated changes in inflation will lead to production and growth below the real potential and higher unemployment rates due to possible impacts on the labour market.

Inflation volatility is measured as standard deviations of five-year windows of year-on-year inflation, as used by IMF and depicted in Figure 5.22. Particularly after 2000, inflation volatility in

**Figure 5.22**  
Inflation Volatility (5-year Overlapping Averages, 1990-2013)



OIC countries appears to be relatively small but still higher than the volatility in developed countries.

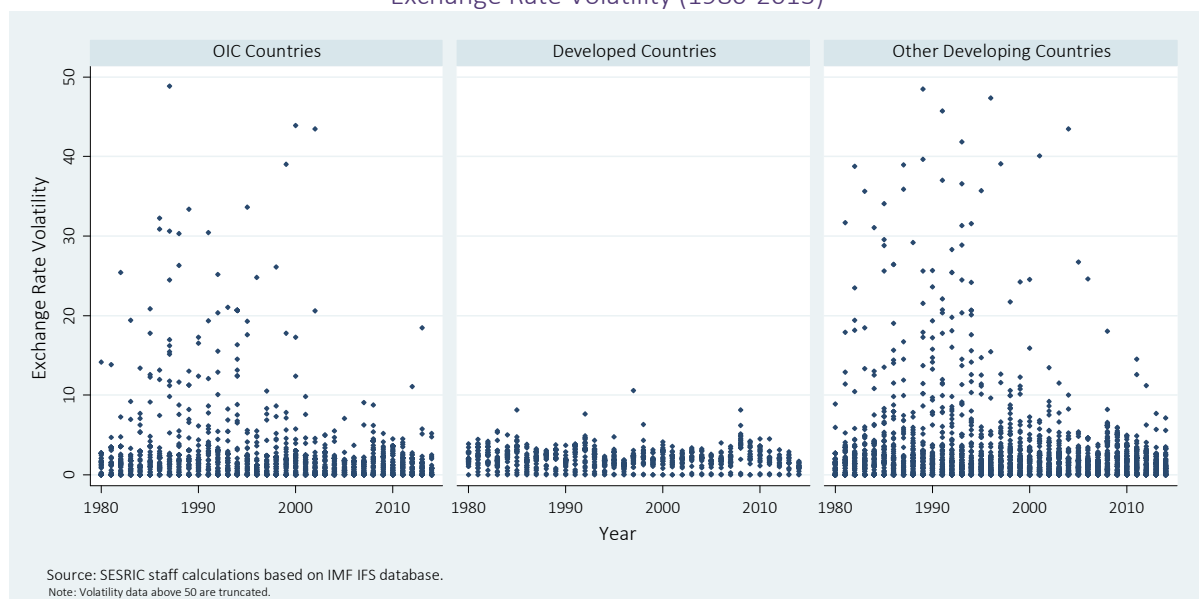
### Exchange rate volatility

Real exchange rate is broadly used to compare the evolution of purchasing power across currencies. By construction, comparison of exchange rates across countries will show *changes* over time, not the *level* of prices. In other words, we can examine whether the price level in one country changed compared to another country during a period of time, but we cannot observe whether the levels of exchange rate adjusted prices are higher in one country compared to the other. Productivity growth or large capital flows may account for the change in real exchange rates. For example, it is common for resource-rich countries to experience rapid rises in real exchange rates that hamper competitiveness in other industries (the so-called *Dutch disease*). Aid flows can also lead to appreciation of local currency in low-income countries, raising demand for domestic products and making export industries less competitive.

It is beyond the scope of this report to discuss the policy choices on exchange rate regimes for competitiveness. However, large fluctuations in exchange rates, whatever the reasons, may signal weakness and imbalances in macroeconomic situation of a country. Higher volatility may discourage firms from acquiring or seeking to acquire more efficient foreign technologies and continue with less sophisticated domestically available technologies. Firms will refrain from more productive production processes that involve reliance on the imported materials due to price uncertainty. All these will reduce productivity growth. If exporting turns to a risky business, it will lead to a reallocation of resources towards safer activities with potentially lower return and productivity (see Rodrick, 1998, for a macroeconomic model of such scenario).

In order to evaluate the current situation, exchange rate volatility in OIC countries is measured against US dollar (USD) as  $\sigma_i = std[d(\log(s_i))]$ , where  $s_i$  is the nominal exchange rate of country  $i$  against USD. Explicitly, volatility is the standard deviation of the changes in the logarithm of bilateral exchange rates (as commonly defined in the literature, e.g., Gros and Thygesen 1998) and

**Figure 5.23**  
Exchange Rate Volatility (1980-2013)



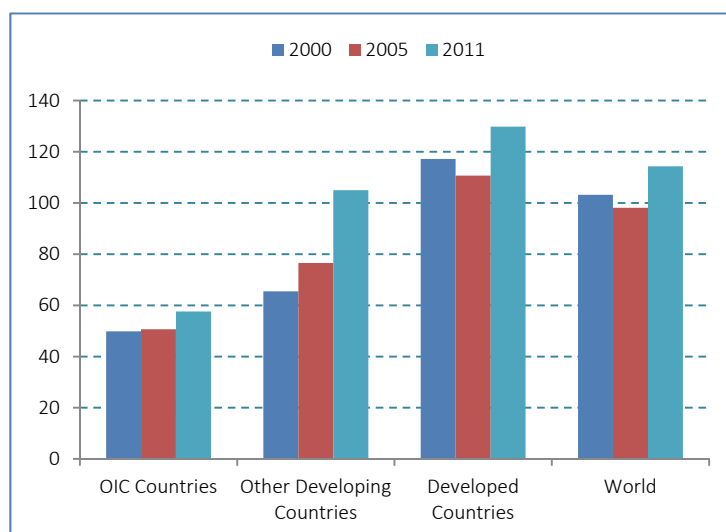
constructed using monthly data over January 1980 to April 2014. Figure 5.23 shows the exchange rate volatility in three country groups. Volatility in developed countries is significantly lower compared to other country groups. OIC countries appear to have less volatility in exchange rates compared to other developing countries.

### Financial deepness volatility

According to a report by the IMF, through an increase in financial transaction volumes, financial deepening can enhance the capacity of the financial system of a country to intermediate capital flows without large swings in asset prices and exchange rates (IMF, 2011). It can also lower the reliance on foreign savings and attenuate balance sheet mismatches by increasing the scope to raise funds in domestic currencies and at longer maturities (World Bank, 2011). Deeper financial markets can provide alternative sources of funding during times of

international stress, limiting adverse spill-overs, as evidenced in the recent global financial crisis. Yet, deeper financial markets can also attract volatile capital inflows, complicating macroeconomic management of the country's economy. Moreover, financial deepening can occur too quickly, leading to credit booms and subsequent busts. At the systemic level, all these factors, if properly managed, can attenuate the need to accumulate foreign assets, and, at the global level, promote

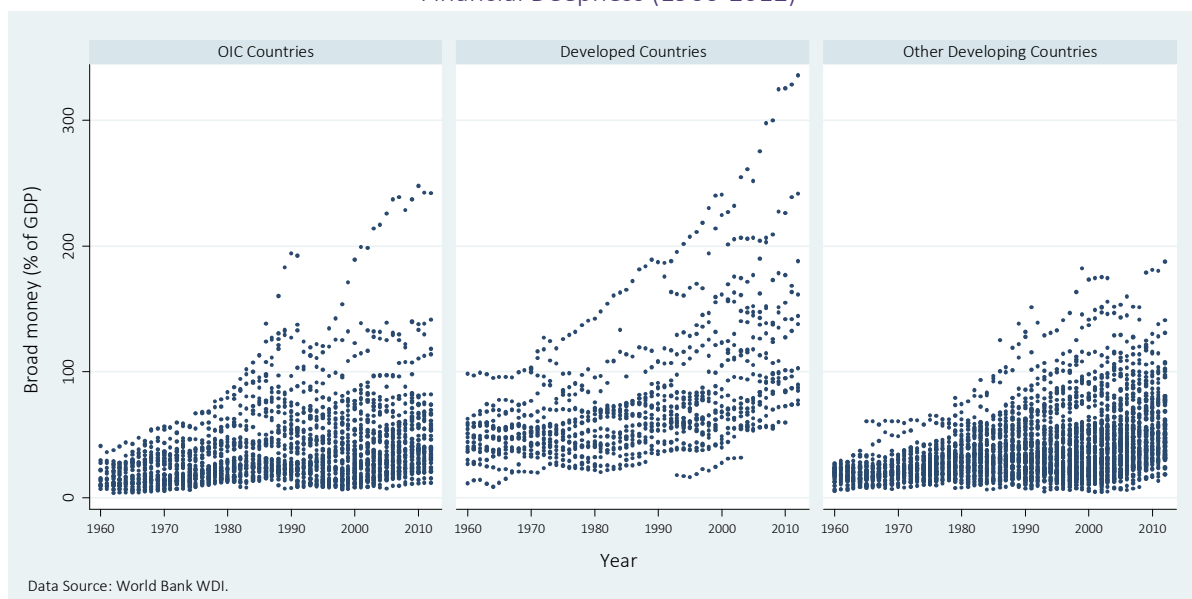
**Figure 5.24**  
Average Volume of Broad Money (% of GDP)



Source: World Bank WDI.

**Figure 5.25**

Financial Deepness (1960-2012)

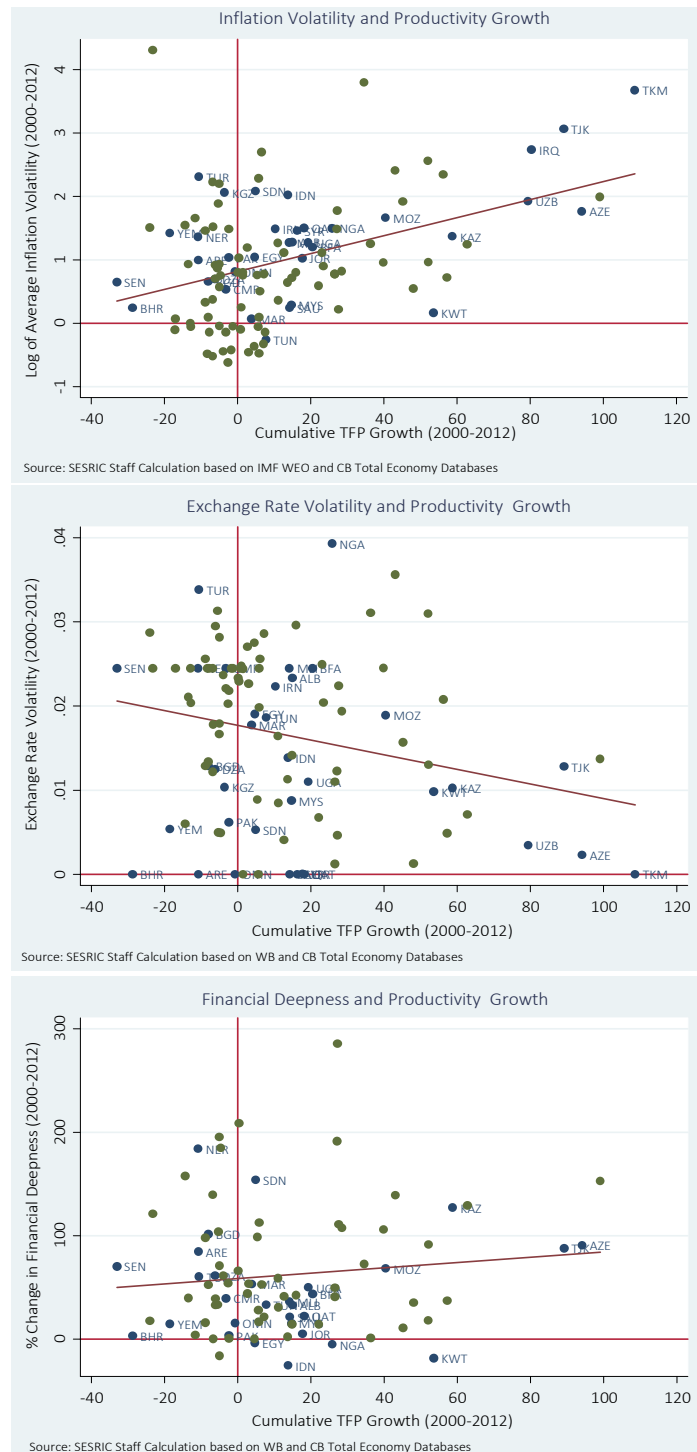


global adjustment (Maziad et al., 2011).

Conceptually, financial depth is often described by three dimensions: (i) sectors and agents are able to use a range of financial markets for savings and investment decisions, including at diverse maturities (access); (ii) financial intermediaries and markets are able to deploy larger amounts of capital and manage larger turnover, without necessitating large corresponding movements in asset prices (liquidity); and (iii) the financial sector can create a broad spectrum of assets for risk-sharing purposes (hedging or diversification). A commonly used metric for determining the degree of financial deepening is the ratio of broad money<sup>3</sup> to GDP. A higher ratio is generally associated with greater financial liquidity and depth. As shown in Figure 5.24, the average volume of broad money relative to the GDP of OIC countries has been recorded at 57.6% in 2011, as compared to 105% in other developing countries and 129.8 in developed countries. In a long-term perspective, Figure 5.25 also shows the value of individual countries for three country groups over the period of 1960-2012. This situation clearly indicates that the financial sector in the member countries is lagging behind their counterparts in other developing as well as developed countries in terms of the provision of sufficient liquidity and better investment opportunities to the economy at a lower cost.

Taking into account the widely accepted view that the financial deepening confers important stability benefits to the economy, albeit with caveats, OIC countries are apparently

Figure 5.26  
Macroeconomic Stability and TFP Growth



<sup>3</sup> The IMF defines broad money as the sum of currency outside banks; demand deposits other than those of the central government; the time, savings, and foreign currency deposits of resident sectors other than the central government; bank and traveler's checks; and other securities such as certificates of deposit and commercial paper.

deprived of these stability benefits. Another important aspect of the financial depth is its volatility. Higher volatility in the financial system may discourage financial intermediaries from giving long-term loans even if project evaluations on the profitability are positive. This will lead to less efficient allocation of resources and lower productivity growth, with implications on overall competitiveness.

When it comes to the impact of macroeconomic stability indicators on productivity growth, a somewhat mixed outcome is observed. Upper panel of Figure 5.26 shows a negative relationship between stability and productivity growth, where countries with higher inflation volatility during 2000-2012 experienced higher productivity growth rates. Middle panel of the figure, on the other hand, shows a positive relationship with stability and productivity growth, where countries with lower exchange rate volatility tended to experience better total factor productivity improvements. Finally, countries that increased their financial deepness have also experienced positive impact on their productivity growth performance (Figure 5.26, lower panel).

Overall, it is fair to argue that macroeconomic stability is critical for attracting more investment, attaining greater economic efficiency and a better allocation of capital. Predictability and clarity in fiscal and monetary policies will bring better performance in terms of productivity growth and competitiveness.

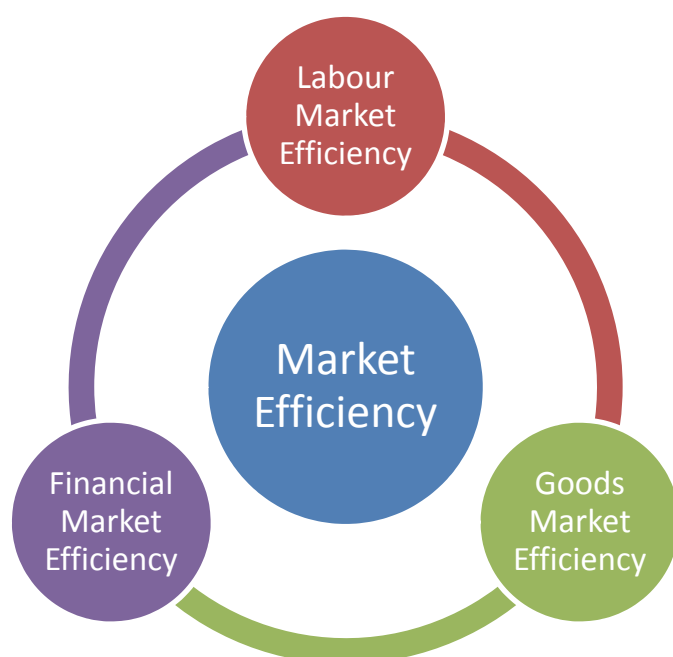
#### 5.2.4 Market efficiency

An efficient market is critical for ensuring the optimum allocation of resources based on supply and demand conditions in the market. There are three main areas where efficiency is sought: labour market, goods market and financial market (Figure 5.27). An efficient labour market should ensure that the skill mismatch is at minimum level in the market. In other words, the skills and capabilities offered by the labour force should match to a large extent with the skills and capabilities needed

by enterprises. Moreover, an efficient labour market should ensure that the available labour force is used in most effective way.

In the case of goods market efficiency, the right mix of goods and services should be produced and effectively traded in the market. Healthy market competition is important in driving market efficiency and business productivity. The most efficient firms in such markets are those that produce goods demanded by the market (WEF, 2013). Burdensome taxes, restrictive and discriminatory rules on

**Figure 5.27**  
Key Factors of Market Efficiency



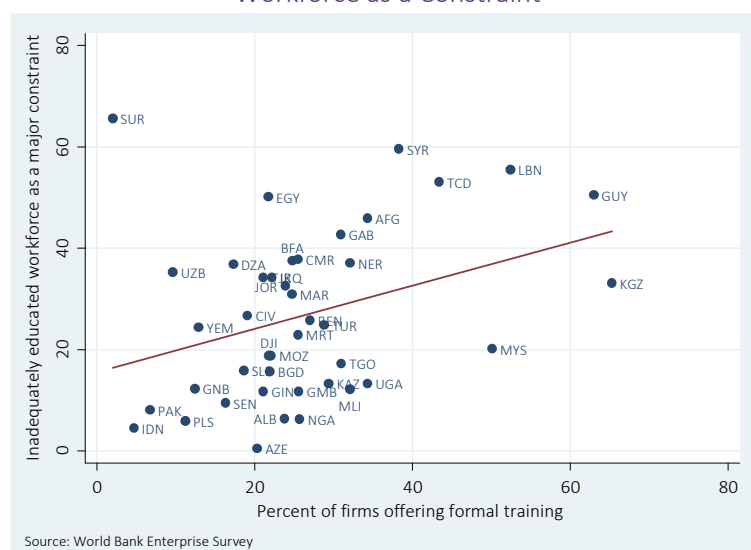
investment, size of informal sector, rules and procedures on business start-up and licensing as well as promotion of competition are critical factors in ensuring goods market efficiency.

Another aspect of market efficiency is financial market efficiency. The degrees of financial stability and efficiency are important features of the financial sector development. They are closely interlinked with the broader process of financial development. On the other hand, to perform its functions well, a financial sector should be efficient and able to perform its intermediating functions in the least costly way possible. If intermediation is costly, the higher costs may get passed on to households, firms, and governments. An efficient financial market will ensure allocation of resources to most productive business opportunities; thereby increase overall productivity and competitiveness of an economy.

**Labour market efficiency:** An efficient labour market is important in allocating human capital to its most productive uses. Particularly in developing countries, ability of the market to reallocate labour between sectors (or from old sectors to newer more productive sectors) is critical in growth process. Moving timely out of agriculture into manufacturing and then into services sector has long been thought to have significant impact on growth rates. The level of labour market efficiency depends on the speed by which the labour market reallocates labour from low productive to new more productive sectors (Burgess and Mawson, 2003). It is also argued that by reducing the time workers spend in unemployed or sub-optimal jobs, an increase in labour market efficiency raises the value of workers' human capital investments and leads them to invest in more education (Laing et. al, 1995). These two channels, reallocation from old to new technologies and creation of incentives to invest more on human capital, make labour market efficiency a critical driver for higher growth.

A flexible labour market, on the other hand, facilitates the adjustment to new economic conditions after any shocks that may arise. For example, during a recession, the job market may adapt to new conditions by reducing real wages in order to keep employment. Pessoa and Reenen (2013) analysed the response of the UK labour market to the recent global financial crisis and they found that the flexibility in UK labour market kept the people employed but reduced their wages due to their lower bargaining power. However, this flexibility resulted in lower productivity levels due to lower investment in capital and higher investment in labour. Successful adaption to growing economy is as important as to adjusting to a shrinking economy. In a growing economy, firms will invest more in new technologies and labour force needs to quickly obtain new skills required to utilize these technologies.

**Figure 5.28**  
Workforce as a Constraint



Efficiency and flexibility of labour market are closely linked to each other. Efficiency leads to an allocation of human capital to its most productive uses during regular times and flexibility leads to rapid market clearing during irregular times through various channels. On the other hand, labour market frictions may inhibit aggregate growth.

Skills level of labour force is generally classified according to specific level of education they attained. As the share of labour force with secondary and tertiary education increases, the ability to adopt new skills and absorb new knowledge increases. This in turn increases their flexibility in the labour market. According to the latest data available, OIC countries are not portraying a charming picture. 39.4% of the labour force has only primary education. The shares of labour force with secondary and tertiary education are only 24.2% and 15.1%, respectively. Apparently around 20% of labour force in OIC countries does not have even primary level education (SESRI, 2014).

As shown in Figure 5.28, while in some countries significant number of firms identify inadequately educated workforce as a major constraint (vertical axis), firms tend to offer formal training to increase the quality of labour force (horizontal axis). This is important in the sense that firms take initiatives to improve the human productivity through various on-the-job-training (OTJT) modules. On the other hand, total share of workers offered formal training in OIC countries is not necessarily higher than that in other developing countries (Figure 5.29). Average of all surveyed countries (94) is 51.1%. Only 10 OIC countries (out of 29) have the proportion above the world average.

Figure 5.29

Proportion of workers offered formal training (%)\*

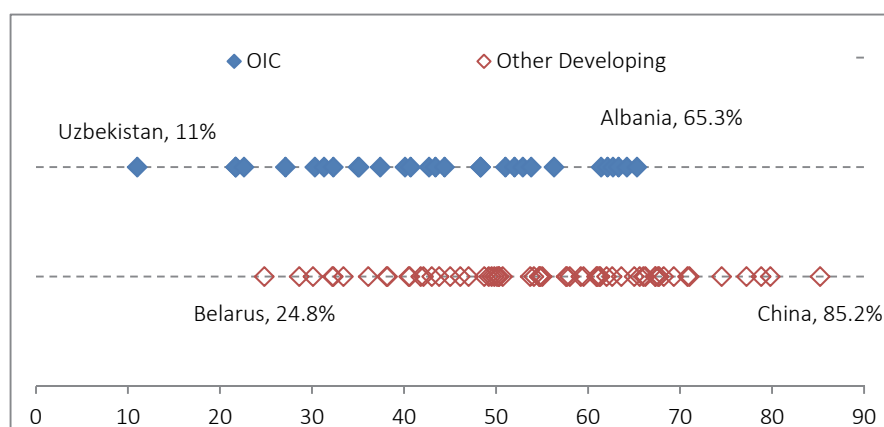
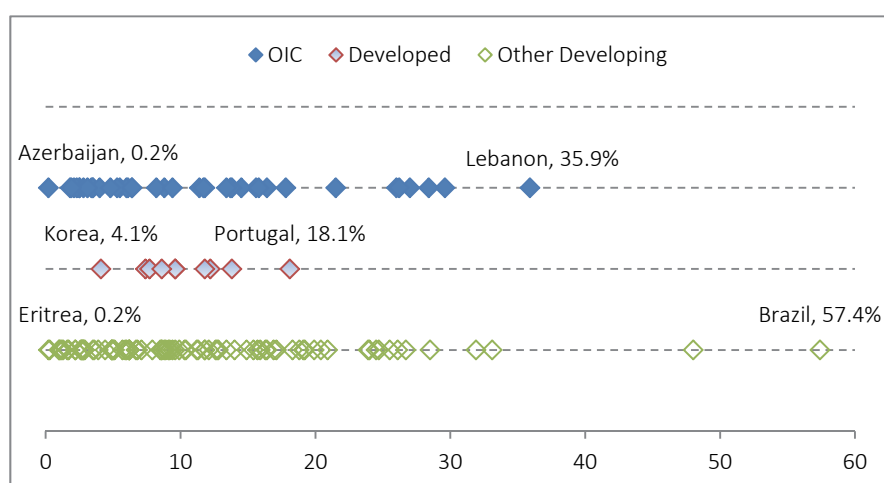


Figure 5.30

Proportion of firms identifying labour regulations as a major constraint



Source: World Bank Enterprise Survey.

Labour regulations handle the relationship between workers, employers, trade unions and the government. Effective laws and regulations promote the efficiency of the labour market. Figure



5.30 shows the percentage of firms identifying labour regulations as a major constraint according to the World Bank Enterprise Survey. In general, OIC countries perform fairly better compared to other countries. Firms in 23 OIC countries (out of 41) consider labour regulations less restrictive compared to the world average of 11.8%.

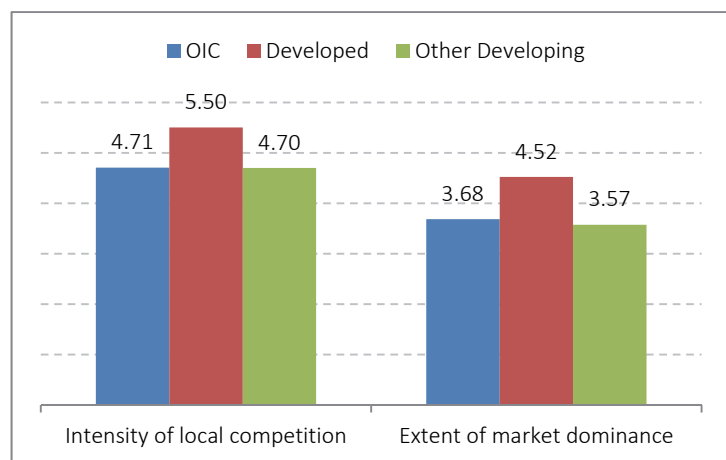
**Goods market efficiency:** Markets are expected to supply the right mix of products demanded. In order to avoid oversupply or undersupply of goods in the long term, an efficient market mechanism is needed. Technically, goods and services will be oversupplied if prices are above the equilibrium level and they will be undersupplied if prices are below the equilibrium level. Economic theory suggests that markets will equilibrate prices based on supply and demand for goods and services; however adjustment may take time if market does not function properly. In a competitive environment, firms seeing profitable business opportunities will enter the market and they will accelerate the adjustment. However, if it is costly for firms to enter the market and if there are imperfections and monopolistic behaviours in the market or frequent distortionary interventions of government, adjustment can be sluggish.

Market efficiency is, therefore, commonly associated with competition, which requires control of abuse of dominant positions, prevention of collusion between firms and removal of market entry barriers (Formosa, 2008). The literature also suggests that an efficient market can only exist if there are no barriers to entry for potential competitors who wish to enter the market. As is well known, freedom of entry into and exit from the industry is one of the theoretical assumptions underlying perfect competition.

It should also be noted that while distortionary government intervention may hinder market efficiency, by establishing necessary institutions, legislations and regulative framework, government can promote market efficiency. If entry into markets is not easy or too costly, informal sectors will emerge and unfair competition will have negative consequences on the efficiency of the market. Punishing abuse of dominance and preventing collusions are also critical.

Figure 5.31 shows the average scores in intensity of local competition and extent of market dominance in OIC countries in comparison with developed and other developing countries, as provided by WEF. The intensity of local competition score is ranged between 1 (not intense at all) and 7 (extremely intense). On average, there is some difference with developed countries but it is equivalent with other developing countries. With respect to the extent of market dominance, which ranges between 1 (dominated by a few business groups) and 7 (spread among many firms), OIC

**Figure 5.31**  
Intensity of Local Competition and Extent of Market Dominance



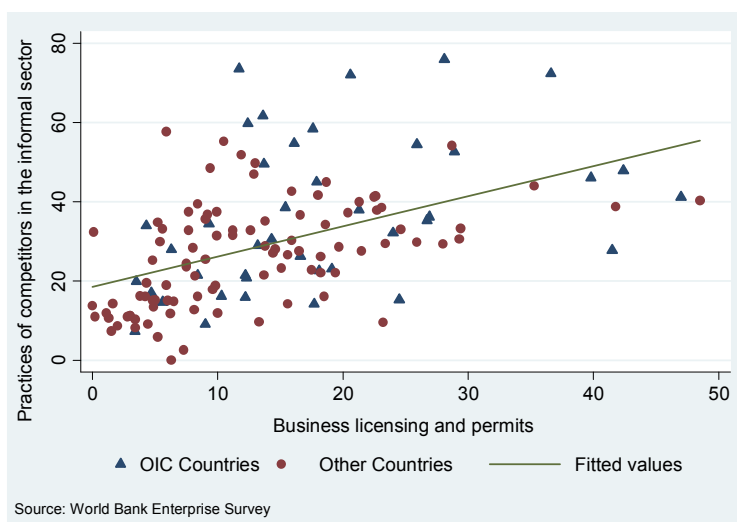
Source: World Economic Forum (WEF).



countries reveal slightly better picture compared to other developing countries, however, further efforts are needed to reduce the market dominance of few business groups in order to promote competition and productivity in OIC countries.

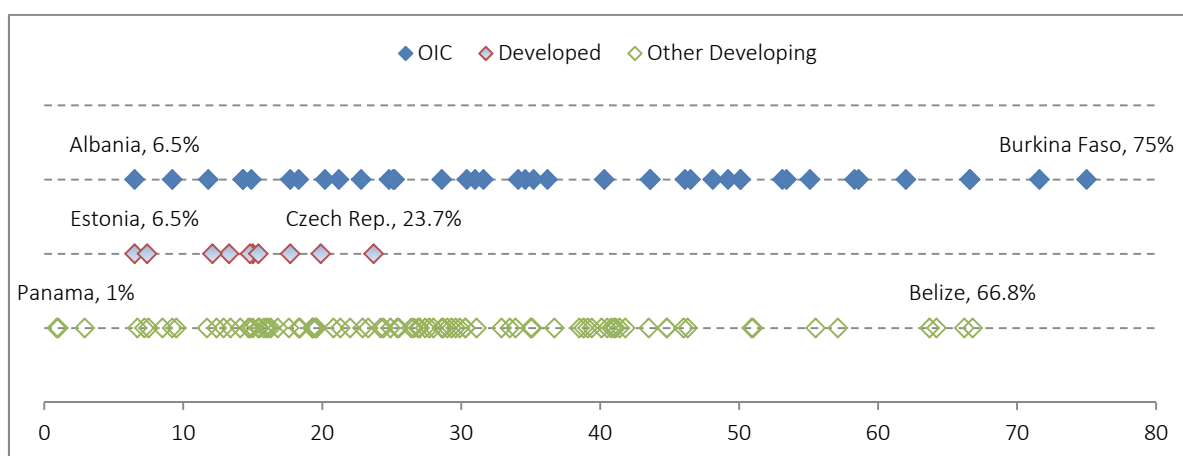
Burdensome procedures of doing business may encourage firms to operate in the informal sector. Such firms will negatively affect the performance of firms' operation in the formal sector. Figure 5.32 shows the percentage of firms identifying business licensing and permits as a major constraint and percentage of identifying practices of competitors in the informal sector as a major constraint. In countries where business licencing and permits are burdensome, firms are facing more competition from informal sector. Firms in significant number of OIC countries identify the practices of competitors in the informal sectors as a major constraint. In Cameroon, Niger, Chad, Benin and Egypt, this rate is above 60%.

**Figure 5.32**  
Business Licensing and Competition with Informal Sector



**Financial market efficiency:** Financial services are fundamental to economic growth and development. Critical roles of financial sector are to mobilize savings for investment, to ensure that funds are allocated to the most productive use, to spread risks and to provide liquidity so that enterprises can manage the productive capacities efficiently and compete in local and international markets. Throughout this process, an efficient financial intermediation will support long-term sustainable development by facilitating accumulation of physical and human capital, pushing for

**Figure 5.33**  
Access to Finance as a Constraint



more efficient use of the resulting productive assets and ensuring the access of people to these assets.

Levine (2005) summarizes the elements of financial development in five categories. Financial development involves improvements in the (i) production of *ex ante* information about possible investments, (ii) monitoring of investments and implementation of corporate governance, (iii) trading, diversification, and management of risk, (iv) mobilization and pooling of savings, and (v) exchange of goods and services. Each of these may influence savings and investment decisions and hence economic growth. Due to many market frictions and different rules, regulations and policies across economies and over time, improvements along any single dimension may have different implications for resource allocation and welfare depending on the other frictions at play in the economy.

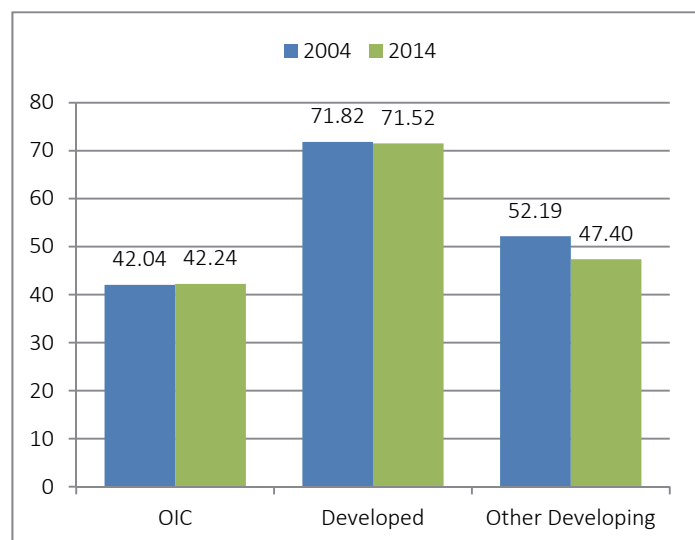
Financial sector is a critical constituent of an economy. The performance of the rest of the economy will depend on how the financial sector performs. As painfully experienced just recently, a crisis in financial markets plunged economies into recession around the globe. Therefore, its relation with real economy is particularly critical. In order to ensure efficient functioning of financial sector, development of the sector should be reinforced by establishing and expanding institutions, instruments and markets that support investment and growth process as desired.

An efficient financial market is required to allocate resources to their most productive uses. For an efficient allocation of resources, prices should reflect all information available and transaction costs should be realistic. If informational and operational efficiency conditions are met, resources will be directed to the places where they will be the most productive and effective.

The level, efficiency and composition of financial intermediation are generally regarded as three basic characteristics of financial systems in capturing the above-mentioned five functions on economic growth (Fitzgerald, 2006). According to the World Bank Enterprise Survey, percentage of firms identifying access to finance as a major constraint is higher in OIC countries (Figure 5.33). Given 29.7% of the world average, firms in 26 out of 41 OIC countries for which data are available identify access to finance as a constraint above the world average. In Burkina Faso and Guinea-Bissau, the rate is over 70%. If significant numbers of firms are struggling in access to finance, the financial sector needs to be further developed for higher efficiency.

In assessing the level of financial market efficiency, financial freedom index and interest rate spread will be used. Financial freedom index, developed by the Heritage Foundation, is a measure of banking efficiency as well as a measure of independence from

**Figure 5.34**  
Financial Freedom Index

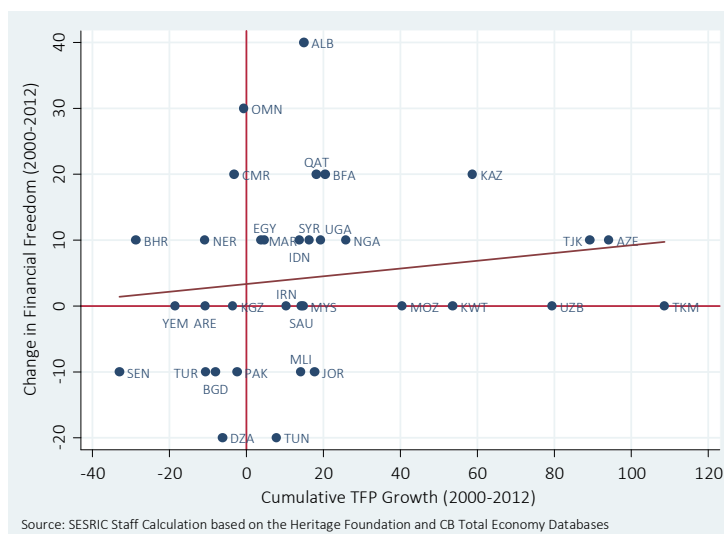


Source: Heritage Foundation.

government control and interference in the financial sector. It is argued that state ownership of banks and other financial institutions reduces competition and generally lowers the level of available services. The financial freedom index scores an economy's financial freedom by looking into (i) the extent of government regulation of financial services, (ii) the degree of state intervention in banks and other financial firms through direct or indirect ownership, (iii) the extent of financial and capital market

development, (iv) government influence on the allocation of credit and (v) openness to foreign competition. OIC countries as a group have the lowest financial freedom and could make no significant progress over the last decade in reducing the gap with developed countries. As shown in Figure 5.34, financial freedom in OIC countries is lower than other developing countries and it has hardly changed over the last decade. The OIC countries that increased their financial freedom also experienced on average higher productivity growth rates (Figure 5.35).

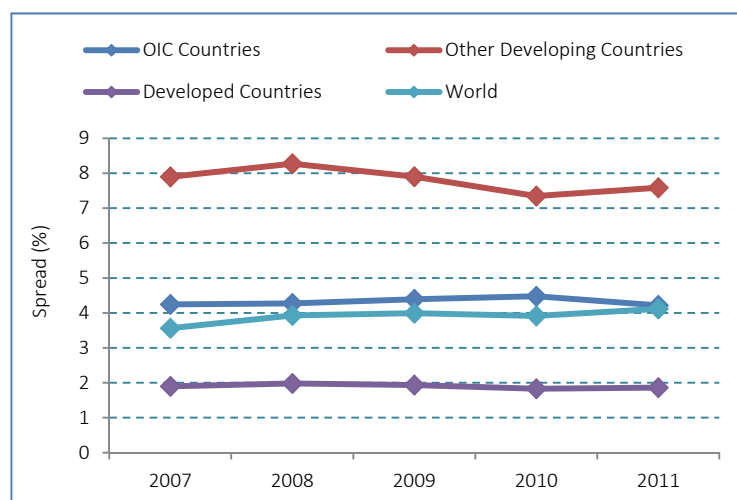
**Figure 5.35**  
Financial Freedom and Productivity Growth



Interest rate spread refers to the lending-deposit spread, i.e. the difference between the lending rate, the rate charged by banks on loans to the private sector, and the deposit interest rate, the rate offered by commercial banks on three-month deposits. Although the terms and conditions attached to these rates differ by country, limiting their comparability, the spreads are frequently used as rough measures of the level of efficiency in the banking sector in different country groups.

Against this backdrop, Figure 5.36 shows the average interest rate spreads in OIC countries during the period 2007-2011 in comparison to other country groups. The average spread is calculated through weighting country spreads by the average of the credit and deposit volume, expressed in US\$, in the corresponding country. The calculations point to significantly higher margins between the lending and deposit rates in OIC countries as compared to those in developed countries but lower than those in other developing countries.

**Figure 5.36**  
Interest rate spreads (%)



Source: World Bank Financial Development and Structure Dataset (April 2013), World Bank Global Financial Development Database (April 2013), and Bankscope.

### 5.3 Identification of Productive Capacities for Competitiveness

The previous two subsections discussed the fundamentals for enhancing productivity and competitiveness and factors that boost multifactor productivity. Another important dimension of enhancing productivity and competitiveness is the process of identification of productive capacities. If investments are made in sectors that are to become more competitive and more strategic for the development of an economy, then critical achievements can be made in enhancing overall productivity and competitiveness in medium and long term.

Even though countries can assess their capacities based on the available resources, technological progress and investment in human resources can create new opportunities in wide ranging areas for higher competitiveness and productivity. These opportunities can be realized through successful discovery processes. An important process of identification is economic diversification, where countries try to position their most competitive advantages through investing in a large variety of fields. Another important factor in identification is the entrepreneurial activities. Diversification can only take place if there are enough entrepreneurs who can take risks to explore new profitable business opportunities. Below these two critical components of identification processes are discussed.

#### 5.3.1 Economic diversification

Specialization is a dynamic process and its effect on productivity depends on the circumstances in which industries operate. That is, similar specialization pattern may give rise to different productivity and growth rates at different points in time. In general, countries may benefit from specialization due to its impact on economies of scale or from diversification due to its impact on technology spillover and discovery of productive and competitive sources. The literature suggests that anything that pushes the economy to specialize in good(s) with higher productivity levels sets forth a dynamic (if temporary) process of economic growth (Hausmann et al. 2007). Therefore, the type of goods in which a country specializes has direct implications for the economic performance of that country. Export of goods with higher productivity potentials bring about higher growth rates and this is achieved by transferring resources from low-productivity to the higher-productivity activities by the entrepreneurial cost-discovery process.<sup>4</sup>

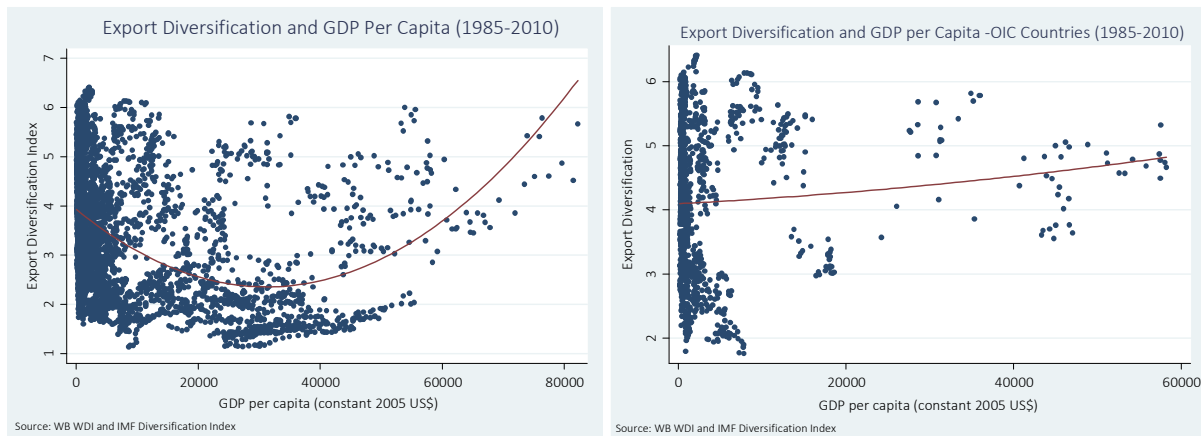
Many developing countries, particularly low income countries, are characterized by high concentration of export and limited diversification of domestic economy. While lack of diversification in export increases the exposure of countries to adverse shocks and macroeconomic instability, high concentration of economic activity in sectors with limited potential for productivity growth may not bring about much growth and development to the country. While striving for higher diversity, identifying sectors and product categories that are conducive for technology spillover, productivity growth and better competitiveness is particularly challenging.

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<sup>4</sup> It is also conjectured that differences in observed TFP are driven by differences in the institutions and government policies they collectively refer to as 'social infrastructure' (Hall and Jones, 1999). Better social infrastructure eases the process of cost discoveries, which in turn increases the overall productivity.

**Figure 5.37**

Export Diversification and Per Capita Income (1985-2010)



Recent literature suggests that change of sectoral concentration in relation to the level of per capita income shows a U-shaped pattern (Imbs and Wacziarg, 2003). This nonlinear relationship between export diversification and economic development indicates that countries diversify their export structure as they grow and at some level of income they start specializing again. The relationship is evident in Figure 5.37, which plots country-year observations over the period of 1985-2010.<sup>5</sup> Therefore, early stages of development are associated with structural transformation. Evidence also suggests that economic development ultimately involves this transformation with dynamic reallocation of resources from less productive to more productive sectors and activities. High concentration of low income countries in agriculture and resource-based activities will inevitably require diversification in domestic production and external trade.

Export diversification can be achieved across products or trading partners. When it occurs at product level, it can involve introduction of new product lines or a more balance mix and higher

**Figure 5.38**

Export Quality and Per Capita Income



<sup>5</sup> IMF (2014) provides data on export diversification based on the Theil Index, which measures the extent of diversification across a country's exports. Lower values indicate higher diversification.

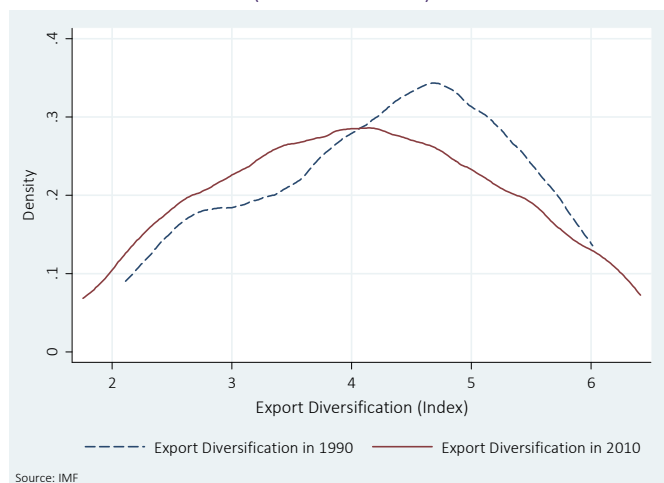
quality of existing product lines.<sup>6</sup> Producing higher quality varieties of existing products can build on existing comparative advantages. It can boost export revenue potential of countries through the use of more physical- and human-capital intensive production techniques. However, agricultural and natural resources tend to have lower potential for quality upgrading than manufactures. Countries at early stages of development with small economic size and limited potential to exploit economies of scale may, therefore, find it difficult to move into new products, making quality upgrading within existing products the more important (IMF, 2014).

Quality upgrading is particularly strong during the early stages of development. However, wide variation in quality upgrading experiences across countries suggests a strong association between income growth and quality upgrading (Figure 5.38). As countries grow, their prospects for quality upgrading will slow down and quality convergence to the world frontier will be largely completed as countries reach upper middle income status. This suggests that low income countries can gain considerably from quality upgrading. This entails once again diversification across and within products.

When the overall and individual diversification performance of OIC countries is analysed, several interesting observations can be made. At OIC level, Figure 5.39 compares the level of diversification in OIC countries in 2010 with the level in 1990. As it is evident, OIC countries became more diversified over the years and distribution of countries leaned towards lower values of index values, indicating higher diversification. At individual country level, different patterns of diversification are observed among the OIC countries (Figure 5.40). While some countries made significant progress in increasing their level of diversification, such as Uganda, Uzbekistan, Turkey, Egypt, United Arab Emirates and Indonesia, some others became more specialized in their export structure, such as Azerbaijan, Sudan, Kuwait and Algeria. However, it is difficult to link income growth with export diversification mainly due to the fact that resource-rich countries increased their income significantly despite increasing level of specialization.

Another important aspect of evaluating potential competitiveness in export products is the comparative advantage of countries in particular products and sectors. Different economic theories suggest that technology differences and cost differences due to differences in factor prices across countries lead some countries to be more advantageous compared to others. In order to evaluate the diversification process of OIC countries, the measure of the revealed comparative advantage

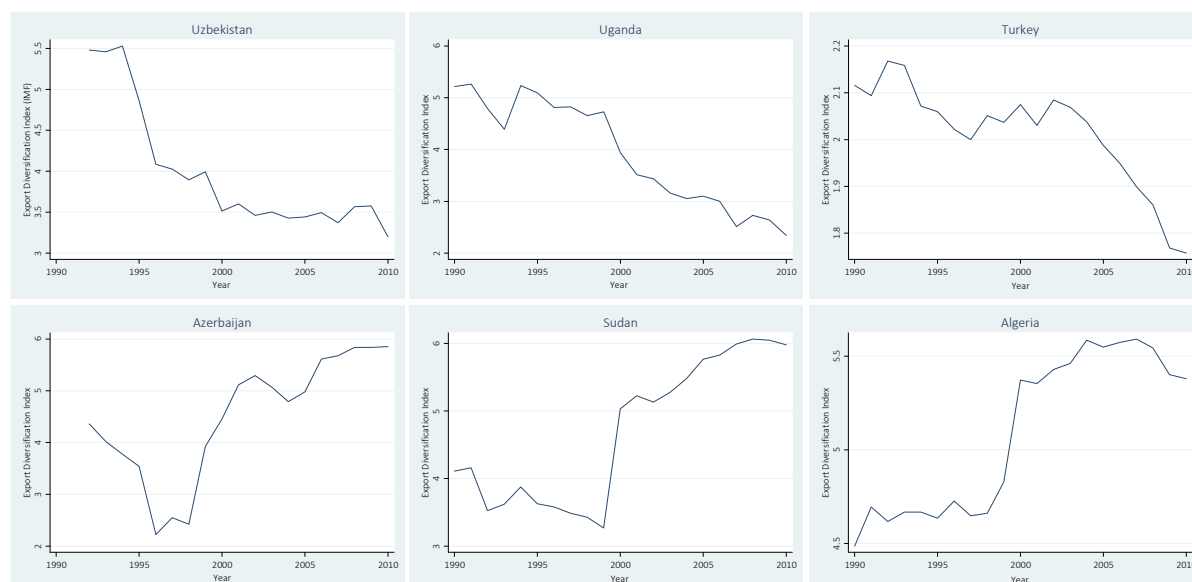
**Figure 5.39**  
Export Diversification in OIC Countries  
(1990 vs. 2010)



<sup>6</sup> When diversifying their export structure, a rather challenging task for countries is whether to diversify at both industry and product level or diversify at only product level while specializing at industry level. The recent evidence suggests that the importance of within-goods specialization increases in characterizing the current patterns of trade. By using US trade data, Schott (2004) provides the first empirical evidence on the nature of trade within and across industries.

(RCA) will be used. The revealed comparative advantage of a nation is measured by the relative weight of a percentage of total export of commodity's in a nation over the percentage of world export in that commodity, as suggested by Balassa (1965). More specifically,  $RCA = \frac{x_{ij}/x_{wt}}{x_{it}/x_{wt}}$ , where  $i$  indicates county,  $j$  indicates commodity or sector,  $t$  indicates total export and  $w$  indicates the

**Figure 5.40**  
Export Diversification Patterns in Selected OIC Countries



world. When  $RCA > 1$ , it means that country  $i$  has a revealed comparative advantage on commodity  $j$ . When  $RCA < 1$ , it means that country  $i$  has a revealed comparative disadvantage on commodity  $j$ .

Table 5.3 provides the data on the number of sectors where OIC countries have comparative advantage vis-à-vis other countries. In general, OIC countries tend to have comparative advantage in food products and crude materials (Codes 0, 1, 2), accounting up to 50% of all sectors they have comparative advantage. However, an upward trend can be observed in the number of sectors where OIC countries have comparative advantage under manufacturing industries (Codes 6, 7, 8),

**Table 5.3**  
Comparative Advantage in OIC Countries (Total number in each sector)

Code	Description	1995		2005		2012	
0	Food and live animals chiefly for food	89	24.3%	113	22.7%	114	24.5%
1	Beverages and tobacco	12	3.3%	33	6.6%	20	4.3%
2	Crude materials, inedible, except fuels	83	22.7%	94	18.9%	77	16.6%
3	Mineral fuels, lubricants and related materials	27	7.4%	37	7.4%	37	7.9%
4	Animal and vegetable oils, fats and waxes	19	5.2%	29	5.8%	27	5.8%
5	Chemicals and related products	42	11.5%	43	8.6%	47	10.1%
6	Manufactured goods classified chiefly by materials	44	12%	62	12.4%	68	14.6%
7	Machinery and transport equipment	5	1.4%	12	2.4%	11	2.4%
8	Miscellaneous manufactured articles	23	6.3%	35	7%	33	7.1%
9	Commodities and transactions not classified	22	6%	40	8%	31	6.7%
<b>TOTAL</b>	<b>All Commodities</b>	<b>366</b>		<b>498</b>		<b>465</b>	

Source: SESRIC Staff Calculation based on UN Comtrade Database.

where the total share is increased from 19.7% in 1995 to 24.1% in 2012. This indicates that OIC countries are increasingly gaining comparative advantages across different sectors and products of manufacturing industries.

This is a particularly strong outcome of increasing diversification observed in OIC countries. However, further efforts should be made to achieve more competitiveness in sectors and products of manufacturing industries. Overall, discovering productive advantage requires significant diversification. Successful discoveries will not only increase overall productivity levels but also number of products in which to have comparative advantage.

High-tech industries are usually the area of specialization of leading industrialized countries and low-skill industries are the area of concentration of the least developed countries. As they progress, developing countries usually diversify their production and export structure in order to attain higher economic growth. Successful diversifiers reap the benefits in terms of better economic performance and faster development. The countries that cannot diversify and are taken captive by limited infertile industries (those specialize in primary commodities) will not be able to jump to the era of higher economic growth.<sup>7</sup> Therefore, as a policy outcome, recommending least developing countries to specialize in what they currently doing best may not necessarily help them to achieve long run sustainable growth.<sup>8</sup>

### 5.3.2 Entrepreneurship

It is widely believed that entrepreneurship is beneficial for economic growth and development. Entrepreneurship has been also remarkably critical in developing countries that achieved substantial poverty reduction (Naudé, 2013). Scholarly thinking about entrepreneurship have taken different forms, but a synthesis definition has been offered by Gries and Naudé (2011) that combines different views to define entrepreneurship as “the resource, process and state of being through and in which individuals utilize positive opportunities in the market by creating and growing new business firms.”

Schumpeter (1950; 1961) famously defined the entrepreneur as the coordinator of production and agent of change. Scholars who share this view of entrepreneurship see the contribution of entrepreneurship to be much more important at later stages of development, where economic growth is driven by knowledge and competition. At earlier stages of development, entrepreneurship may play a less pronounced role because growth is largely driven by factor accumulation (Ács and Naudé, 2013).

Technically, entrepreneurs create a positive externality through bringing new goods and new technology to the market. Hausmann and Rodrik (2003) emphasize the role of entrepreneur in discovering new products when there is uncertainty about what a country is good at producing. Entrepreneurial cost discovery process, as suggested by Hausman and Rodrik, involves making sunk costs in a new activity to identify the profitability of the activity, which is *ex ante* unknown but it will later provide information to other entrepreneurs on the profitability of a specific

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<sup>7</sup> The question is that should the countries producing coffee-beans be the best coffee beans producer and ignore the other industries. The answer should not be that difficult, but what usually recommended to such countries is generally the opposite (see, e.g., Stockey, 1988).

<sup>8</sup> For instance, though no one would regard India, a low-income developing country, to have comparative advantage in technology intensive industries, the country showed remarkable success in information technology sector.



entrepreneurial activity. However, there is a lack of clear empirical evidence of whether entrepreneurship drives economic growth and productivity.

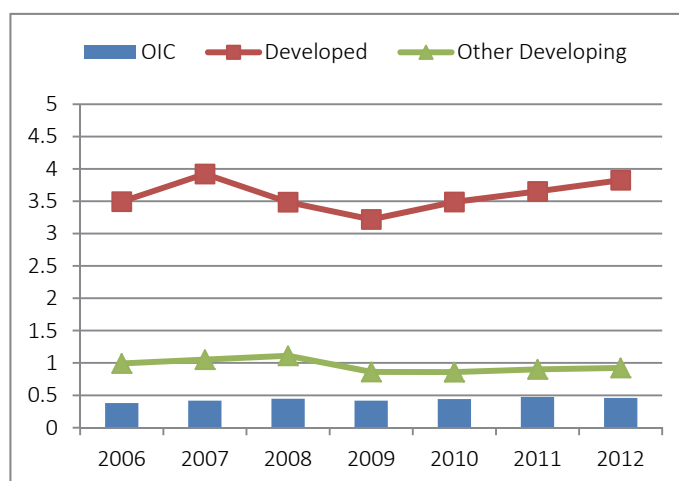
In order to further elaborate on why entrepreneurship is important in identifying productive capacities, the importance of discoveries of new productive sectors against the existing comparative advantage needs to be further highlighted. Three important arguments cited in Hausmann and Rodrik are the followings:

- i. There is much randomness in the process of discovering what one can be good at. More likely, existing patterns of specialization are the consequence of historical accidents and serendipitous choices by entrepreneurs.
- ii. For most economies, industrial success entails concentration in a relatively narrow range of high-productivity activities. However, the specific product lines that eventually prove to be the most productive are typically highly uncertain and unpredictable.
- iii. Enterprises may not be able to predict if, when, how, and at what cost they would learn enough to become fully competitive, even when the technology is well known and mature elsewhere.<sup>9</sup>

The empirical literature also finds a U-shaped relationship between entrepreneurship and a country's level of economic development, as measured by GDP per capita (Naudé, 2010), implying a higher rate of entrepreneurial activity in low-income countries than in middle-income countries. This result may reflect that entrepreneurs in developing countries are less innovative and tend to be proportionately more 'necessity' motivated (Ács et al., 2008). Higher levels of GDP may therefore be associated with more 'innovative' forms of entrepreneurship. Studies find that innovative firms, particularly in high-tech sectors, have on average higher levels of productivity, tend to do enjoy higher employment growth, and cause positive spillovers for other firms (Stam and Wennberg 2009).

In order to assess the level of entrepreneurial activity in OIC countries, the Entrepreneurship Database of the World Bank is used. It is a critical source of data that facilitates the measurement of entrepreneurial activity across countries and over time. Data from 139 economies on the number of newly registered firms per year over the period 2004-2012 can help show the

**Figure 5.41**  
Establishment of New Firms  
(Per 1,000 working-age adults)



Source: World Bank.

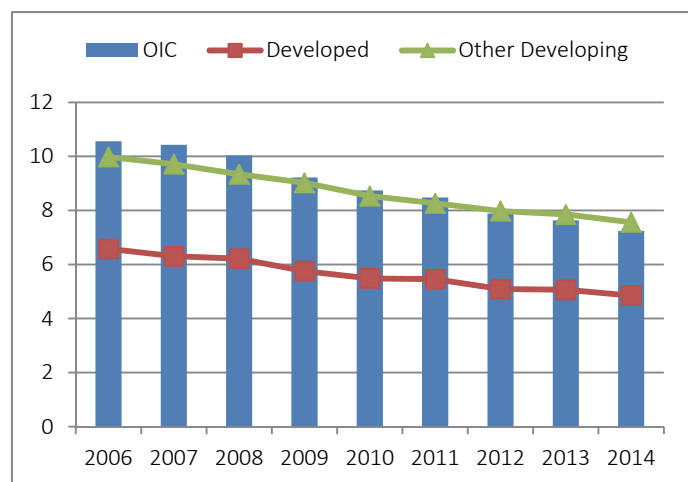
<sup>9</sup> As noted by Acemoglu and Zilibotti (2001), "many technologies used by the LDCs are developed in the OECD economies and are designed to make optimal use of the skills of these richer countries' workforces. Differences in the supply of skills create a mismatch between the requirements of these technologies and the skills of LDC workers, and lead to low productivity in the LDCs. Even when all countries have equal access to new technologies, this technology- skill mismatch can lead to sizable differences in total factor productivity and output per worker."

relationship between the level of cost, time, and procedures required to start a business and new firm registration. Figure 5.41 shows the weighted average of newly registered firms per 1,000 working-age adults during 2006-2012. Entrepreneurial activity in OIC countries is clearly lagging behind developed as well as other developing countries. During 2006-2012, the weighted average increased only from 0.38 to 0.46 in OIC countries, while this number reached 3.8 in developed countries and 0.92 in other developing countries. However, the gap between OIC and other developing countries decreased from 0.61 in 2006 to 0.46 in 2012.

There are important constraints in promoting entrepreneurial activity, which include among others time and procedures required to start a business as well as investor protection. According to the World Bank Doing Business database, time and procedures required to start a business is constantly falling since 2006 all around the world. With regard to number of procedures, the progress achieved by OIC countries during 2006-2014 is better than achievements of other groups (Figure 5.42). OIC countries on average now require fewer procedures than other developing countries and narrowed the gap with developed countries from 5 procedures in 2006 to 2.4 procedures in 2014. A similar achievement has been observed in terms of time required to start a business (Figure 5.43). As of 2014, OIC countries on average require less time to start a business compared to other developing countries and the gap with developed countries have significantly reduced to 7.1 days from its level of 12.2 days in 2006.

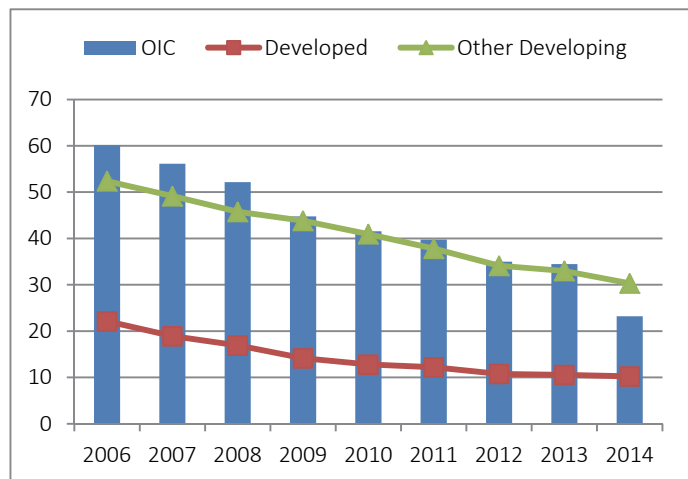
Another aspect of supporting entrepreneurial activity is investor protection. Strength of investor protection index<sup>10</sup> measures the strength of minority shareholder protections against misuse of corporate assets by directors for their personal gain, which is particularly important to support risk-taking by small investors. In this context, despite continuous improvement, OIC countries as a group do not perform as good as

**Figure 5.42**  
Number of procedures required to start a business



Source: World Bank WDI.

**Figure 5.43**  
Time required to start a business



Source: World Bank WDI.

<sup>10</sup> The index provided by the World Bank ranges between 0 and 10, with higher values indicating better investor protection.

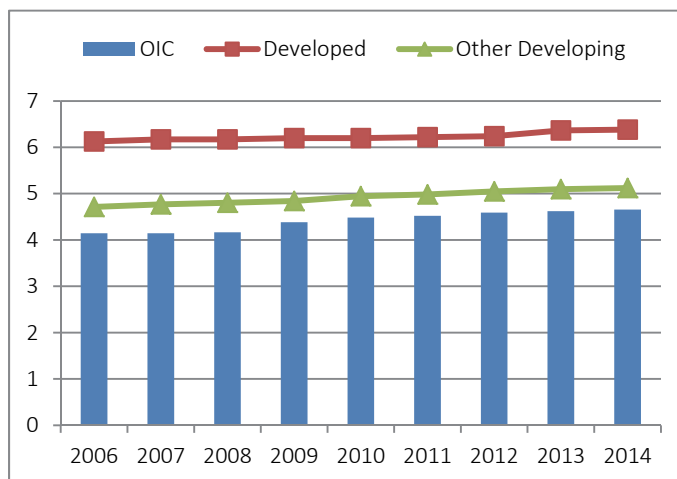
other developing and developed countries. As of 2014, the index value for OIC countries reached 4.7, compared to 5.1 in other developing countries and 6.4 in developed countries (Figure 5.44). Therefore, in addition to favourable developments observed in time and procedures required to start a business, further efforts should be made in protecting investors as well in order to better encourage entrepreneurship.

A drawback of the ease of doing business ranking is that it can measure the regulatory performance of economies only relative to the performance of others, but does not provide information on how the absolute quality of the regulatory environment is improving over time. It also does not provide any information on how large the gaps are between economies at a single point in time. The distance to frontier measure is designed to address both shortcomings, complementing the ease of doing business ranking. This measure illustrates the distance of an economy to the “frontier,” and the change in the measure over time shows the extent to which the economy has closed this gap.<sup>11</sup> Accordingly, OIC and other developing countries are moving towards closing this gap (Figure 5.45). On average, OIC countries’ distance to frontier was 48.5 in 2008, but it improved to 54.6 in 2014 and narrowed the gap with developed countries. However, the performance of OIC countries continues to remain below the performance of other developing countries.

As a result, encouraging entrepreneurial activity for identifying productive capacities is critical, but improving only procedures is not enough if entrepreneurs are not innovative. Innovative abilities of entrepreneurs should also be improved through investing in skills and education of entrepreneurs. It is innovative entrepreneurship that is most desirable for growth. Therefore, innovation and education policy should be a central focus of entrepreneurship promotion in OIC countries as it is in developed economies.

Figure 5.44

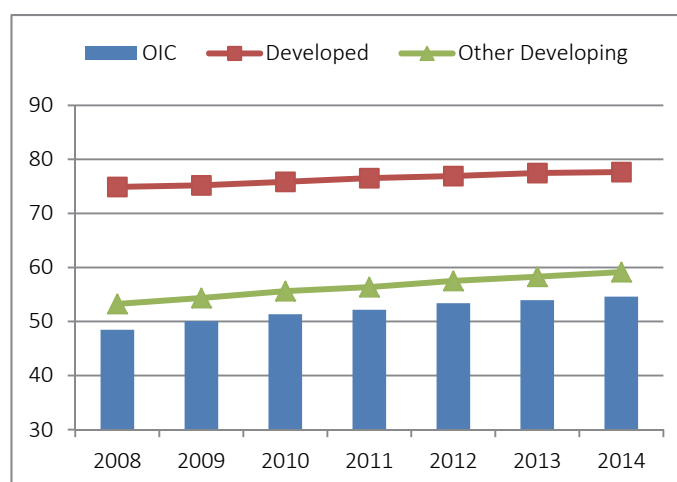
Strength of investor protection



Source: World Bank WDI.

Figure 5.45

Distance to frontier



Source: World Bank WDI.

<sup>11</sup> An economy’s distance to frontier is reflected on a scale from 0 to 100, where 0 represents the lowest performance and 100 represents the frontier.

## SECTION 6

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### Policy Issues for Structural Transformation

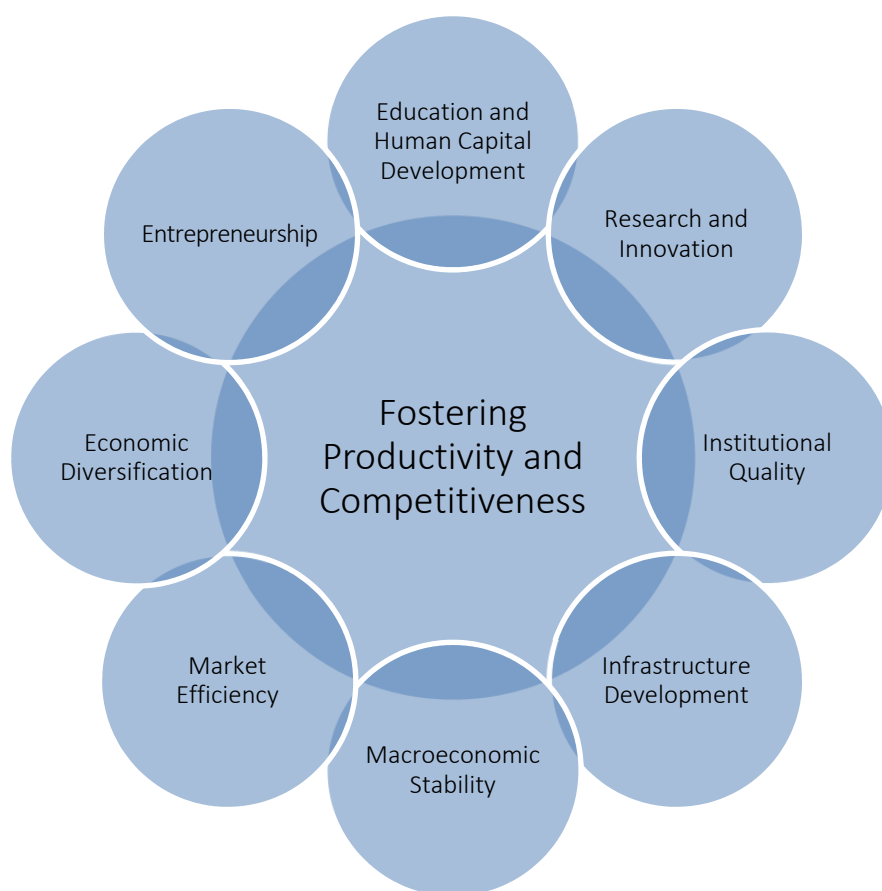
Part II of this report focused on the critical issue of productivity and competitiveness in OIC countries in a comprehensive perspective. It highlighted the role of these issues in economic development and wealth creation process in section 3 and provided some basic statistics on the current level of productivity and competitiveness in OIC countries in section 4. Then a comprehensive examination of key issues in fostering productivity and competitiveness is made in section 5. In the light of the analyses made throughout these sections, this section provides important policy issues identified for better performance in enhancing productivity and competitiveness and achieving successful structural transformation towards higher development in OIC countries. These issues are summarized under each category classified in section 5 and provided again in Figure 6.1.

Evidence suggests that reform priorities for better productivity growth differ across countries. Low income countries are particularly in need of improved education and infrastructure, good quality economic institutions, reduced barriers for better market efficiency and effective competitiveness. Low income countries need to achieve rapid accumulation of capital, raising agricultural productivity and technology diffusion in labour intensive industries in order to maintain a dynamic growth path supported by productivity growth.

On the other hand, middle income countries need, among others, effective policies for investment promotion, quality higher education, investment on research and development, deepening of financial markets, more flexible and competitive goods and labour markets. Sectoral reallocation from agriculture to industry and services in these countries may already have taken a long way and

**Figure 6.1**

Critical Factors in Fostering Productivity and Competitiveness



these countries may need more efforts to increase their capacity to innovate and apply new knowledge and technologies. Middle income countries need also to achieve a greater flexibility to shift resources across sectors in order to improve productivity and competitiveness. Economic diversification, particularly in resource-rich countries, remains critical to achieve sustained growth through higher productivity and competitiveness levels. More specific policy issues are discussed below under each category provided in Figure 6.1.

### Education and Human Capital Development

Human capital is one of the main determinants of long-term growth. Skilled and well-educated workforce facilitates the absorption of foreign knowledge and technology from other countries through channels including international trade and foreign direct investments that smooth the spill-over of this stock of knowledge and technology. But, it is the absorptive capacity that determines the level of diffusion. Investment in human capital accumulation or education has, therefore, the potential to increase the capacity to obtain and utilize the knowledge developed elsewhere. Since the majority of the OIC member countries occupy lower ranks in economic development, the issue of human capital development remains critical in widening the potentials to achieve long-term sustainable growth.

Development policy today recognizes the role of education but focuses most attention on ensuring that everybody is in school and ignoring the quality and efficiency of the learning that takes place in educational institutions. Promoting the quality of education at international and regional level is highly critical for creating better opportunities of growth and development. It is observed that despite some improvement in school attendance, there are still OIC countries with low level of schooling. The quality of education also remains a critical concern in many OIC countries. For effective human capital development that can lead to higher productivity and better competitiveness levels, attendance as well as quality of education at all levels (pre-primary, primary, secondary, and tertiary) and all types (vocational, formal, and evening) should be supported through effective programmes and policies.

Given the shortage of skilled workers, effective policies and programmes need to be devised and implemented for better education and training as they are critical factors for technological readiness to raise productivity and diversify into more sophisticated products. Enhancing firm productivity, upgrading technologies, developing high-value added services and achieving more competitive status in the world economy necessitate the assurance of better educated and trained human resources that match the needs of the labour market.

### Research and Innovation

The performance of OIC countries on different indicators for technology-based innovation, investments in research and development (R&D) and patents suggest that many of these countries face an innovation shortfall. In this perspective, it is evident that investments in human capital are not sufficient to translate the capacities into more innovative structure to generate higher patent applications, casting doubt on the quality of education in OIC countries. Gains in access to education should turn attention to the challenge of improving the quality of education and accelerating learning. OIC member countries should focus on improving the framework conditions for innovation and thus the potential outcomes related to the productivity and competitiveness in order to prompt a faster catch-up process.

In this process, it is important to allocate a reasonable amount of public budget to education, R&D and innovation. Training and attracting talent should be placed in top of the national strategies for innovation. In order to ensure effective use of these resources while supporting research and innovation activities, necessary monitoring and evaluation mechanisms should be in place. Needs for critical reforms should be quickly identified and implemented. Cooperation with other countries in knowledge sharing and transfer should be strengthened. It is also important to note that challenges for making innovation the engine of economic development can be quite demanding in low income countries due to poor framework conditions and low human capital. Improving education attainment and quality of education as well as strengthening framework conditions should be priority policies in these countries.

OIC member countries need to pay a special attention to innovation and R&D policies that are critical ingredients for technology growth. National R&D policies should encompass several components such as sharing a larger budget for R&D sector (public and private), increasing average education level, and redesigning curriculums to encourage innovative ideas. The framework conditions, which include policy environment, economic environment, regulations and procedures,

access to finance, education system, protection of IP rights and empowerment, should be well taken into consideration while devising policies for innovation-friendly environment.

### Institutional Quality

Institutions promote productivity and competitiveness by reducing transaction costs which cover search and information costs, negotiation costs, policing and enforcement costs. Institutions decrease transaction costs by setting up common legal frameworks and by encouraging trust with the establishment of policies and justice systems.

OIC member countries need to undergo a change in their institutional structure and legal framework that affect directly and indirectly their competitiveness. In recent years, a small decline was observed in the average OIC competitiveness scores that indicate the urgency of this issue. It is clear that the reforms should be prepared with a holistic approach and implemented under a strategic plan. Otherwise, the efforts will more likely to be inconclusive.

OIC countries, particularly low-income member countries, can reap productivity gains by further strengthening the quality of their institutional frameworks that protect property rights, including intellectual property. Property rights and the ability to enforce contracts are considered to be two critical elements of a country's institutional and legal framework and they are critical conditions for market-based economic activity.

Further strengthening institutions would have many repercussions on other key factors of raising productivity. It could help promote private investment and entrepreneurship, and foster financial sector development. Even if total investments are rising, inefficiencies in public investment management and weak governance often distort the impact of public spending on capital accumulation and inadequate protection of investors discourage investments. Therefore, it is essential to improve the quality of institutions and governance in order to improve the quality and outcome of investments.

### Infrastructure Development

Improved infrastructure improves competitiveness and productivity, lower the cost of doing business, and facilitate trade and foreign direct investment as well as deepen economic and social integration and create employment opportunities. Despite significant progress in some areas, many OIC countries are still suffering large infrastructure deficits, manifested in deficient transportation and communications networks and low energy-generating capacity to meet rising demand.

Integrating energy, transport, communication and water infrastructure within and across countries is critical for enhancing productivity and competitiveness. On the other hand, some OIC countries are too small to develop large scale infrastructure on their own, particularly in the area of transport. Developing and realizing regional projects, such as Dakar-Port Sudan railway project, would be an efficient option for the related countries to reduce the cost of doing business and trade as well as facilitate people to have access to large markets.

In the area of energy, there is an urgent need to invest in the diversification of the energy mix. This will reduce heavy reliance on single source of energy and make the infrastructure investments sustainable. Finally, as a critical tool in enhancing productivity and competitiveness, ICT

infrastructure should be developed for firms to obtain and utilize the latest information and technology. In areas where transport, energy and ICT policies converge with each other or other policy objectives, a high degree of coordination among different ministries and institutions should be ensured.

Overall, insufficient infrastructure is a key cause of low productivity growth. Improving connectivity to both domestic and foreign markets could boost prospects for productivity growth in agriculture and manufacturing with significant growth impacts. In order to attract more private and foreign investment, the regulatory environment for infrastructure may be reformed and public-private partnerships can be further promoted.

### **Economic Stability**

Low and predictable inflation rate, an appropriate real interest rate, and competitive and predictable real exchange rate are important elements of macroeconomic stability that are discussed in the report. It is argued that inflation volatility adversely affects an effective allocation of resources, as it is not possible for firms to know the future prices and wages. Moreover, large fluctuations in exchange rates may signal weakness and imbalances in macroeconomic situation of a country. It is also argued that financial deepening can enhance the capacity of the financial system of a country to intermediate capital flows.

OIC countries found to have in general low inflation and exchange rate volatility, but low financial depth. Macroeconomic stability requires a proper mix of fiscal and monetary policies. A well-developed financial system facilitates the financing of long-term investment and better risk sharing can support investment in higher return projects. When this leads to greater economic efficiency and a better allocation of capital, it is conducive to higher output and growth (Levine, 2005). Fiscal policy and monetary policy should support sustainability and stability in major economic indicators so that investors and finance institutions have the clarity about the projects and project financing.

Financial openness may expose economies to higher volatility in financial flows. Capital account liberalisation without sufficiently developed financial markets can lead to increased volatility (Dell’Ariccia et al., 2008). There is again a considerable body of evidence associating trade openness with long-term growth but also with greater output volatility (Easterly, et al., 2001). Flexible exchange rates help to absorb terms-of-trade shocks, which can be large, persistent and account for a sizeable share of macroeconomic volatility (Andrews and Rees, 2009; Kose, 2002). Proper policy choices should be made in line with the economic fundamentals and development strategies in each economy.

### **Market Efficiency**

The following three main areas where efficiency is sought are highlighted in section 5: labour market, goods market and financial market. An efficient labour market should ensure that the skill mismatch is at minimum level in the market. In the case of goods market efficiency, the right mix of goods and services should be produced and effectively traded in the market. Finally, an efficient financial market will ensure allocation of resources to most productive business opportunities; thereby increase overall productivity and competitiveness of an economy.



With respect to labour market efficiency, it is important to ensure that human capital resources are allocated to their most productive uses. Particularly in developing countries, ability of the market to reallocate labour between sectors (or from old sectors to newer more productive sectors) is critical in growth process. It should be noted that while in some countries significant number of firms identify inadequately educated workforce as a major constraint, firms tend to offer formal training to increase the quality of labour force. This indicates some level of efficiency in the labour market, skill mismatch in the labour market can be reduced and employability of labour force should be improved by raising the quality of training and education programmes. There is also quite a moderate share of firms identifying labour regulations as a major constraint, therefore further efforts should be made to improve regulations for higher labour market efficiency. Significant flexibility in the labour market should be attained in order to allow for structural transformation from resource-based economy to efficiency- and innovation-driven economy.

Market efficiency is commonly associated with competition, which requires control of abuse of dominant positions, prevention of collusion between firms and removal of market entry barriers. The literature also suggests that an efficient market can only exist if there are no barriers to entry for potential competitors who wish to enter the market. In these indicators, OIC countries reveal slightly better picture compared to other developing countries, however, it is still recommended to reduce the market dominance of few business groups in order to promote competition and productivity in OIC countries.

If financial markets do not work properly, adequate and long-term financial resources will not be able to channel to producers and entrepreneurs with profitable investment opportunities. Financial freedom index, which is a measure of banking efficiency as well as a measure of independence from government control and interference in the financial sector, is lower in OIC countries compared to other developing countries and it has hardly changed over the last decade. This indicates the needs for improving banking efficiency and efficiency-distorting interventions in the financial sector.

The empirical literature suggests that reforms focused on reducing administrative burdens, simplifying regulations, strengthening competition, and reducing bureaucracy are positively associated with higher productivity growth (IMF, 2013). All these improve the environment in which firms operate and increase the overall efficiency. The composition and quality of taxation and public spending can also have a significant impact on productivity and growth. An efficient fiscal policy can result in more effective provision of public services in education and infrastructure. In this context, increasing amount and efficiency of public spending in productive areas and cutting back in non-productive areas can provide important productivity gains.

### Economic Diversification

Identification of productive capacities may require significant economic diversification. It is particularly important to exert new and powerful efforts to develop the productive base given the immense competition among the countries and global economic slowdown. Countries with small market size may face particular challenges in their efforts to diversify the economy, but promoting export-oriented industries and larger economic integration with neighbouring countries may ease this bottleneck.

The standard argument for diversification for resource-rich economies is to mitigate the effects of Dutch disease. In small economies with narrowly defined production structure, volatility of resource prices can be a source of economic volatility, therefore these countries need to expand their range of export commodities in order to reduce the impact of external volatility. However, the main argument for diversification is to encourage countries to engage in activities with significant productivity and competitiveness potential. This process of identification should be managed in a way that does not waste the limited resources available and it should be realistic. If the process involves resources that do not available or difficult to secure or a timeframe that is not sustainable or a potential outcomes that does not cover the investments made and bring enough competitive advantages, the outcomes of the diversification strategy may be disappointing.

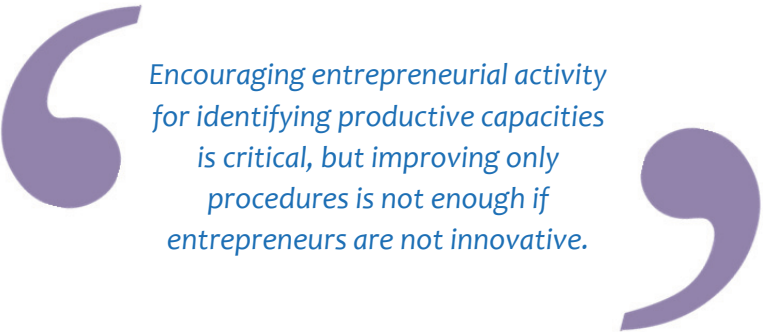
It is found that there is a tendency towards increased diversification in OIC countries. However, there is a need to achieve more competitiveness in sectors and products of manufacturing industries. Overall, discovering productive advantage requires significant diversification. Successful discoveries will not only increase overall productivity levels but also number of products in which to have comparative advantage.

### Entrepreneurship

Entrepreneurial activity in OIC countries is clearly lagging behind developed as well as other developing countries. There are important constraints in promoting entrepreneurial activity, which include among others time and procedures required to start a business as

well as investor protection. With regard to the number of procedures, the progress achieved by OIC countries during 2006-2014 is better than that achieved by other groups. A similar achievement has been observed in terms of time required to start a business. As of 2014, OIC countries on average require less time to start a business compared to other developing countries. However, with regards to investor protection, despite some improvement, OIC countries as a group do not perform as good as other developing and developed countries.

Encouraging entrepreneurial activity for identifying productive capacities is critical, but improving only procedures is not enough if entrepreneurs are not innovative. Innovative abilities of entrepreneurs should also be improved through investing in skills and education of entrepreneurs. It is innovative entrepreneurship that is most desirable for growth. Therefore, innovation and education policy should be a central focus of entrepreneurship promotion in OIC countries as it is in developed economies.



*Encouraging entrepreneurial activity  
for identifying productive capacities  
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procedures is not enough if  
entrepreneurs are not innovative.*



## Part III

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# The Role of **Public** **Private** **Partnerships** for the Development of the **Tourism Sector** in OIC Member States

## PART III

This Part highlights the role of public private partnerships (PPPs) for the development of the tourism sector. It provides a short assessment of the tourism sector development in OIC countries and sheds light on the importance for the development of tourism sector. In this context, PPPs in tourism industry can be formed to create new products or services, to achieve higher levels of efficiency, to open markets that were previously inaccessible, or to simply pool resources. The key factor leading to partnership relies on the fact that all partners from the public and private sector wish to benefit from sharing resources and objectives.



## SECTION 7

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# Public Private Partnerships for the Development of the Tourism Sector



Defined by the United Nations World Tourism Organisation (UN-WTO), tourism comprises the activities of individuals travelling to and staying at places outside their usual permanent places of residence for a period not exceeding 12 months for leisure, business and other purposes. Based on this broad definition, tourism industry includes all socio-economic activities that are directly and/or indirectly related to the provision of goods and services to tourists. The UN-WTO identifies 185 supply-side activities that have significant connections to the tourism sector<sup>12</sup>. These activities include the services of various sectors, such as transportation and communication, hotels and lodging, food and beverages, cultural and entertainment services, banking and finance, and promotion and publicity services. Defined by this impressive network of socio-economic activities and the infrastructure needed to support it, tourism is one of the largest sectors in the world as well as most important categories of international trade.

Like in the case of any other sectors in the economy, the development of sustainable tourism sector, through enhancing long-term quality and competitiveness of tourism destinations, necessitates effective and coordinated involvement of both the public and private sector. However, it is most often the case that these two sectors are working independently, particularly in the developing countries. In this context, the experience has shown that if these two forces come together to work synergistically for the development of the tourism sector, the value could be exponential. The way to make this happen is the effective Public-Private Partnerships (PPPs).

In the light of this understanding, this Part of the *Economic Outlook 2014* Report briefly overviews the recent trends in international tourism worldwide and in the OIC Member Countries and highlights the role of PPPs for the development of the tourism sector.

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<sup>12</sup> UNWTO, "Standard International Classification of Tourism Activities (SICTA)", [http://www.unwto.org/statistics/basic-\\_references/index-en.htm](http://www.unwto.org/statistics/basic-_references/index-en.htm)

## 7.1 International Tourism Worldwide: Overview

Worldwide, international tourism activity has been growing, over the last five decades, at substantial and sustainable rates in terms of both tourist arrivals and tourism receipts. The number of international tourist arrivals worldwide increased from 69.3 million in 1960 to 1087 million in 2013, corresponding to an average annual growth rate of 5.3%. The revenues generated by those tourists, i.e. international tourism receipts in terms of current US dollar prices, increased from \$6.9 billion to \$1,159 billion in the same period, corresponding to an average annual growth rate of 10.2%; a rate which was significantly higher than that of the world economy as a whole.

Meanwhile, in addition to the two traditional tourist-receiving developed regions of Europe and the Americas, new destinations have been emerged over the last few decades in the developing regions as well. International tourism activity has even become one of the main economic activities in many developing countries, including a significant number of OIC member countries. In particular, international tourism activities constitute an important source of foreign exchange earnings and employment in many of these countries. Therefore, tourism has been given more attention in the national development strategies of many developing countries and placed on the agenda of many recent international conferences on sustainable development.

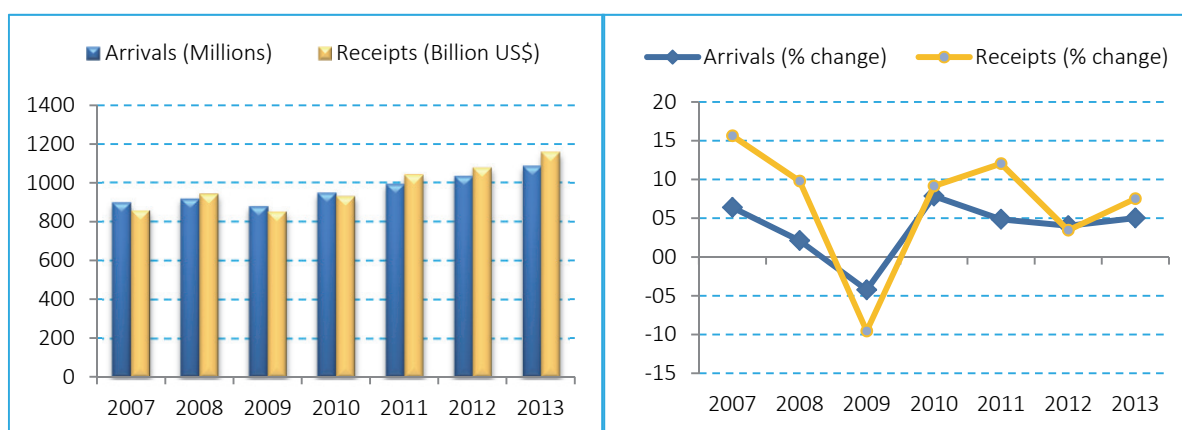
The number of international tourist arrivals worldwide increased from 900 million in 2007 to 1,087 million in 2013, corresponding to an average annual growth rate of 3.2%. In the same period, international tourism receipts, in current US dollar prices, increased from \$858 billion to \$1,159 billion, corresponding to an average annual growth rate of 5.1%. After the latest global financial crises in 2009, which severely hampered the flow of international tourists worldwide, international tourist arrivals continued to grow again, consolidating a growth trend by 7.8% in 2010, 4.8% in

**Figure 7.1**

International Tourism Worldwide

(a) Tourist Arrivals and Tourism Receipts

(b) Annual % Change



Source: UNWTO.

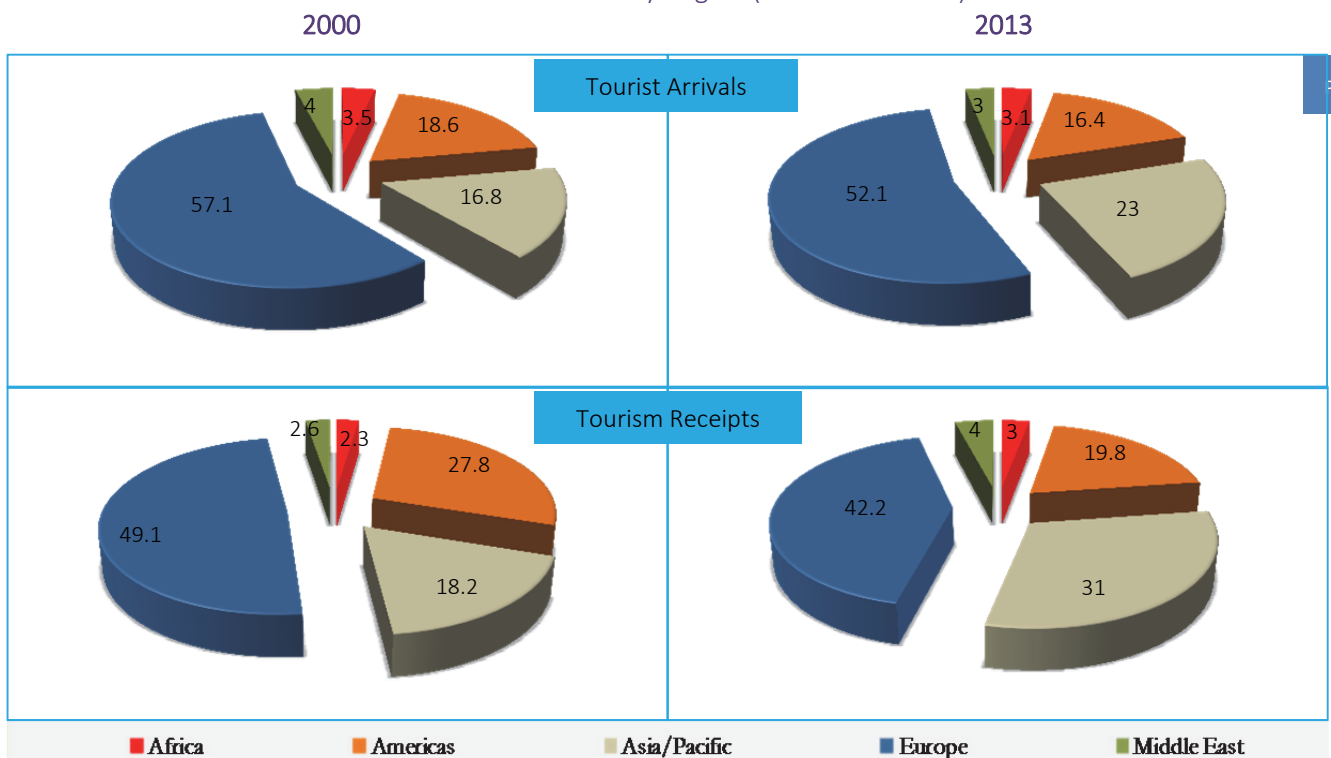
2011 and 4% in 2012 (Figure 7.1). International tourist arrivals grew by 5% worldwide in 2013, reaching a record 1,087 million arrivals, after topping the 1 billion mark in 2012. Similarly, international tourism receipts, in current US dollar prices, recorded 9.7% growth rate in 2010, 12% in 2011 and 3.5% in 2012. In 2013, international tourism receipts grew by 7.5%, reaching a record of \$1,159 billion, up from \$1,078 billion in 2012.

Over the past few decades, international tourism was also characterised by a growing tendency for tourists to visit new destinations in addition to the traditional favourites of Europe and North America. Coupled with the diversification of tourism products and increasing competition in international tourism markets, this has led to an ever increasing number of new tourism destinations in the developing regions, which are steadily growing at a faster pace, and hence increasing their share in the world tourism market.

In this context, during 2007-2013 the average growth rate of international tourist arrivals in the developing regions was above the world average, and above that of the developed regions, floating around 5.3% in the Asia & Pacific and 4.6% in Africa. In contrast, in more traditional tourist-receiving regions such as Europe and the Americas this rate was only 2.5% and 2.7% respectively, which is below the world average of 3.2%. Consequently, it is notable that the combined share of the latter two regions in the world tourism market has contracted from 75.7% in 2000 to 68.5% in 2013 with market shares increasing in favour of the other regions, particularly the Asia & Pacific (Figure 7.2). To a large extent, a similar performance was also observed in terms of international tourism receipts, where the combined share of these two regions in the world total has contracted from 76.9% in 2000 to 62% in 2013 with market shares increasing in favour of the other regions, particularly the Asia & Pacific. In fact, there has been a substantial change in the world tourism

Figure 7.2

International Tourism by Region (% of World Total)



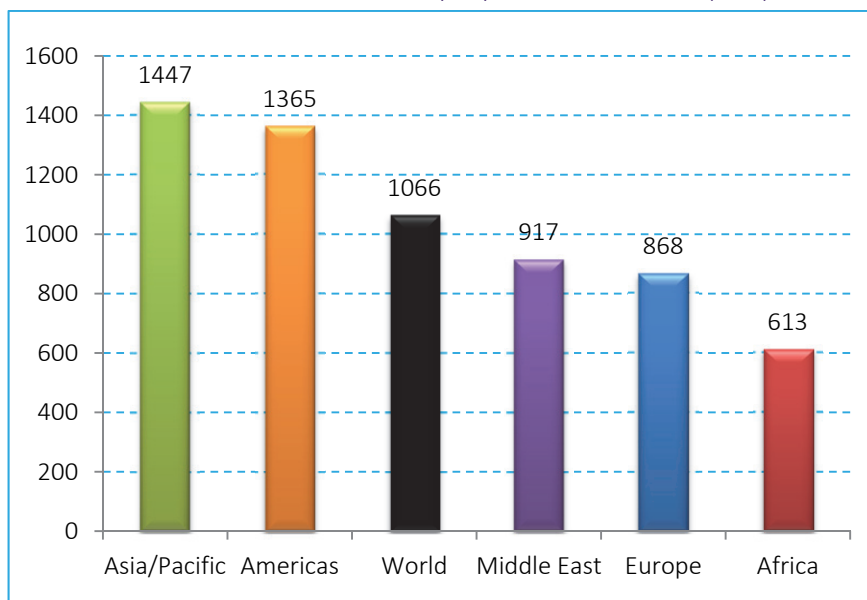
Source: UNWTO.



map since 2002 where while Europe remained firmly in the first place in terms of both tourist arrivals and tourism receipts, Asia & Pacific claimed the second place from the Americas in terms of both tourist arrivals; and also in terms of tourism receipts since 2006 (see SESRIC 2013)<sup>13</sup>.

However, it should be mentioned that while the trends in tourism receipts followed, in general, similar patterns to those in tourist arrivals, the average growth rates of tourism receipts and the regional shares in world total were somewhat different among the regions. This is mainly due to the fact that the international tourism receipts per arrival vary as each region has its own touristic characteristics in terms of the length of stay of tourists, purpose of visit, geographical

**Figure 7.3**  
International Tourism Receipts per Arrival in 2013 (US\$)



Source: UNWTO.

distance, etc. In this context, the world average tourism receipts per arrival in 2013 amounted to \$1066. The highest average tourism receipts per arrival was recorded in the Asia & Pacific (\$1447), followed by the Americas (\$1365). International tourism receipts per arrival in the other regions were below the world average ranging from \$917 in the Middle East and \$868 in Europe to \$613 in Africa (see Figure 7.3).

## 7.2 International Tourism in OIC Member Countries

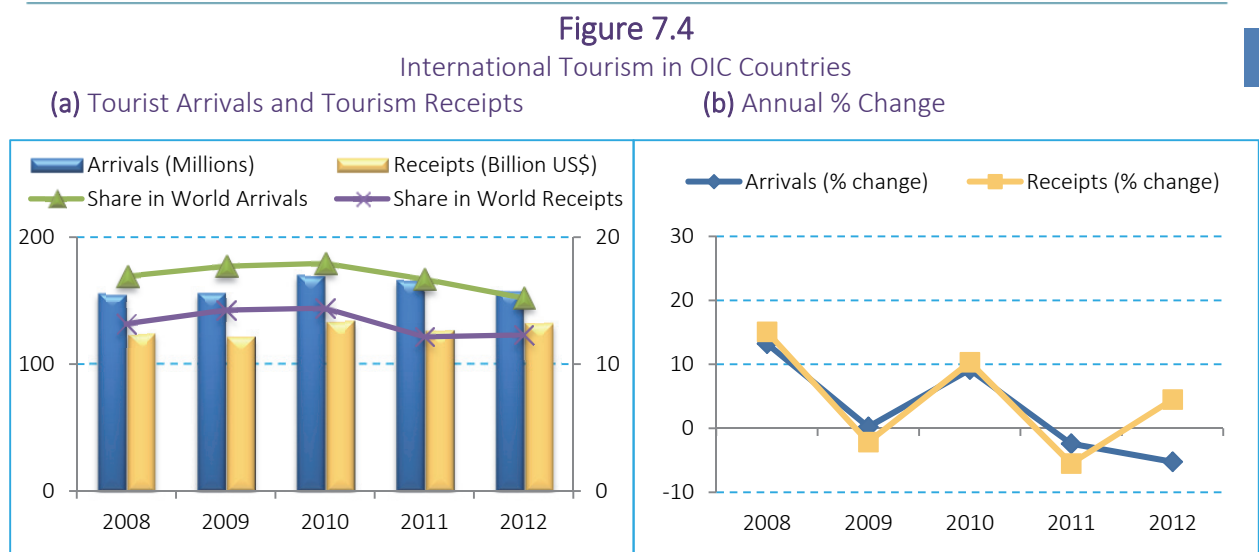
As a substantial part of the developing countries, international tourism activity in the OIC member countries has been also growing substantially in terms of both tourist arrivals and tourism receipts. The number of international tourist arrivals into the OIC countries was growing by an average annual growth rate of 4.6% during the period 2008-2010. However, although the number of international tourist arrivals in the OIC region witnessed a slight increase (0.2%) in 2009, international tourism receipts declined by 2.2% due to the impact of the global financial crisis (Figure 7.4). Yet, it should be noted that the share of OIC countries in the total international tourist arrivals increased to 17.7% in 2009 compared to 16.9% in 2008. Similarly, the share of OIC countries in world's total tourism receipts increased from 13.2% in 2008 to 14.2% in 2009. This clearly indicates that tourism sector in OIC countries was not affected from the financial crisis as heavily as other tourism destinations in the world.

<sup>13</sup> SESRIC, "International Tourism in the OIC Countries: Prospects and Challenges 2013".

In 2011, the number of international tourist arrivals in the OIC countries, for which the data are available, declined to 166 million, corresponding to a slight decrease by 2.4% over 2010. Consequently, the share of OIC region in the world tourism market decreased slightly to 16.7% in 2011 compared 17.9% in 2010. This decline might be explained, in part, by the social movements and political unrest in some OIC countries in the Middle East region. Similarly, international tourism receipts in the OIC region decreased to \$126.6 billion in 2011 compared, corresponding to a decline by 5.5% over 2010. Consequently, the share of OIC region in world tourism receipts decreased slightly to 12.2% in 2011 compared to 14.4% in 2010.

As shown in Figure 7.4, in 2012, the number of international tourist arrivals in the OIC countries, for which the data are available (27 countries), declined to 157.3 million, corresponding to a decrease by 5.2% over 2011. Consequently, the share of OIC region in the world tourism market decreased slightly to 15.2% in 2012 compared 16.7% in 2011. However, it seems that this decrease in international tourist arrivals into OIC countries is mainly due to the unavailability of the data, where the data is not available for 22 countries in 2012 compared to 15 countries in 2011. Yet, it should be noted that, although the OIC region witnessed a decline of 5.2% in the number of tourist arrivals in 2012, international tourism receipts increased by 4.5%; reflecting in a very slight increase (0.1%) in the share of OIC region in the world tourism receipts.

While, in absolute terms, the trends in international tourism receipts were generally similar to those in international tourist arrivals, the shares of the individual countries in the total OIC

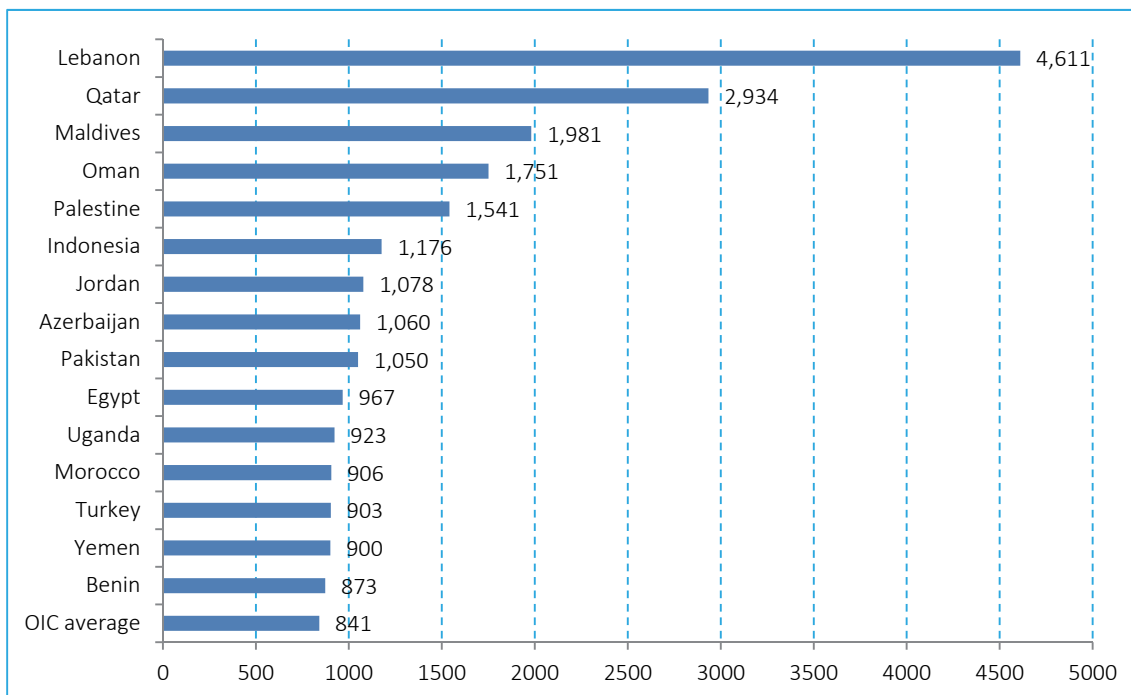


Source: UNWTO.

international tourism receipts as well as the average growth rates of those receipts were somewhat different. This is due to the fact that receipts per arrival vary as each country has its own tourism characteristics in terms of length of stay, purpose of visit, geographical distance, types of shopping, etc. For example, as shown in Figure 7.5, the OIC average tourism receipts per arrival in 2012 amounted to \$841. In the same year, the highest receipts per tourist arrival were recorded in Lebanon (\$4611) followed by Qatar (\$2934) Maldives (\$1981), Oman (\$1751), Palestine (\$1541), Indonesia (\$1176), Jordan (\$1078), Azerbaijan (\$1060), Pakistan (\$1050) and Egypt (\$967).

**Figure 7.5**

International Tourism Receipts per Arrival in OIC Countries (US\$ in 2012)



Source: UNWTO.

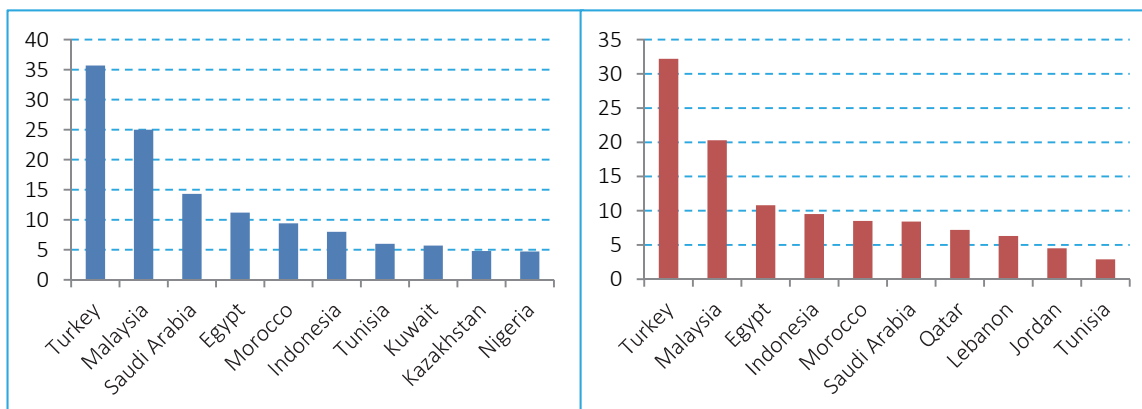
At the individual country level, it is observed that international tourism activity, in terms of both tourist arrivals and tourism receipts, is still concentrated in a few countries. For example, in 2012, only 10 OIC countries, namely Turkey, Malaysia, Saudi Arabia, Egypt, Morocco, Indonesia, Tunisia, Kuwait, Kazakhstan and Nigeria were the top 10 international tourist destinations among the OIC member countries (Figure 7.6). These 10 countries together hosted 124.8 million international

**Figure 7.6**

Top 10 Tourist Destinations and Tourism Earners in 2012

(a) Arrivals in Millions

(b) Receipts in US\$ Billions



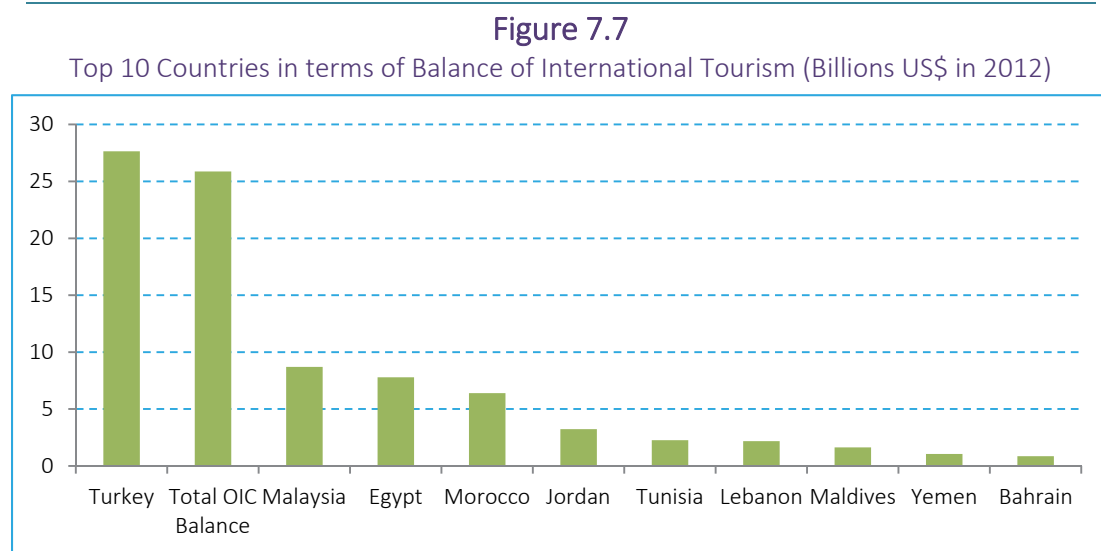
Source: UNWTO.

tourist arrivals, corresponding to a share of 79.3% of the total OIC tourism market in 2012. Similarly, international tourism receipts in the OIC countries are also concentrated in a few countries, the majority of them being the main OIC tourist destinations shown in Figure 7.6. In

descending order, Turkey, Malaysia, Egypt, Indonesia, Morocco, Saudi Arabia, Qatar, Lebanon, Jordan and Tunisia were the top 10 OIC countries in terms of tourism receipts in 2012. This group of OIC countries earned \$110.6 billion as international tourism receipts in 2011, corresponding to a share of 83.6% of the total OIC tourism receipts in that year. In this context, it is worth mentioning that, in 2012, Turkey was the only OIC member country which has been ranked 6<sup>th</sup> among the top 10 world tourist destinations (see UNWTO 2014).

As an attempt to assess the economic role of international tourism sector in the economies of the OIC countries, the balance of international tourism is calculated (by deducting the international tourism expenditure from the international tourism receipts) for each individual country for which the relevant data are available in the five-year period of 2008-2012. The net contribution of international tourism sector to the economies of OIC countries is then examined by relating the balance of international tourism as a percentage of the GDP of each country. The sector is also evaluated as a source of foreign exchange earnings by relating the international tourism receipts in each country, as a percentage, to its total merchandise exports in the same period.

Figure 7.7 displays the top 10 OIC countries in terms of their balance of international tourism in billions of US dollars in 2012. It is obvious that the majority of these countries are the main OIC international tourism destinations and earners. It is also observed that the balance of international tourism of some OIC countries accounts for a high percentage of their international tourism receipts. This is true for some countries like Gambia (92%), Maldives (85.8%), Turkey (85.7%), Tunisia (77%), Morocco (75.3%) and Egypt (72%). The total OIC international tourism balance amounted to \$24.6 billion in 2012, corresponding to 18.6% of total OIC international tourism receipts.



Source: UNWTO.

However, when the economic role of the international tourism sector in the economies of the OIC countries is examined in terms of its net contribution to the GDP of each country, the picture, as shown in Figure 7.8, reflects a widely different situation. The economic role of the international tourism sector in the economies of the OIC countries is neither a function of the size nor the level of affluence of the economy. With an average of 60.5% of GDP during 2008 through 2012,

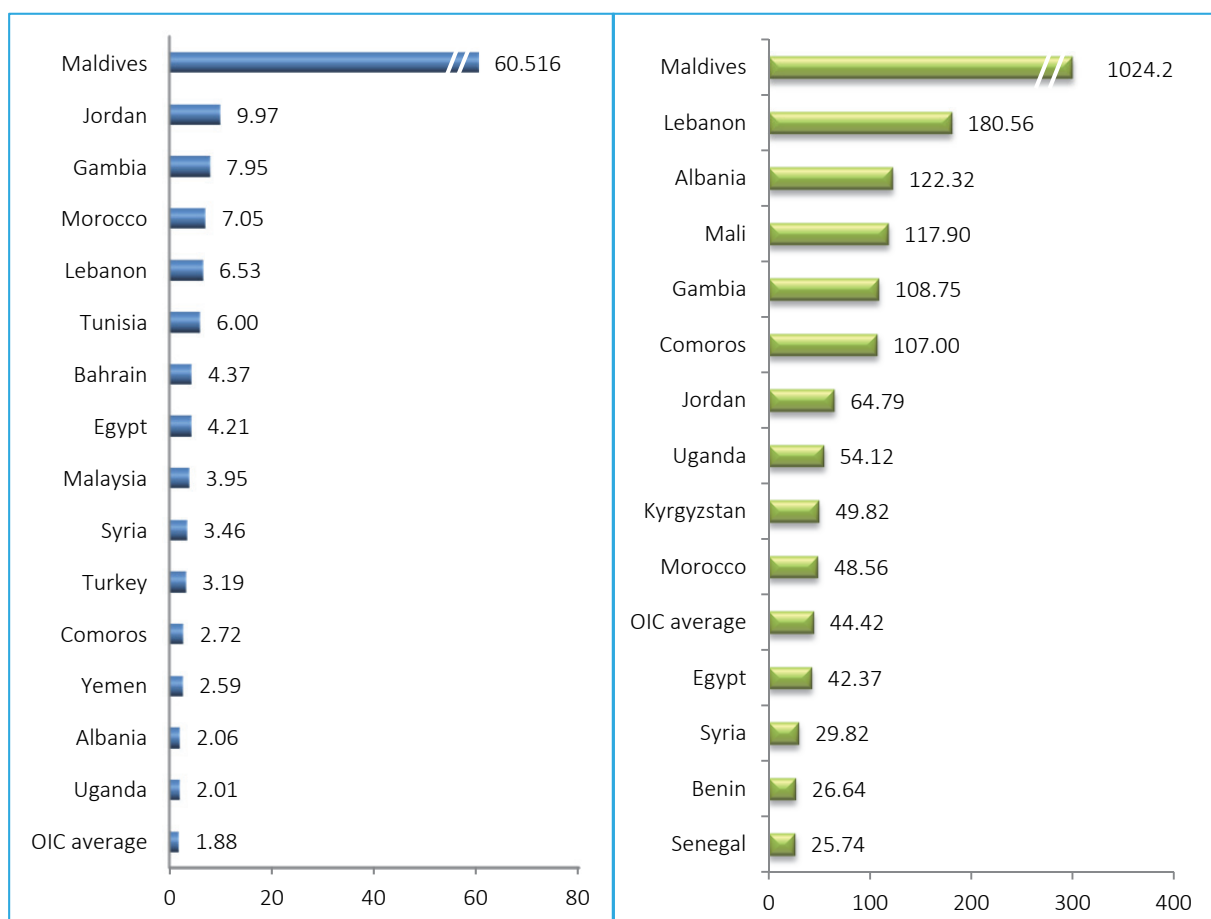
international tourism is the major economic activity in the Maldives. International tourism reached 10% of GDP in Jordan and 8% in Gambia. Figure 7.8 also shows that the international tourism activity plays a relatively important role compared to the size of the economy in countries for which the balance of international tourism accounts, on average, for 7 to 4% of their GDP. This group includes some of the OIC's main tourism destination and earner countries (e.g., Morocco, Lebanon, Tunisia, Bahrain, Egypt, and Malaysia). In contrast, international tourism activity is found to have a negligible or even negative role in the economies of many OIC countries for which the data are available, where 27 countries recorded, on average, a deficit in their balance of international tourism during 2008 through 2018. During the same period, the net contribution of international tourism activity accounted, on average, for 1.9% of the total GDP in the OIC countries.

However, when the international tourism sector is evaluated as a source of foreign exchange earnings by relating the international tourism receipts in each country, as a percentage, to its total merchandise exports, Figure 7.8 indicates that international tourism activity plays a more significant role in the economies of the OIC countries as a source of foreign exchange earnings.

**Figure 7.8**

Role of International Tourism in the Economy (Average 2008-2012)

(a) Balance of International Tourism as % of GDP (b) International Tourism Receipts as % of Exports

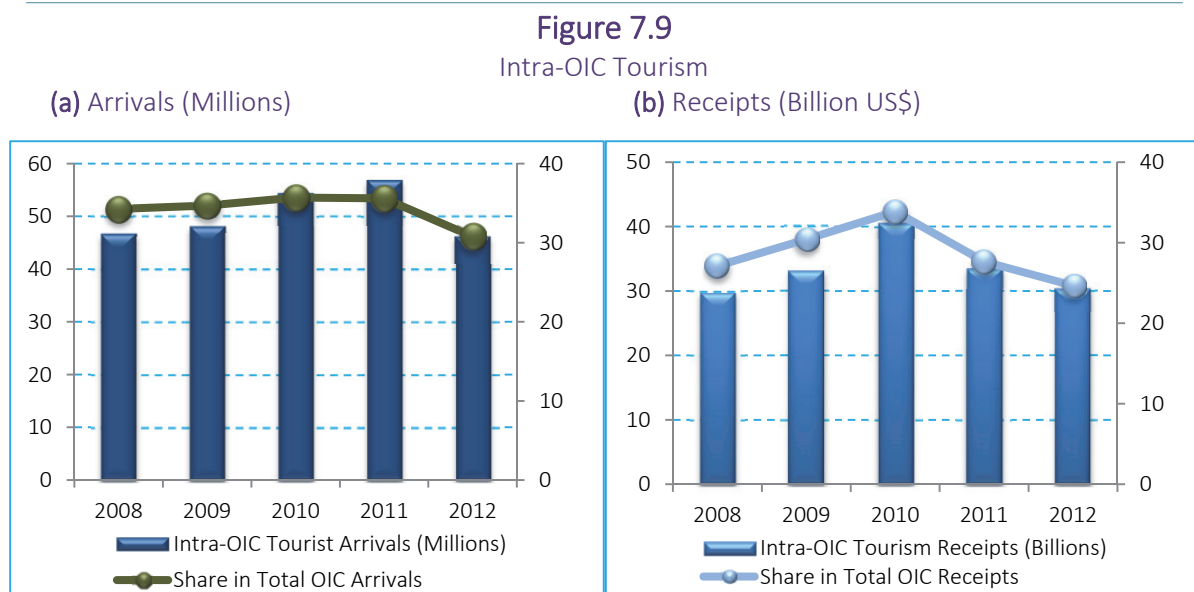


Source: UNWTO.

During the period 2008-2012, international tourism generated foreign exchange earnings almost 10 times, on average, more than those generated by exports in the Maldives. In the same period,

international tourism receipts accounted, on average, for 1.8 times the total exports in Lebanon, 1.2 times the total exports in Albania and Mali and 1.1 times the total exports in Gambia and Comoros. In the same period, international tourism receipts accounted for more than 50% of total exports in Jordan and Uganda. Moreover, international tourism receipts accounted for 30 to almost 50% of the value of the exports in Kyrgyzstan, Morocco, Egypt and Syria (Figure 7.8). On average, international tourism receipts accounted for 44.4% of total merchandise exports of all OIC countries.

As shown in Figure 7.9, in 2008, intra-OIC tourism, in terms of the number of tourist arrivals, reached almost 47 million arrivals, corresponding to 34.3% of the total international tourist arrivals in 27 OIC countries for which the relevant data are available. Intra-OIC tourist arrivals increased steadily during the period 2008-2011 and reached a peak of 57 million in 2011, corresponding to 35.6% of total OIC international tourist arrivals. In contrast, in 2012, intra-OIC tourist arrivals decreased by 18.7% over the year 2011, to reach 46.3 million, corresponding to a 30.8% share in total OIC international tourist arrivals. On the other hand, intra-OIC tourism receipts reached a peak of \$40.8 billion in 2010, corresponding to 33.9% of the total OIC tourism receipts, before declining in the following two-year period of 2011-2012.



Source: UNWTO.

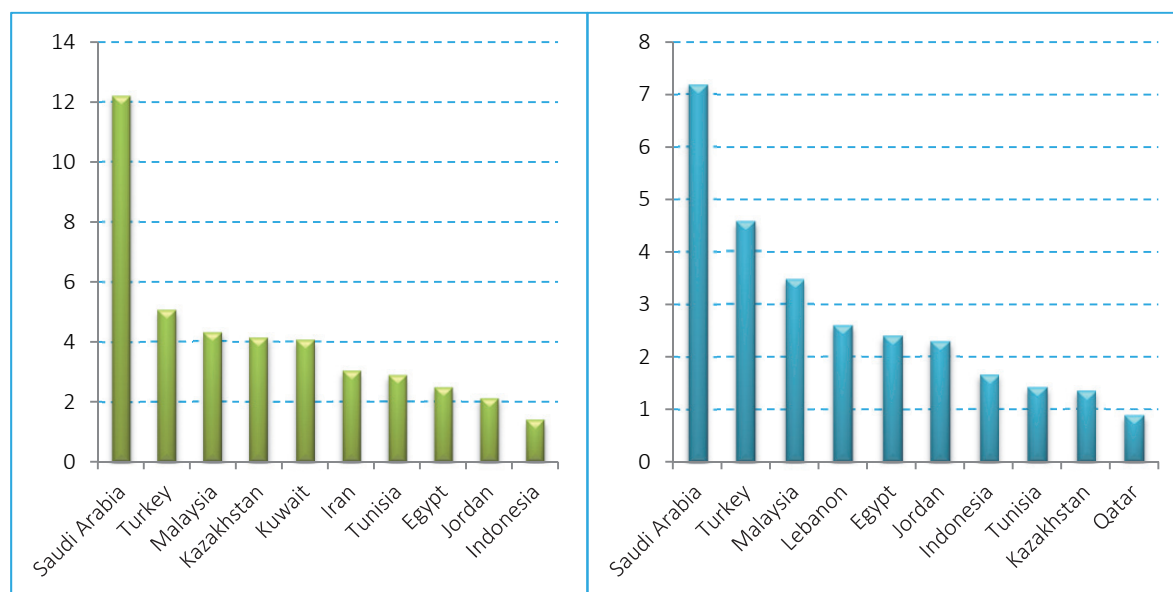
At the individual country level, it is observed that the intra-OIC tourist arrivals are also concentrated in a few countries. In descending order, Saudi Arabia, Turkey, Malaysia, Kazakhstan, Kuwait, Iran, Tunisia, Egypt, Jordan and Indonesia were the top 10 intra-OIC tourism destinations in 2012 (Figure 7.10). Together, they hosted 41.8 million tourists from the OIC member countries, corresponding to 90.3% of the total intra-OIC tourist arrivals in that year. Similarly, the top 10 intra-OIC tourism earners (Saudi Arabia, Turkey, Malaysia, Lebanon, Egypt, Jordan, Indonesia, Tunisia, Kazakhstan and Qatar) earned \$27.9 billion in 2012, corresponding to 91.5% of the total intra-OIC tourism receipts.

**Figure 7.10**

Top 10 Intra-OIC Tourist Destinations and Tourism Earners (2012)

(a) Arrivals (Millions)

(b) Receipts (Billion US\$)



Source: UNWTO.

### 7.3 The Role of PPP for Development of Tourism Sector

Over the past several decades, tourism industry has experienced continued expansion and diversification, becoming one of the largest and fastest-growing economic sectors in the world. An ever increasing number of tourism destinations worldwide have opened up to, and invested in tourism, turning tourism into a key driver of socio-economic progress through export revenues, the creation of jobs and enterprises, and infrastructure development. There is, however, still a long way to go, particularly in low-income countries, in terms of sectoral development. Despite very favourable initial conditions with regard to tourism attractions, many profitable projects that could contribute to the development of the sector as well as the country remain unrealized due to inadequate investment.

On the other hand, there is an increasing interest in cooperation between public and private sectors to promote development within a country. Public Private Partnership (PPP) involves collaboration between public and private sector to fulfil a long-term goal, usually for a social and economic infrastructure project that will lead to the development of an area or region. In practice, such partnership agreements are mainly used to finance the building and operation of hospitals, schools, roads, rail networks and airports. Since the development of the tourism sector commonly requires substantial amount of initial investments, PPP could be suggested as a viable model to finance tourism projects where tourism projects are financed and operated through a partnership of government units and private sector agents.

PPP's can be attractive to both the government and the private sector. For the government, private financing can support increased infrastructure investment without immediately adding to government borrowing and debt, and can be a source of government revenue. At the same time, better management in the private sector and its capacity to innovate can lead to increased efficiency and bring better quality and lower cost services. For the private sector, PPP's present

**Table 7.1**  
Functions and responsibilities of public-private partnerships

Public Sector	Private Sector
<ul style="list-style-type: none"> <li>• Having a vision for tourism</li> <li>• Provide a favourable environment for tourism, which allows sustainability and profits for the private sector, offering free capital flow and facilitating investments</li> <li>• Ensure proper infrastructures and their maintenance</li> <li>• Generate sufficient market conditions to stimulate the sustainable development of tourism</li> <li>• Provide support, favourable terms and services to the private sector, along with incentives</li> <li>• Ensure a flexible labour legislation</li> <li>• Ensure steady regularization and a fair tax policy</li> <li>• Provide a regulating model through consultation with all stakeholders, for the protection of natural, cultural and social environments</li> <li>• Ensure local communities' well-being, as well as the well-being of domestic and international visitors</li> <li>• Carry on research initiative, in cooperation with the private sector, for the supply of information about markets to the industry and the community of investors, to improve the perception and understanding of market changes</li> </ul>	<ul style="list-style-type: none"> <li>• Understand the environmental and social concerns of governments and local communities</li> <li>• Develop skills and competences, access to finance for development and operation of tourism services</li> <li>• Assume collective responsibility for spreading and practising industry standards, considering ethics, moral and justice</li> <li>• Contribute to preserving culture, traditions, and environment, leading the education and orientation of tourists, as a fundamental directive for the sustainable development of the sector</li> <li>• Involve local communities in tourism development and assure they are satisfied with the benefits directed to them</li> <li>• Develop measures for training professional labour skills, in order to achieve excellence in service quality</li> <li>• Cooperate with governments to ensure the safety and well-being of tourists</li> <li>• Contribute to the development of research and creation of statistical databases</li> <li>• Resort to technologies, in order to increase the effectiveness of operations, tourism marketing and service quality</li> </ul>

Source: UNWTO (2000).

business opportunities in areas from which it was in many cases previously excluded as well as expansion of products and services beyond their current capability (IMF, 2004). PPPs, therefore, enable the public sector to benefit from entrepreneurial dynamism, extended financing



opportunities in an environment of budgetary constraints, innovative and efficient management styles of the private sector who contributes their own capital, skills and experience.

In an agreement between public and private sectors in tourism, parties can assume different roles to contribute the development of the industry. UNWTO (2000) provides a list of the functions and responsibilities of the different bodies involved in public-private partnerships in tourism. As provided in Table 7.1, while public sector has overall vision on the development of the sector, private sector usually has better understanding of the environmental and social issues. While governments improve the framework conditions, private sector can increase the efficiency and productivity by investing on skills upgrading and capacity building. There are clearly a number of functions and responsibilities that can be undertaken by different partners to enhance the tourism sector development.

Governments traditionally play a key role in the development of tourism and in the promotion of their countries as tourism destinations, because it is governments themselves that identify tourism as a possible means to achieve economic development. There is always a need for public sector support for the development of the industry, particularly in developing a suitable physical, regulatory, fiscal and social framework as well as providing basic infrastructure including roads, airports and communications. However, governments around the world are increasingly transferring some of their traditional responsibilities and activities to local authorities and the private sector. Their role in the development of the industry is increasingly limited to certain critical activities at critical times. In certain times, the public sector might be required to facilitate investment—by assisting private entities to overcome initial barriers and providing much-needed financial solutions to initiate a major tourism project. In other times, an infusion of private capital and management can ease fiscal constraints on infrastructure investment and increase efficiency.

Identification of potential partnership areas is also a critical step in establishing PPPs. A study by UNWTO (2000) included a survey distributed to representatives of the public and private sectors. According to the respondents, the most critical areas for PPPs within the tourism industry are improving destination image and preserving cultural and heritage resources. Education and training, safety and security, and environmental protection were also among the highest priorities identified by the respondents. In general, a public-private partnership offers new possibilities for the development of tourism in different fields. UNWTO (2003) identifies some potential partnership areas in product development, marketing and sales, research and technology, infrastructure, human resources and financing, as provided in detail in Table 7.2.

The main area in which public-private partnership has traditionally developed is that of marketing and promotions, because private sector activities are considered to be more entrepreneurial and effective. In addition to this, infrastructure and product development, education and training, financing and investment are other areas where partnership can contribute to development of tourism sector as a competitive industry. It is observed that private sector is increasingly involving in operating key public utilities including airports and national heritage buildings. It is also important to enhance cooperation in addressing some key issues of concern, such as safety and security, health, environment, culture and heritage.

Table 7.2

Partnership Areas between Public and Private Sectors

Product development	<ul style="list-style-type: none"> <li>•Development and preservation of resources;</li> <li>•Establishment of quality standards;</li> <li>•Development of attractions, theme parks and accommodation;</li> <li>•Provision of technical support to programmes for the development of innovative products;</li> <li>•Contribution to the economic wealth of the community;</li> <li>•Realization of sustainable development in the tourism sector;</li> <li>•Overcoming trade and investments barriers;</li> <li>•Protection of consumers;</li> <li>•Dealing with competition.</li> </ul>
Marketing and sales	<ul style="list-style-type: none"> <li>•Improving the destination's image;</li> <li>•Improving marketing efficiency;</li> <li>•Improving market coverage and reach;</li> <li>•Supporting electronic marketing and distribution, including the internet;</li> <li>•Supporting participation in trade fair and events;</li> <li>•Strengthening joint marketing programmes;</li> <li>•Accessing new markets.</li> </ul>
Research and technology	<ul style="list-style-type: none"> <li>•Providing methodologies for research and measurement;</li> <li>•Implementing tourism satellite accounts;</li> <li>•Stimulating technological innovations and their application.</li> </ul>
Infrastructure	<ul style="list-style-type: none"> <li>•Improving roads, transport infrastructure and basic services;</li> <li>•Promoting intermodal transport;</li> <li>•Improving public health and sanitation;</li> <li>•Improving safety and security;</li> <li>•Strengthening the telecommunications system.</li> </ul>
Human resources	<ul style="list-style-type: none"> <li>•Establishing standards for services and quality;</li> <li>•Providing educational programmes and trainings;</li> <li>•Improving productivity and innovations.</li> </ul>
Financing	<ul style="list-style-type: none"> <li>•Securing investments and financial assets;</li> <li>•Securing the means to complement public investments;</li> <li>•Obtaining start-up financing,</li> <li>•Improving results</li> </ul>

Source: UNWTO (2003).

Many tourism products are based on public assets such as the natural and cultural environments. A key role of the public sector is to provide basic infrastructure, essential services, destination management and marketing, innovation, training and education. Private enterprises provide the basic tourism products, facilities and essential services, such as accommodation, transport and restaurants. This sector ranges from large global corporations, such as tour companies, airlines and hotel chains, to tiny, remote local family businesses, such as craft shops and lodges. The fragmented nature of tourism supply at destinations is another important reason for intensification of cooperation among the stakeholders, since it is critical to satisfy the needs of the visitors at every stage of their visit.

Increasing the number of PPPs does not necessarily mean that they will produce successful outcomes. A clear coordination mechanism with well-defined goals and targets should be in place. More generally, UNWTO (2000) provides some success factors in managing PPPs in the tourism sector as listed below, which are also summarized in Figure 7.11.

- A balanced structure, with clear role assignment and responsibility for all members;
- A flexible approach by partners, along with the will to understand each partner's needs, contributing with the share of resources;
- Leadership sharing between both sectors, with shared and well-defined goals, realistic expectations and identification of the benefits on both sides;
- Awareness by all partners that the development of tourism must be sustainable, from an economic, but also social and environmental point of view;
- A long-term commitment that combines strategic vision and planning with specific short-term goals able to be measured;
- Periodic evaluation of the effectiveness of the role performed by each partner;
- Accurate and effective communication between partners and from partners towards all stakeholders.

When successfully implemented, PPPs play an important role in improving attractiveness of a destination, marketing efficiency, productivity as well as overall management of the tourism industry.

Moreover, tourism plays an important role in sustainable development and the integration of rural areas into the national and international economy. Overall, rural tourism is operated by households and mid-sized companies. These providers of tourism products and services do not have sufficient financial and human resources to succeed on their own, maintain market

positions or secure an integrated quality management, as reported in UNDP (2011). The same report highlights some important areas where efforts are made in establishing PPPs for the development of rural tourism. These include:

- Strategic planning and territorial planning;
- Infrastructure investments and infrastructure projects;
- Creation of a competitive business environment to stimulate investments;
- Conservation and management of the cultural heritage of the area in question;
- Development of human capital through education and professional further education,

**Figure 7.11**  
Success factors in managing PPPs



- Attracting new assets for investments, promotion and marketing;
- Promotion of sustainable tourism products and markets;
- Promotion of international good practice examples;
- Support to the process of information exchange/communication between destinations at the international level;
- Stimulating the technological development and introduction of new technologies in the production, promotion and commercialization of tourism products;
- Promotion and commercialization of tourism destinations;
- Securing a system and methodology for the collection and processing of statistical data necessary for market analyses and studies.

Another important dimension in enhancing cooperation among the stakeholders is partnership for pro-poor tourism. Pro-poor tourism is an approach to tourism development that ensures allocation of the economic benefits from tourism to local communities. A key aspect to this approach is the linkages between the private sector and local communities (WEF, 2009).

#### 7.4 Policy Issues for Tourism Development in OIC Member Countries

In fact, as a group, the OIC countries have a high potential for the development of a sustainable international tourism sector. This is particularly true considering their rich and diverse natural, geographic, historical and cultural heritage assets. However, given the modest share of the OIC region in the world tourism market and the concentration of the international tourism activity in only a few OIC countries, it seems that a large part of the tourism potential of the OIC region remains unutilised. The problems facing tourism and the development of a sustainable international tourism sector in the OIC countries are diverse as each country has its own tourism features, level of development and national development priorities and policies. In fact, if properly planned and managed, tourism sector could play a significant role in the socio-economic development of the OIC countries. It is for this reason that tourism has recently assumed greater importance on the agenda of the OIC, where eight Islamic conferences of tourism ministers and a number of expert group meetings and seminars on tourism development were held during the period that elapsed since the 1<sup>st</sup> Islamic Conference of Tourism Ministers (ICTM), which was held in Isfahan, Islamic Republic of Iran, in October 2000.

In today's world, role of public sector is changing substantially. Governments withdraw from the production of goods and the provision of services and adopt a more strategic approach in its role in society. They are now increasingly focusing on fostering the trust that creates social capital and mobilizes forces and energy from all its stakeholders in society. In this fashion, PPPs in tourism industry can be formed to create new products or services, to achieve higher levels of efficiency, to open markets that were previously inaccessible, or to simply pool resources. The key factor leading to PPPs relies on the fact that all partners from the public and private sector wish to benefit from sharing resources and objectives.

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