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Internationalization of Tertiary Education in the Middle East and North Africa



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INTERNATIONALIZATION OF TERTIARY EDUCATION IN THE MIDDLE EAST AND NORTH AFRICA

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Cover design: www.wizlemonstudio.co.uk

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ACKNOWLEDGEMENTS

This report was authored by Giulia Marchesini, Senior Partnerships Officer, World Bank, CMI, with contributions from Consultants Lise Barbotte, Paul Cahu, Aurelia Hoffmann, Holly Johnstone, Mirna Mehrez and Marco Pasqualini. Various drafts of the report greatly benefited from the excellent comments and substantial inputs from Francisco Marmolejo, Education Advisor, Qatar Foundation, and former Lead Tertiary Education Specialist, Education Global Practice, World Bank.

The work was conducted under the overall guidance of CMI Manager, Blanca Moreno-Dodson.

The team would also like to thank Mourad Ezzine, former CMI Manager and former Education Sector Manager, Middle East and North Africa, World Bank, for the essential role he played driving the work forward in the conception stages of the report.

The report underwent a peer review process with both internal (World Bank) and external reviewers. The Review Meeting was chaired by Rabah Arezki, Chief Economist, Middle East and North Africa, World Bank, whom the team would like to thank enormously for his insightful comments and overall guidance in this role. The constructive Review Meeting greatly helped guide the final editing of the work. The team is also extremely grateful for the peer reviewers' detailed and helpful comments. The internal World Bank reviewers were Javier Botero Alvarez, Lead Education Specialist, Education Global Practice, Roberta Malee Bassett, Global Lead for Tertiary Education, Senior Education Specialist, Education Global Practice, and Mourad Ezzine, former CMI Manager and former Education Sector Manager, Middle East and North Africa. The external reviewer was Hans de Wit, Professor and Director, Center for International Higher Education, Boston College.

EXECUTIVE SUMMARY

The Middle East and North Africa (MENA) region is one which today faces several social, political and economic challenges, including political instability, and high levels of unemployment and youth exclusion. Young people, often leaving education without the right mix of knowledge and skills needed for today's rapidly changing labor markets, can face stark choices. Many will find themselves pressed between unemployment, underemployment, informal and precarious work, at best, with pressures to emigrate and the risks of irregular migration channels, at worst.

In parallel, global trends are veering towards increased nationalism and identity politics, with the hardening of borders and increasing anti-immigration sentiment around the world. However, as the recent global crisis of the new coronavirus (COVID-19) has shown us, with the virus sweeping across the globe regardless, **national borders are not concrete and unpassable, but purely a human construction.** Moreover, the measures put in place as part of governments' attempts to contain the virus, such as travel bans and closing of borders, have demonstrated how critical a role mobility plays in today's globalized world.

Set against these regional and global contexts, a shift away from the national, an "opening up" towards the regional – or international – appears imperative. At the same time, in order to combat some of the interconnected challenges faced by MENA and beyond, reforms must be put in place to ensure that the youth are adequately equipped and skilled for entry into regional labor markets, ready to take on active roles in transforming their region, to foster peace, stability, and inclusion. **This, in turn, requires serious investments in human capital, including a rethinking of education to include increased, smarter mobility, not only of people, but also of knowledge and skills.**

This report attempts to demonstrate that, as an important part of the reforms needed in education and training, the internationalization of tertiary education has a role to play. The internationalization of tertiary education represents an outward looking element in which tertiary education institutions “internationalize” their curricula, establish partnerships, collaboration, and joint programs with other institutions across borders, and where student and staff mobility are key elements, although many activities can also be developed at the home institutions.

The COVID-19 global pandemic will have lasting effects on tertiary education and on its internationalization. In its immediate impact, thousands of universities have been forced to close, with courses cancelled, and international students stranded in both home and host countries. In the future, due to the predicted negative economic impact and likely restrictions in international travel in a post-COVID-19 world, student and staff mobility may well decrease. **However, the crisis may also highlight certain opportunities that institutions in the MENA region could take advantage of.** It will necessitate radical changes in the world of education, some of which are already being implemented, such as moving to online learning models. **And if MENA institutions are able to adapt quickly to the “new normal”, adopting new and innovative models and pushing for increased internationalization activities at institutions domestically, including virtual mobility, and so on, they may be able to find a silver lining to the crisis.**

The report, then, analyzes the internationalization of tertiary education in

the MENA region, aiming to provide some recommendations for prioritizing and mainstreaming it into the core activities of universities. But more broadly, recognizing the potential of the MENA region, as well as its interconnectedness with the other shores of the Mediterranean, it also aims to set the scene for the promotion of a Mediterranean space for mobility: mobility of people, ideas, knowledge and skills, for development and shared prosperity.

1. RATIONALE

The rationale for this report draws on three key motivations: the existing lack of data and analysis on much of the internationalization of tertiary education in the region; a direct demand, from tertiary education institutions in the region, for research on the topic; and a belief that while internationalization could be advantageous for the region, it has not, as yet, been fully exploited.

First, there is a real lack of data, research and analysis on the internationalization of tertiary education, in particular in the region, but also worldwide for certain elements. At the time of writing, to our knowledge there is no comprehensive report on the internationalization of tertiary education in the MENA region as a whole.¹ Moreover, for many elements of internationalization, it is widely acknowledged that comprehensive data is simply not available; not all elements are widely reported, or data is incomplete. This report will not be able to fill all the existing gaps, but nonetheless attempts to go some way towards fulfilling this objective.

1. Nevertheless, there is some existing analysis, although it is often restricted to one country or one area. See, for example: Badry, Fatima (2019) Internationalization of Higher Education in the Countries of The Gulf Cooperation Council: Impact on The National Language. Background paper for UNESCO’s 2019 Arab States Global Education Monitoring Report; or Vardhan, Julie (2015) Internationalization and the Changing Paradigm of Tertiary Education in the GCC Countries. SAGE Open 5(2): 1-10. This report aims to build on such existing research.

Second, the report was conceived partially in response to a demand from institutions in the region. In the framework of the CMI/World Bank-led University Governance Screening Card² and series of regional conferences on tertiary education, MENA tertiary education institutions expressed a desire and need for further information and analysis on forms of internationalization as well as its benefits, and guidance on how to most effectively promote and boost internationalization of tertiary education in the region.³ One of the aims of the report is therefore to provide institutions concerned a starting point with regard to those demands.

Third, the report shows that despite some countries in the region steaming ahead with their internationalization strategies, the region – taken as a whole – is not the most advanced in these terms. The report also shows that there are many and varied benefits to be had from internationalizing tertiary education, for students and institutions, as well as at the country level. This disconnect and the fact that MENA is not yet taking full advantage of what may be highly beneficial, then, constitutes another motivation behind the report.

2. AIMS AND TARGET AUDIENCE

Building on the above rationale, the primary aim of this report is to stimulate policy dialogue around the internationalization of tertiary education in the region, raising awareness about internationalization and its benefits. In this way, it aims to encourage both tertiary

education institutions and governments to push internationalization higher up in their priorities and to place increased importance on the conception and implementation of internationalization strategies. As the first report of its kind on internationalization in the region, it also hopes to stimulate further, much needed research into the topic.

Given this positioning in terms of aims, the target audience for the report is primarily tertiary education institutions and governments in the MENA region. It is also aimed at any and all other relevant stakeholders, both in the region and, given the intrinsically international nature of internationalization, the potential regional spillovers, etc., beyond.

3. OUTLINE OF THE REPORT

This report has five main parts. Part 1 gives an introduction and some context to the topic; it outlines rationales for internationalization and details some global trends in the internationalization of tertiary education. Part 2 outlines what the internationalization of tertiary education can comprise, introducing the many and varied types, dimensions, and elements of internationalization. Part 3 details some of the benefits that the internationalization of tertiary education can hold for students, tertiary education institutions, and countries, ranging from the economic to the socio-political. Part 4 looks at the state of internationalization in the MENA region. It first gives context regarding tertiary education systems in the region – as well

2. The UGSC is a benchmarking tool, developed by the World Bank and CMI to assess the extent to which tertiary education institutions are following governance practices aligned with their institutional goals and international trends. For more information, see http://www.cmimarseille.org/highereducations/docs/Benchmarking_Governance_100_Universities_Book.pdf

3. These demands were expressed and discussed at two of the regional conferences in particular: “Paradigm Shifts in Tertiary Education: Improved Governance and Quality for Competitiveness and Employability”, held in Algiers in May 2016, and “Towards Competitiveness and Equity in Tertiary Education in the MENA Region: Collaboration for Good Governance, Sustainable Financing and Internationalization”, held in Marseille in June 2017.

as some of the wider socio-economic issues - before detailing a number of key examples of internationalization in the region. The bulk of this part focuses on student mobility in MENA; it gives analysis in terms of the size and direction of student flows to, from, and within MENA, as well as the key determinants and characteristics of those student flows. Part 5 details several recommendations for the way forward, looking at some key ways in which MENA countries may start to prioritize internationalization, design and implement their own strategies and take advantage of the many potential benefits it holds.

4. SUMMARY OF THE REPORT

PART 1. INTRODUCTION

The landscape of tertiary education globally has changed significantly over the years and continues to change. Enrolment has been increasing on an unprecedented scale, in parallel to the effects of urbanization, demographic shifts, and technological advances. Access to tertiary education has been widened enormously, partly enabled by the technological revolution, with tertiary education becoming more sophisticated and global.

In this framework, one of the significant recent developments has been the growth of the internationalization of tertiary education, which can be defined as “the intentional process of integrating an international, intercultural or global dimension into the purpose, functions and delivery of post-secondary education, in order to enhance the quality of education and research for all students and staff, and to make a meaningful contribution to society”.⁴

The internationalization of tertiary education can take several forms, including student and staff mobility, academic joint ventures such as joint degrees, partnerships, collaboration and exchange, the establishment of branch campuses, and internationalization “at home” activities including the internationalization of the curriculum; online, virtual and distance learning; and intercultural activities.

Internationalization has been shown to have a variety of advantages, ranging from economic benefits to socio-political ones, for students themselves as well as for tertiary education institutions and countries. Internationalization is indeed becoming a key feature of tertiary education around the world, albeit to different extents from region to region.

Governments and tertiary education institutions may have diverse rationale for internationalizing tertiary education. They may do so in order to take advantage of internationalization’s capacity to generate revenue, boost countries’ influence, increase the employability of their graduates, raise the level of human capital, and improve the quality of their tertiary education, for example. For certain regions, demographics may play a key role: despite tertiary enrolment being on the rise worldwide, in regions such as North America and Europe, where the 18-25 years age group is in decline, student populations peaked around 2010.⁵ In such cases, attracting foreign students to make up for this demographic decline could be a clear rationale.

When it comes to student mobility, students may also be motivated to study in a foreign country for various reasons.

⁴. De Wit, Hans, et al (2015) *Internationalisation of Higher Education*. European Parliament Directorate-General for Internal Policies Policy Dept B: Structural and Cohesion Policies, Culture and Education, p. 29. Definition based on Knight, Jane (2003).

⁵. UNESCO data.

Some of the key “push” and “pull” factors in these decisions are the following: the language of teaching at the host institution, tuition fee amounts set by host institutions, the programs’ quality or reputation, the standard testing requirements, the immigration policies and relative ease of student visa obtention in the destination country, and even the socio-economic environment of the country in question.

Several global trends in internationalization of tertiary education are discernible. For example, regarding student mobility, while some regions and countries have become major destinations for foreign students, other regions and countries have become suppliers of those students. With regard to host or receiving countries, mobility towards OECD countries has dramatically increased over the last decade, with 77 percent of mobile students studying in OECD countries in 2016.⁶ Nonetheless, new players are on the rise in terms of attracting international students, including China, Malaysia, Qatar, Russia, New Zealand, and India. In terms of supplier or origin countries, Asia is key, as the region of origin for more than half of all mobile students worldwide. Western Europe and North America have been declining in terms of number of students they send abroad, while the number of mobile students originating from Arab states has more than doubled since 1999.⁷ In terms of branch campuses, of which the number is growing dramatically, in 2017, the top sending or home countries were the United States, United Kingdom, France, Russia, and Australia, while the top host or receiving countries were China, UAE, Malaysia, Qatar, and Singapore.⁸

PART 2. INTERNATIONALIZATION OF TERTIARY EDUCATION: MODELS AND DIMENSIONS

The internationalization of tertiary education is a complex endeavor that covers many different elements and can be implemented in numerous ways. There are also many and varied definitions and terminologies around internationalization, as well as different understandings and conceptions, a reality which complicates things further. One way of conceptualizing internationalization of tertiary education and its many dimensions is in terms of models. On this well-known understanding, tertiary education institutions internationalize on the basis of models such as the import or export model (receiving and sending mobile students), joint-venture, partnership, or foreign campus model.⁹ Other ways include looking at internationalization strategies rather in terms of outcomes than in terms of processes. Yet others make a main distinction between internationalization “abroad” and “at home”. Despite this variety of typologies, what is clear is that internationalization covers an extremely wide range of elements and activities.

Mobility, of students and/or of staff, appears critical to many of these models; indeed, mobility is an important part of the internationalization of tertiary education. However, this too is a complex phenomenon, since mobility can include not only the mobility of people, but also of programs and of education providers. Adopting the terms of some scholars of internationalization,¹⁰ the “1st generation” of “cross-border education” comprises

6. Ibid.

7. Ibid.

8. C-Bert Listing, 2017.

9. See Hawawini, Gabriel (2011) *The Internationalization of Higher Education Institutions: A Critical Review and a Radical Proposal*. INSEAD Working Paper 2011/2012/FIN.

10. See, for example, Knight, Jane (2018) “International Education Hubs”, Chapter 12 in Meusburger, P. et al. (eds). *Geographies of Universities, Knowledge and Space*.

the physical mobility of students and of staff; the “2nd generation” covers the mobility of programs and of providers (such as franchising, twinning, mergers and acquisitions, joint and double degrees, branch campuses...); and the “3rd generation” refers to education hubs, a more recent development, referring to countries, cities or special zones aiming to attract researchers, providers, programs, etc. to become centers for education and training, research and innovation, and so on.

However, there are other important elements of internationalization, forming what has been coined as internationalization “at home”, which doesn’t rely on the mobility of students and staff. There has been a heavy focus on mobility, with internationalization sometimes even being simply equated with student mobility, but internationalization “at home” is a key dimension, especially since most students will not have the opportunity to travel abroad for their studies. Internationalization “at home” can include: an emphasis on foreign language development, especially as a teaching language; the internationalization of the curriculum, such as the inclusion of and focus on “international” subjects; the promotion of intercultural activities, both on and off campus; the development of jointly conceived curriculum, in partnership with foreign institutions; and the use of virtual mobility, including collaborative networked modules, amongst other activities.

In this report, we understand the internationalization of tertiary education to cover all of these elements, abroad and at home. Nonetheless, due to the lack of comprehensive data on many elements and, conversely, the relative abundance of

data on and visibility of student mobility, the report has a natural focus on mobility.

PART 3. BENEFITS OF INTERNATIONALIZATION OF TERTIARY EDUCATION

The internationalization of tertiary education can have many advantages for students, for tertiary education institutions, and for countries. At least four of internationalization’s key benefits can be detailed: on the economy, on the quality of tertiary education, on countries’ influence, and on students’ skills and employability.

- **ECONOMY:** internationalization, insofar as it concerns student mobility, can be beneficial for the economies of host countries to such an extent that it is increasingly being officially labelled as an “exporting” industry, even becoming a central component of foreign trade policies in several countries. Foreign students generate revenue through the (usually higher) tuition fees that they pay, as well as through the contributions to the economy that their expenses in their daily life whilst in the host country represent. In addition, student mobility is linked with competitiveness: a positive correlation can be found between the share of foreign students and the Global Competitiveness Index.
- **EDUCATION QUALITY:** enhancing the international dimension of teaching, research and service brings value added to the quality of tertiary education systems. Exchanges with peers, adapted methods of teaching, innovative solutions, introduction of common standards and development of communities of practice, mutual learning, cross-cultural understanding, and foreign language acquisition are all likely to increase the quality of tertiary education. Although difficult to quantify, when education quality is measured through proxies

such as university rankings, increases in internationalization are positively correlated with increases in education quality.

- **INFLUENCE:** internationalization can contribute to building the country's influence and reputation on the global and regional scenes. Student mobility and wider types of collaboration and exchange can forge stronger links between the countries, international students and staff concerned, and so on. Indeed, several countries have included tertiary education international outreach as a key component of their diplomacy policy and operations; the establishment of international cultural and academic centers is testament to this, as is the presence of mobile students in countries with particular economic and political ties to those countries.
- **EMPLOYABILITY THROUGH SKILLS ENHANCEMENT:** internationalization can help boost students' skills and employability. Globalization, digitalization and rapidly-changing labor markets are changing the nature of work and the skills required for work, with increased emphasis placed on "soft", "21st century" skills. Both studying abroad and taking part in internationalization "at home" activities have been shown to boost such skills, raising students' employability and contributing to increased human capital stocks.¹¹ Moreover, as a concrete example of the impact of these skill gains, the evaluation of one study abroad program (Erasmus) has shown its students to have better employment prospects and lower unemployment levels upon graduation.¹²

PART 4. TERTIARY EDUCATION AND ITS INTERNATIONALIZATION IN THE MENA REGION

A. CONTEXT

The MENA region has been referred to as the "cradle of higher education": indeed, some of the world's first universities were established in MENA. And over the last decade, there has been a remarkable quantitative expansion of tertiary education in the region: numbers of institutions have been exploding, with the total for the region doubling; and enrolment increasing massively across the region.¹³

Governments in the region have been investing significant shares of their fiscal resources in tertiary education; for decades, MENA countries were investing much more of their budget on education than the global average, and many continue to do so. Moreover, with regards to tertiary education, several MENA countries today spend more per student than the OECD countries' average.¹⁴

However, despite the rising demand for tertiary education and the resources invested, the quality of tertiary education varies widely across the region, being considered as low in many countries. Although no one single indicator for education quality exists, several indicators that can be used as proxies for quality, such as university rankings, certain indicators in the Global Competitiveness Index, the PISA and TIMSS data on student performance, show limitations in much of the MENA region's tertiary education.

11. See, for example, Parsons, 2009, Sample, 2013, Soria & Troisi, 2014, Rubin, 2019, or Jones, 2019.

12. European Commission (2016) The Erasmus Impact Study Regional Analysis: A Comparative Analysis of the Effects of Erasmus on the Personality, Skills and Careers of Students of European Regions and Selected Countries. European Union: Luxembourg.

13. UNESCO data.

14. UNESCO and World Bank data.

In addition, unemployment, in particular of young people, is extremely high in the MENA region; at around 26 percent, MENA has the highest youth unemployment rate of all the regions worldwide. Many young people are graduating without the right mix of knowledge and skills for today's labor markets, and in parallel, across much of the region, public sector employment – once absorbing the vast majority of the tertiary level educated young people – is declining and private sectors are unable to absorb the increasing number of educated young adults.

B. CURRENT STATUS OF INTERNATIONALIZATION

The internationalization of tertiary education is not new to the MENA region – in terms of mobility, for example, many of its institutes have been sending and receiving students and scholars for centuries.

Today, however, the MENA region is not the world's most advanced in terms of internationalization. While both inbound and outbound student mobility rates to and from the region are relatively high (see below), they are so due to just a handful of countries. Furthermore, MENA tertiary education institutions are rarely those targeted by institutions in other regions for their internationalization partnerships; even those institutions in the MENA region itself prefer to prioritize institutions in other regions.¹⁵

Nevertheless, there are plenty of examples of internationalization in the MENA region, from the implementation of internationalization “at home” activities to the educational hubs developing in some Gulf countries. There are also examples of cross-Mediterranean partnerships such as the collaborative Franco-Tunisian University

for the Mediterranean and Africa (Tunisia), and the Euro-Mediterranean University of Fes (Morocco). MENA is also developing its online learning practice, including setting up collaborative online international learning (COIL) modules with institutions in other regions around the world.

This report does not aim to document all cases of internationalization in the region, nor can it give a full analysis of the region's progress regarding each element of internationalization; the lack of data prevents such an exercise. Regarding student mobility, however, the existence of much more abundant data allows for a more comprehensive overview.

C. STUDENT MOBILITY

Inbound student mobility to the MENA region has been growing steadily in the past decade. Indeed, the inbound rate for MENA is slightly high, at 3.1 percent, compared to the world average of 2.4 percent.¹⁶ However, this is mostly due to a very few countries (notably the UAE and Qatar) attracting huge numbers of foreign students – who make up between a third and half of their total student population – as well as Jordan, Bahrain and Lebanon being well above average. Most of the other MENA countries lag behind in terms of their inbound rate, with north African countries attracting fewer inbound students than the world average. Nevertheless, inbound mobility is on the rise and, with the exception of Algeria and Saudi Arabia, foreign enrolment grew faster than domestic enrolment over the last decade.

As destination countries for inbound students, MENA countries can be categorized into different groups: “emerging destinations”, such as Iran,

¹⁵. International Association of Universities, 2019. See Marinoni, Giorgio (2019) Internationalization of Higher Education: An Evolving Landscape, Locally and Globally. International Association of Universities 5th Global Survey.

¹⁶. UNESCO data.

the Gulf countries and Morocco; the more established “mature destinations”, comprising Egypt, Jordan, and Lebanon; and two outliers, where Tunisia can be characterized as a “transition destination” and Algeria as a “closed destination”.

In terms of the origins of foreign students, more than half of international students in MENA countries come from within the region itself, with 45 percent from the Middle East and another 10 percent from North Africa. Students from South and South-East Asia make up 21 percent and Sub-Saharan African students account for 16 percent, while Europeans make up only 3 percent.¹⁷ In some cases, diplomatic and cultural ties between countries are reflected in MENA’s inbound students’ origins; certain countries deliberately target specific populations based on such ties, and countries’ levels of influence can be somewhat inferred by which students they attract.

Outbound student mobility from the MENA region is not far from double the world average, at 4.5 percent compared to the average of 2.4 percent. In North Africa, however, the figures fall closer in line with the global average.¹⁸

In some countries, governments see the strong potential that their outbound students can have in raising the domestic level of human capital upon their return, as they bring back new skills, knowledge, and languages, and have accordingly put in place national scholarship schemes, encouraging students to enroll on programs abroad. In the MENA region, Saudi Arabia stands out as a leader in this area, with the King Abdullah Scholarship Program sending tens of thousands of Saudi students to study abroad.

However, high outbound mobility rates can also signal some shortcomings in the education on offer in the home country or in the region. In the MENA region, one indicator that demonstrates this is the comparison between inter-regional and intra-regional outbound mobility from MENA. In 2016, more than two thirds of mobile MENA students chose to leave the whole region, rather than enroll at a university in another MENA country. Moreover, the attractiveness of the region has declined, as in 1999, only 59 percent of mobile students chose to study outside the region.¹⁹

Language plays an important role in the choice of destination for MENA’s outbound students. Maghreb students tend to mostly choose France, whereas students from Gulf countries tend towards the United States, but also the UK, Malaysia and other Gulf countries; students from the Mashreq tend to prefer Arabic-speaking and English-speaking countries.

Geographical proximity and political ties between countries may also have an effect: for example, most mobile students from Syria study in Jordan, the UAE and Saudi Arabia; around half of mobile Palestinian students go to Jordan; and around two thirds of mobile Saudi students go to study in the USA.²⁰

D. BRANCH CAMPUSES AND EDUCATIONAL HUBS

An emergent phenomenon in the internationalization of tertiary education in the MENA region is the opening of international branch campuses, where tertiary education institutions establish satellite branches abroad. Most branch campuses in the MENA region were set up in the 2000s, with a rapid expansion from

17. Ibid.

18. Ibid.

19. UNESCO data.

20. Ibid.

2005 onwards. However, the distribution of branch campuses across the MENA region is very uneven, with the vast majority of them located in the Gulf countries, namely in the UAE and Qatar.

One of the latest phenomena in internationalization, educational hubs, concerns the MENA region in particular, since two of the six countries worldwide currently considered hubs are in MENA: the UAE and Qatar. Two countries which host very large numbers of branch campuses – grouped together in zones such as Education City in Qatar, Knowledge Village in Dubai and Masdar City in Abu Dhabi – they aim to position themselves as centers for education, training, research and innovation.

E. REFUGEES

One of the characteristics of the MENA region today is the extremely high number of refugees and asylum seekers who are hosted there, mostly those fleeing the war in Syria. Such unprecedented influxes of people have impacts on the education systems of the host countries and on the education paths of refugees themselves. Refugees' access to tertiary education is a key issue in several MENA countries, due to discriminatory practices, labor market policies, and the lack of recognition of qualifications across borders, amongst other factors. In this context, several examples can be highlighted in which internationalization efforts contribute to improving the educational situation for refugees.

As the first recipient of Syrian refugees worldwide, Turkey has taken several steps in internationalizing its tertiary education to accommodate Syrian students and

academics. These efforts (including reforms on academic and financial admissions policies, and the creation of online platforms aiming specifically to increase the recruitment of Syrian academics) have led to a huge rise in enrolment of Syrians at Turkish universities in recent years, and can be characterized as positive examples of “forced internationalization” where the rationale has been enlarged to include a “humanitarian rationale”.²¹ In the European context, one university in Italy has developed an Internet-based portal as a “University for Refugees” to widen access to include refugees.²² In terms of legal frameworks, the recently adopted UNESCO Global Convention on the Recognition of Qualifications concerning Higher Education provides a framework which, together with the “Qualifications Passport” being piloted, aims to facilitate refugees’ and vulnerable migrants’ access to tertiary education.

PART 5: THE WAY FORWARD

The internationalization of tertiary has been shown to hold several advantages, yet in the MENA region, the analysis shows that it remains limited in scope. This section gives some starting points to help MENA to better exploit the potential of internationalization.

First, internationalization does not have significant meaning or impact if it is not situated in the context of broader reforms of tertiary education. A key issue is that of the governance of tertiary education institutions, including issues around financial and academic autonomy, which, if not addressed, is likely to prevent internationalization strategies from being prioritized or effectively implemented. MENA governments and institutions ought then to make sure that these kinds of issues are

21. Ergin, Hakan, et al. (2019) Forced Internationalization of Higher Education: An Emerging Phenomenon. International Higher Education, N°97: Spring 2019, pp.9-10.

22. See <https://www.uninettunouniversity.net> for further information.

given sufficient attention and develop their internationalization strategies in this context.

A. DIFFERING STRATEGIES FOR DIFFERING CONTEXTS

Although some MENA countries do manage to attract huge numbers of foreign students, and succeed in sending many students to study abroad, this is essentially limited to those few Gulf countries. Several factors may explain this, including the comparatively high employment prospects and perceived education quality there, which may attract foreign students, as well as the higher average incomes which allow more students to study abroad. It is also in these countries that the majority of branch campuses have been set up.

Across the region, however, social, political and economic contexts vary enormously. These differing contexts mean that there is no “one size fits all” internationalization strategy that may be applied across the region; indeed, each MENA country, and each tertiary education institution itself, ought then to develop its own unique internationalization strategy based on its specific context and the wide range of variables present.

This contextualizing ought also to include the extent to which different MENA countries are vulnerable to fragility or the numbers of refugees they host. In countries hosting high numbers of refugees, institutions may decide to provide scholarships for refugees, or offer preparatory programs at universities to improve access to tertiary education for refugees, for example; governments would do well to ensure that refugees are systematically included in tertiary education plans and programs, and provide a legal framework in which refugees are enabled to have their competences recognized, and so on.

B. INCREASING INTERNATIONALIZATION ACROSS MENA

While accounting for their own specificities, MENA tertiary education institutions and governments may adopt various strategies that aim to boost student mobility, establish wider collaboration, partnership and exchange with institutions within the region and further afield; they may look into establishing further research partnerships, sending more staff abroad and attracting more foreign staff at their institutions, and so on. The three key examples addressed here are the following: increasing inbound mobility, outbound mobility and internationalization “at home”.

- **INCREASING INBOUND MOBILITY:** when attempting to attract more foreign students, institutions must account for the factors in students’ decisions regarding where to study, such as language, geographical proximity, employment prospects, etc. This could include North African institutions investing in partnerships with other francophone institutions, or MENA institutions prioritizing attracting students from neighboring countries. In addition, it cannot be assumed that the presence of foreign students alone will have major positive effects. The host tertiary education institution must provide structures to ensure that foreign students are duly welcomed and properly included, and it must organize activities to maximize interactions and cultural exchanges in order for the benefits of this strategy to be reaped.
- **INCREASING OUTBOUND MOBILITY:** sending students abroad to study can represent investments in the domestic level of human capital, as well as benefiting the students directly; the existence of national scholarship schemes is testament to this. There are, however, fears around “brain drain” where the “best and brightest” students leave and may not return; mechanisms may be put in place

accordingly to ensure that a majority of students do return or contribute in some way to “brain gain” or “brain circulation”. Moreover, for many young people in the region, financial constraints and visa issues present obstacles in the way of study abroad. Governments could put policies in place that facilitate this, such as making more grants available to meet the costs of study abroad and drawing up bilateral and multilateral agreements with destination countries that facilitate the obtention of student visas.

- **INCREASING INTERNATIONALIZATION “AT HOME”:** this strategy appears as key for MENA due to its wide reach (not being restricted to those who can study abroad), its key benefits in terms of skills gains and employability, its relative ease and lower cost of implementation. Internationalization “at home” has come under some criticism for being hard to define or to implement; indeed, it appears that there can be several obstacles in the way of its successful implementation. Yet with time invested and proper support from across faculties, support staff and wider stakeholders, the evidence shows it to be effective.

C. COVID-19: CHALLENGES AND OPPORTUNITIES

The global pandemic COVID-19 has had and will continue to have serious impacts on tertiary education globally and on its internationalization. In terms of immediate impact, thousands of institutions have closed, courses been cancelled, international students stranded, and so on. In the future, it is expected that the crisis will have prolonged effects on the economy, international travel, and beyond. One obvious likely effect of this is a decrease in student and staff mobility. The first two strategies given above (increasing inbound and outbound mobility) then, are likely to be made more difficult by the crisis.

On the other hand, the crisis may highlight certain opportunities that countries and institutions in MENA could take advantage of. The crisis has forced a huge majority of institutions to make radical changes, such as the swift move to online learning. These new measures, or hybrid ones, are likely to stay in place at least for the foreseeable future. MENA institutions may benefit, if they consciously decide to adapt to the post-COVID-19 world by acting quickly to adopt new and innovative learning models, increasing their use of activities such as collaborative online learning and virtual mobility, for example. More widely, with mobility severely restricted and the “new normal”, MENA institutions could also seize the opportunity to push their internationalization “at home” agenda. Internationalization “at home” is a strategy which holds many advantages for institutions in the region and which may today represent one of the most effective ways for MENA to “catch up” with other regions on the internationalization agenda.

D. RESEARCH, REGIONAL APPROACHES, AWARENESS-RAISING AND PRIORITIZING INTERNATIONALIZATION

In addition to the above strategies, another key recommendation for boosting internationalization across MENA is to raise awareness about it and its benefits, as well as to encourage both tertiary education institutions and governments to make it a key priority.

Since not all relevant stakeholders are likely to be experts on internationalization and aware of its advantages, part of this lies in communication. The links between internationalized education and skills gains, economic benefits, and gains in education quality, must be more clearly articulated; this may be a task for institutions. Moreover,

given the lack of understanding and even misinformation around international education, more effective communication channels could be sought between tertiary education institutions and relevant stakeholders.²³

Taking advantage of regional networks, and focusing on a regional approach, may also be helpful here. Adopting a regional approach could mean drawing in students and staff from other countries in the region and setting up new regional partnerships and exchange programs. Regional networks of tertiary education institutions – both those already in place and the setting up of new ones – could allow for the cooperative drafting of a regional strategy for internationalization in the region, and support the capacity building of individual institutions in the drafting of their strategies, with the aim also of enhancing both the attractiveness of institutions in the region, and North-South and South-South mobility.

In parallel, governments could, for their part, start to reduce the number of barriers impeding the internationalization of tertiary education, such as visa

regulations and labor market restrictions. They may also encourage tertiary education institutions in their internationalization efforts through the provision of financial incentives such as targeted funds to promote internationalization, or the modulation of tuition fees for international students. Since such measures will likely necessitate the mobilization of interior, foreign affairs, and finance ministries, as well as those of higher education, **what emerges here is the need for internationalization strategies to be conceived and implemented at the inter-ministerial level.**

Lastly, in terms of data and analysis on internationalization, it is clear that more research is required. Indeed, one of the aims of this report is to stimulate further research that could be useful for MENA. This may include: research on the extent to which internationalization is already in place, and if and how it is being promoted, or increased; research on the effects, potential and benefits of internationalization; and research on the most appropriate and beneficial internationalization strategies for countries and tertiary education institutions in MENA.

²³ Gribble, Cate & Coelen, Robert (2019) "Conclusions" in Coelen, Robert et Gribble, Cate (eds.) Internationalization and Employability in Higher Education. Routledge: London & New York.

1.

INTRODUCTION

1. The landscape of tertiary education²⁴ globally has changed significantly over the years and continues to change. Enrolment has been increasing on an unprecedented scale, whilst demographic and geopolitical shifts, urbanization, technological advances and the changing requirements of labor markets have all had their effects. Tertiary education is becoming increasingly sophisticated and global, especially with the increased access to education made possible by the technological revolution. In the complex and changing social, economic and geopolitical environment of today, one of the recent significant developments in tertiary education is the growth of internationalization.

2. The internationalization of tertiary education has been defined as “the intentional process of integrating an international, intercultural or global dimension into the purpose, functions and delivery of post-secondary education, in order to enhance the quality of education

and research for all students and staff, and to make a meaningful contribution to society”.²⁵ It can also be seen as an integration process within the global education sector; indeed, Gabriel Hawawini defines it as “An ongoing process of change whose objective is to integrate the institution and its key stakeholders (its students and faculty) into emerging global knowledge economy”.²⁶

3. Internationalization can take several forms, such as student and staff mobility (inbound and outbound), academic joint ventures (joint degrees), partnerships (cooperation on programs and exchanges) and branch campuses in third countries, to mention some. But internationalization can also happen “at home” through activities that help larger numbers of students develop global understanding and intercultural skills: giving an international perspective to curricula and programs, to the teaching and learning processes, to extra-curricular activities, and to research and other scholarly activity, as

24. Since “higher education” is often defined differently by different actors, and sometimes includes only universities, we use “tertiary education” throughout this report. By “tertiary education” we refer to all post-secondary education, including universities, technical training institutions and vocational schools, although universities will be the most commonly referred to.

25. De Wit, Hans, et al (2015) *Internationalisation of Higher Education*. European Parliament Directorate-Generale for Internal Policies Policy Dept B: Structural and Cohesion Policies, Culture and Education, p. 29. Definition based on Knight, Jane (2003).

26. Hawawini, Gabriel (2016) *The Internationalization of Tertiary Education and Business Schools: A Critical Review*. Springer Briefs in Business, Springer, p. 5.

well as liaison with the local community.²⁷

4. The benefits of internationalization are multiple. For instance, regarding mobility, internationalization has been shown to have diverse advantages for both host countries and sending countries, and for both international and domestic students. The benefits of internationalization range from economic to socio-political as well as its advantages for the quality of education.

5. Internationalization is becoming a key feature of tertiary education around the world, although regions differ with regard to the degree of centrality to which internationalization has taken hold in their tertiary education systems.

1. AIMS OF THIS REPORT

6. This report looks at the internationalization of tertiary education in the Middle East and North Africa (MENA) region.²⁸ It finds that internationalization has been shown to have beneficial effects both on the economic and social levels. However, whilst the MENA region could further benefit from internationalization of its tertiary education sector, it has not yet taken full advantage of this opportunity.

7. The report therefore first gives an introduction to internationalization, including some global trends. It gives an overview of some of the benefits of internationalization of tertiary education. It then analyzes the situation of internationalization in the MENA

region, identifying some obstacles as well as setting the ground for operational solutions aimed at supporting internationalization.

8. The main objective of the report is to stimulate policy dialogue around internationalization of tertiary education in the MENA region; it aims to raise awareness of the benefits of internationalization and push for it to become more of a priority in the region. The target audience, then, includes both governments and tertiary education institutions, as well as all other relevant stakeholders in the region and abroad.

2. THE DIVERSE RATIONALES FOR INTERNATIONALIZATION

9. Given the benefits of internationalization, governments and tertiary education institutions may be motivated to internationalize for several reasons. Indeed, they may be compelled to internationalize in different ways, from attempting to attract foreign students, to creating new academic partnerships, to internationalizing their curricula at home. However, although internationalization comes in many forms, student mobility, measured as *inbound* and *outbound* mobility, remains the most visible manifestation and is one of the aspects for which more data is available. Thus, despite it being just one dimension, there will naturally be a focus on student mobility throughout this report.

27. Several terms exist around internationalization “at home”, including “internationalization of the curriculum” and “comprehensive internationalization”; see section “Internationalization: models and dimensions” of this report for details.

28. We follow the World Bank’s definition of the MENA region, which includes: Algeria, Bahrain, Djibouti, Arab Republic of Egypt, Islamic Republic of Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Malta, Morocco, Oman, Qatar, Saudi Arabia, Syrian Arab Republic, Tunisia, United Arab Emirates, West Bank and Gaza, and Republic of Yemen. However, this report generally omits Malta, due to the limited commonalities with the rest of the region. Also, given that (a) data is not always available for all MENA countries and (b) that we sometimes use data from UNESCO or other organizations, who may have different definitions of MENA, the selection of countries shown in the tables and graphs throughout this report sometimes varies, although, when it is the case, it is duly clarified.

10. Analyzing the rationales for internationalization allows us to understand policy decisions made by governments and institutions. For instance, there seems to be a connection between overall demographics and the ageing of societies and patterns in tertiary education enrollment and student mobility. Today, there are 200 million tertiary education students in the world. This is twice as many as there were in 2000, and the number of students worldwide will probably double by 2030.²⁹

11. Despite this growth in number of students worldwide, some countries are facing a decrease in domestic enrolment, since the size of the 18-25 years old age group is in decline, while others are experiencing significant growth. As can be seen on Figure

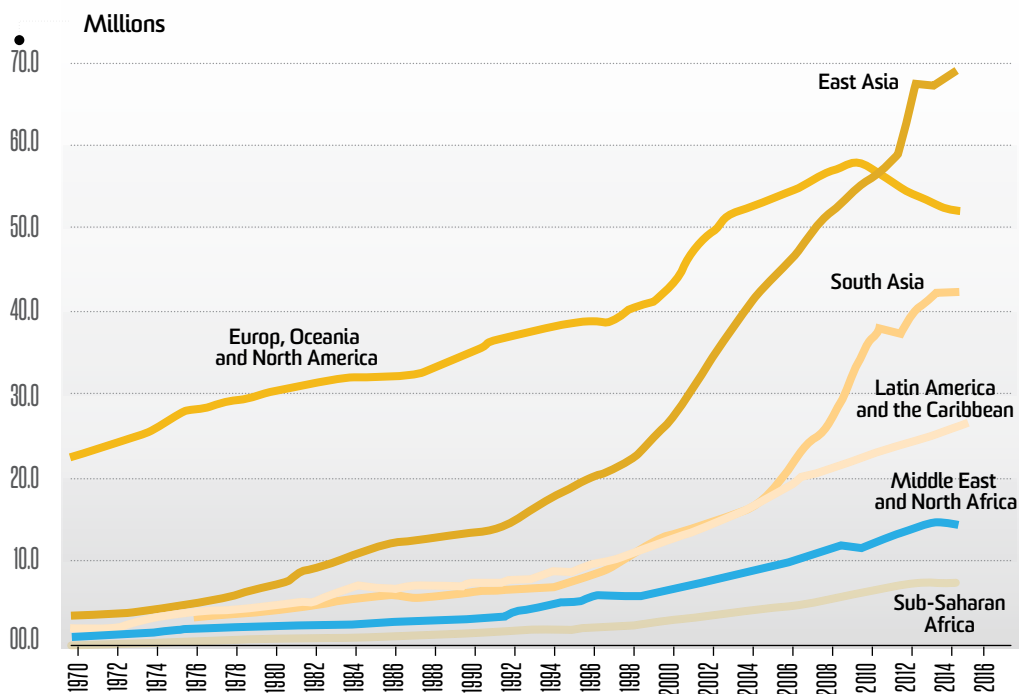
1, the student population in North America, Oceania and Europe peaked around 2010.

12. Although internationalization and the recruitment of international students is not only perceived as a way to compensate for a decline in domestic enrolment, this may nevertheless represent one of the motivations for some countries to move toward internationalization.

13. In other cases, internationalization's rationale may be based on its perceived capacity to generate revenue, boost countries' influence, and improve the quality of education.

14. In the MENA region, despite governments' heavy investments in education, its quality remains low.³⁰

FIGURE 1 Dynamics of the global number of students by region



29. Ramanantsoa, Bernard; Delpech, Quentin; and Diagne, Marième (2016) *L'enseignement supérieur français par-delà les frontières : l'urgence d'une stratégie*. France Stratégie, Paris

30. According to the World Bank, "the poor quality of education in MENA is equivalent to approximately three lost years of education". World Bank (2018a) *World Development Report 2018: Learning to Realize Education's Promise*. Washington, D.C.: World Bank Group., cited in World Bank (2018b) *MENA Education Flagship Report: Expectations and Aspirations: A New Framework for Education in the Middle East and North Africa*. Washington, D.C.: World Bank Group, p. xii. Indeed, the MENA region ranks low on several indicators relating to education quality; see further in this report for more details.

Students are graduating without the right mix of knowledge and skills required to enter the labor market,³¹ and unemployment among graduates is extremely high.³² Sadly, the problem being faced in MENA is also present in other regions of the world. For MENA, internationalization's potential for improving the quality of education is thus another motivation for institutions and governments to move in that direction.

3. THE "PUSH-PULL" FACTORS THAT INFLUENCE STUDENT MOBILITY

15. The benefits of internationalization and tertiary education institutions' consequent motivations to internationalize are not the only factors at play; in terms of student mobility, a number of factors also affect students' motivation.

16. The "push-pull" factors that influence students' decisions can either encourage or discourage students to move abroad to study, and include:

- **LANGUAGE OF TEACHING:** the use of globally predominant languages in the business environment pushes students to learn and attain proficiency, mostly in English. Universities are responding to this strong demand by expanding English-taught programs in non-English speaking countries.
- **STUDY COSTS:** studying abroad is costly as tuition and costs of living in most popular

destination countries are high. Although there are significant variations between countries, undoubtedly, the question of finances is an important factor determining the flows of international students.

- **IMMIGRATION POLICIES:** depending on the ease and the timeliness of obtaining a student visa and/or a work authorization during the studies, these policies may encourage or discourage students from going abroad to study.
- **PROGRAM QUALITY:** there is a strong correlation between the attractiveness of the study destination and the perception of its quality. Some students use university global ranking systems as proxies to gauge their quality, or other indicators such as other students' testimonials.
- **STANDARD TESTING REQUIREMENTS:** some students may opt for lengthy preparation and orientation programs in order to pass standard tests for entry to host institutions.³³ Others may choose programs which are less demanding in these terms.
- **GENERAL BENEFITS:** beyond the quality of the degree and its economic returns, youth also travel abroad to discover different cultures, gain new experiences and acquire life skills such as independence, intercultural understanding, self-confidence, and interpersonal skills.
- **SOCIAL AND ECONOMIC ENVIRONMENT:** for many young people, especially in developing economies, moving abroad, even

³¹ See World Bank (2013) *Jobs for Shared Prosperity: Time for Action in the Middle East and North Africa*. Washington, D.C.: World Bank Group.

³² See Jaramillo, Adriana and Melonio, Thomas (2011) *Breaking Even or Breaking Through: Reaching Financial Sustainability while Providing High Quality Standards in Higher Education in the Middle East and North Africa*.

³³ These tests include, for example: the Graduate Management Admissions Test (GMAT) and the Graduate Record Examinations (GRE), standardized tests used for admissions in many graduate schools in the USA and elsewhere; the Test of English as a Foreign Language (TOEFL), a standardized test designed to test the English level of non-native speakers for entry into English-taught university programs.

temporarily, is also a way to benefit from an improved social and economic environment, and perhaps higher prospects for emigrating to a more prosperous and stable economy.

4. CURRENT GLOBAL TRENDS IN INTERNATIONALIZATION

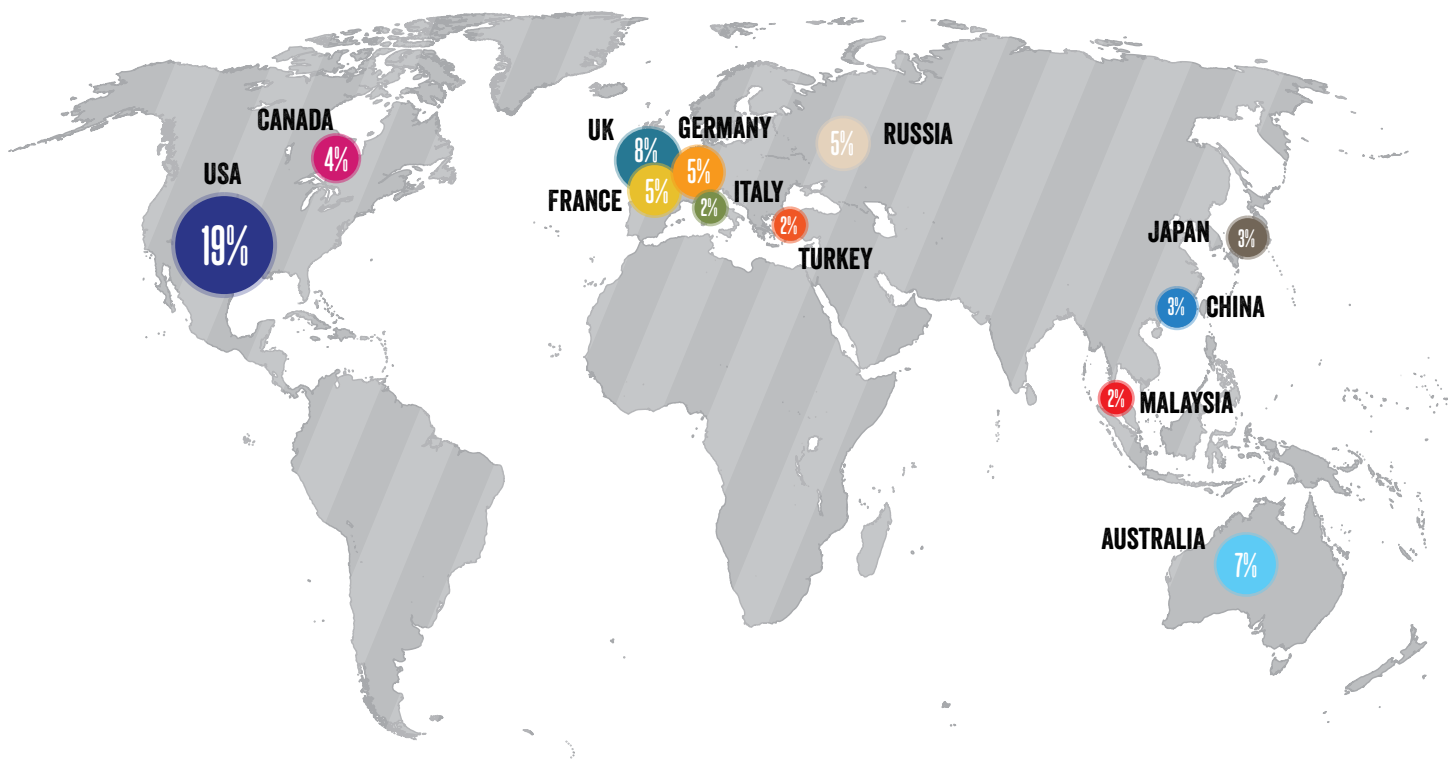
17. Several global trends in internationalization of tertiary education are discernible. For example, regarding student mobility, while some regions and countries have become major destinations for foreign students, other regions and countries have become suppliers of those students. We present here some of the main trends in terms of student mobility and branch campuses across different regions.

18. Student mobility toward OECD countries has dramatically increased over the past decade mostly due to: (i) an exploding demand for tertiary education at the global level and (ii) the perceived reputation and prestige of tertiary education institutions in some OECD countries. In 2017, the majority of the global demand for tertiary education was met by institutions located in OECD countries (see Figure 2). Just under a quarter of mobile students study in the USA and Canada, with a similar proportion studying in Western Europe.

19. However, new players on the field are making significant efforts to position themselves as hubs for international students. The list of countries focusing on such intent includes China, Malaysia, Qatar, Russia, New Zealand, and India, just to name a few.

FIGURE 2

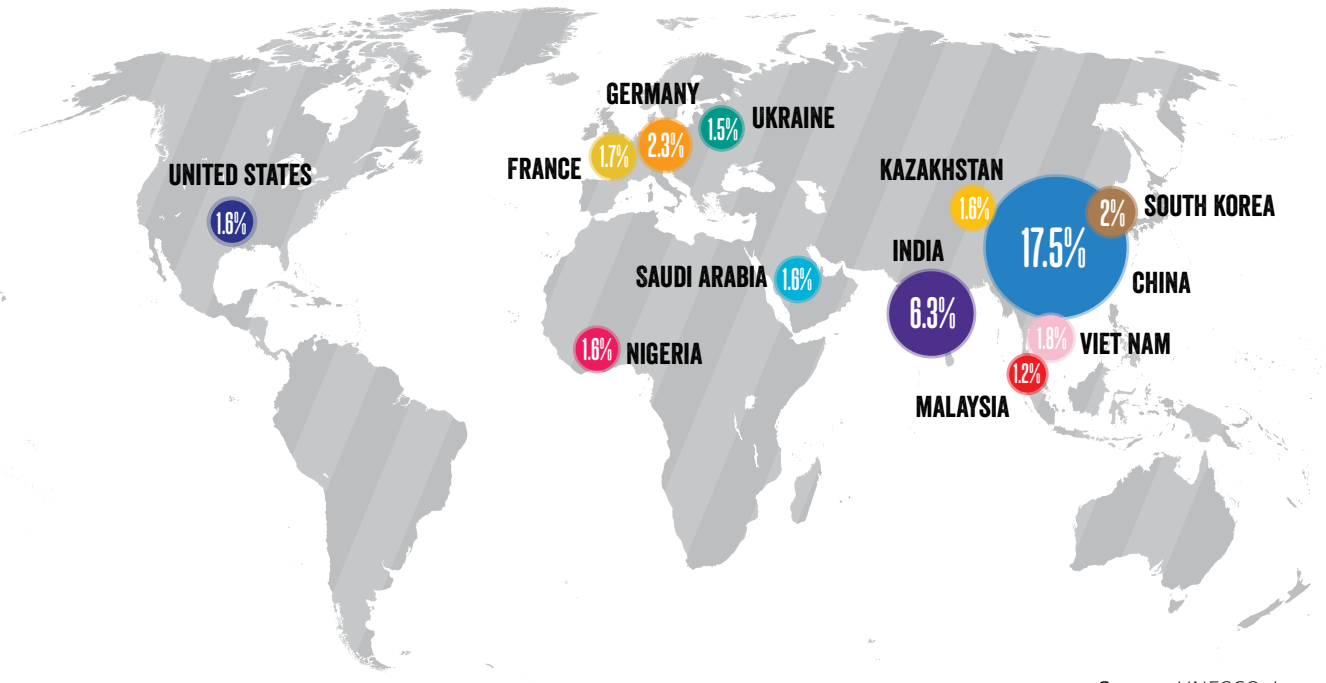
Top 12 destinations of international students: number of mobile students in top 12 countries of destination, as percentages of total mobile students, 2017



Source: UNESCO data.

FIGURE 3

Top 12 countries of origin of international students: number of mobile students by top 12 countries of origin, as percentages of total mobile students, 2017

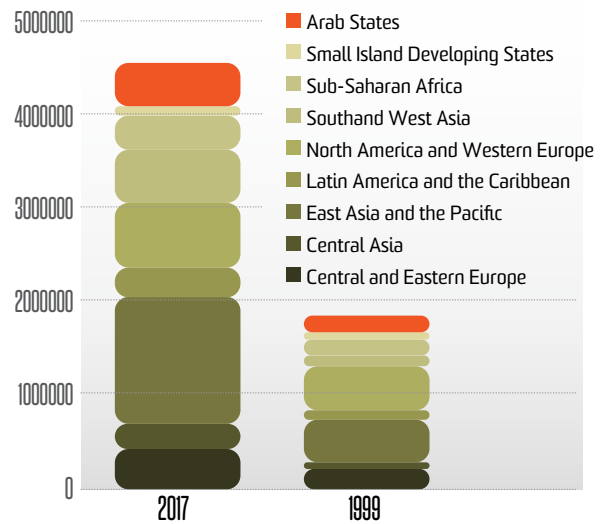


Source. UNESCO data.

20. Asia is an engine for growth in global student mobility: around 51 percent of mobile students worldwide are from Asia, and over 17 percent come from China alone (see Figure 3).³⁴ The weight of Western Europe and North America in outbound students has halved since 1999, while the relative share of mobile students from Eastern Europe has also significantly declined (see Figure 4). These evolutions have been compensated by the arrival of Asian students, which have almost tripled since 1999, while outbound students from Arab states³⁵ have also more than doubled (see Figure 4).

FIGURE 4

Global distribution of mobile students in tertiary education by region of origin, 1999 and 2017.



Source. UNESCO data.

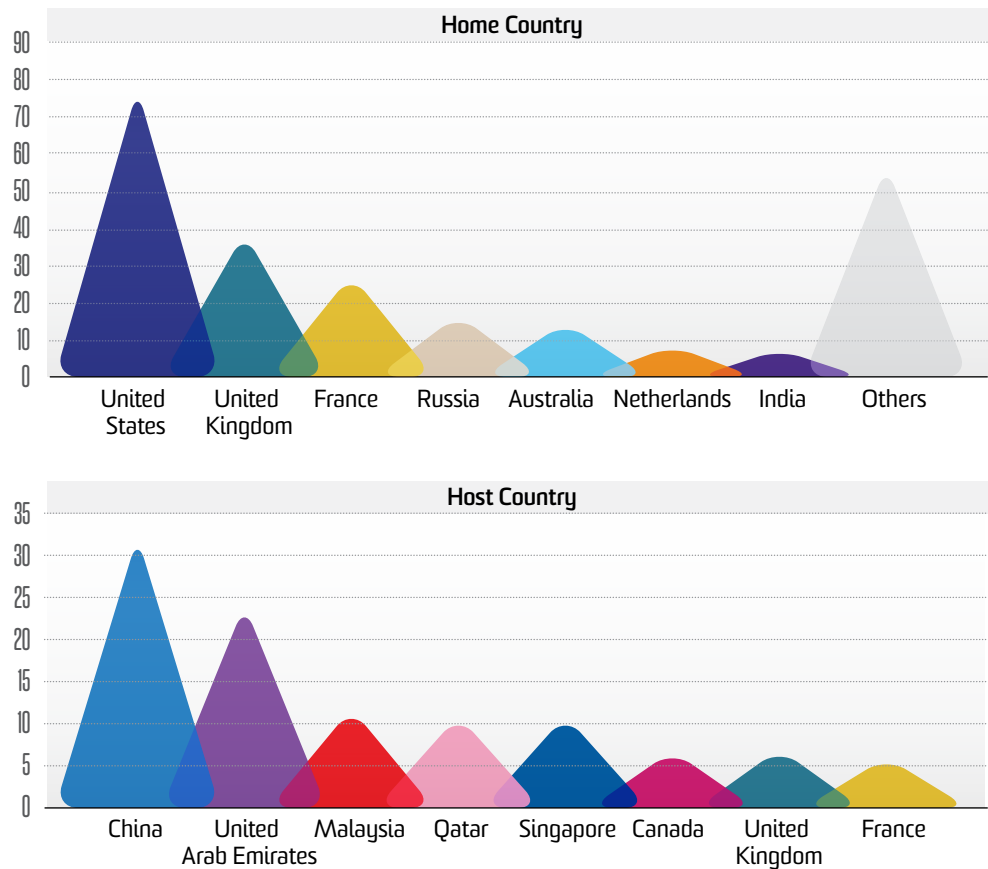
³⁴. According to UNESCO data, in 2017, about 2.7 million international students came from Asia, including more than 900,000 from China alone, among the total 5.3 million international students across the globe.

³⁵. "Arab states" here follows UNESCO's definition which, slightly different from the MENA region as defined by the World Bank, includes Algeria, Bahrain, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Malta, Mauritania, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Somalia, Sudan, Syria, Tunisia, the UAE, and Yemen.

21. The number of international branch campuses is also growing. Among the top countries from which higher education institutions are establishing branch campuses in foreign countries, we find the United States, United Kingdom, France, Russia, and Australia, whilst the top host countries of those institutions are China, UAE, Malaysia, Qatar, and Singapore (see Figure 5).

FIGURE 5

Number of international campuses considering top home and host countries, 2017



Source. C-Bert Listing (January 2017) on a total of 248 campuses

Read: In 2017, 77 campuses abroad were branches of a university located in the United States. 32 branch campuses of foreign institutions were located in China.

5. TERTIARY EDUCATION IN THE MENA REGION AND ITS INTERNATIONALIZATION

22. The tertiary education sector in the MENA region has undergone strong and positive changes throughout recent years: total enrolment grew by more than 50 percent between 2006 and 2016 (see Figure 1), while the number of institutions doubled. Private education sectors have expanded, and some countries have visibly strengthened their academic research.

23. Nonetheless, the quality of tertiary education varies widely across the region, remaining limited in many countries. Despite efforts in most MENA countries to establish and implement institutional and academic program quality assurance mechanisms, standards for accreditation are still not widely adopted and, at the global scale, limited knowledge exists about

their rigor and independence, resulting in limited availability of evidence about their effectiveness. Also, while recognizing the limitations of rankings as a proxy of quality,³⁶ it is useful to note that, probably due to the still-nascent international recognition of the academic research output in MENA countries, no university in the region appears in the global top 100 of universities for its research, while the best university in the region ranks around 350th.

24. Graduate employability in the region is distinctly low, with high unemployment rates among graduates. **The youth unemployment rate is around 26 percent in the region, the highest in the world,**³⁷ and the labor market is plagued with large skills gaps between what tertiary education is delivering and what economies need.³⁸

25. A further issue is the recent influx of refugees in some MENA countries, mainly those moving from Syria, which represents an extra pressure on both the education systems and the labor markets in the region. In turn, improving access to tertiary education for refugee youth presents MENA countries with a major challenge, one which is not always seen as a domestic issue by governments in the host countries but rather as a temporary problem.

26. Governments and households have been investing heavily in tertiary education. In many countries in the region, what governments are spending

per student is more than adequate, with figures for some countries well above what industrialized countries are investing.³⁹ The fact that **the quality of education remains limited despite this high resource investment**, gives credence to the idea that, in the MENA context, **qualitative improvements – as opposed to just additional resources – may yield greater benefits in terms of further developing the tertiary education sector.**

27. To succeed in improving the quality of tertiary education, some states and institutions in the region have been strengthening their international outlook, in the hope that opening their campuses to foreign students and academics will not only increase the quality by importing skills and human capital, but also facilitate reforms.

28. Although the MENA region is not among the most advanced regions in terms of internationalization of its tertiary education, some institutions in the region have embraced it as a way to renovate the curriculum, modernize pedagogy, specialize research and improve their overall management. Gulf countries have been leading this push toward internationalization, but most North African countries have also made limited efforts to improving their international outreach, internationalizing the education they provide, diversifying their recruitment and allowing the establishment of foreign tertiary education institutions.

36. See Hazelkorn, E. (2019) University Rankings: there is room for error and “malpractice”. *Elephant in the Lab*, or Marmolejo, F. (2015) Are we obsessed with university rankings? *Voices of Dissent and Concern*. HERB. 2 (4), pp. 7-8.

37. According to World Bank data (estimate modeled on the ILOSTAT database for 2017), for the total labor force, ages 15-24. Accessible at databank.worldbank.org.

38. A significant distortion in the employment of university graduates in many countries in the region is that since the public sector has long been an important and stable employer, it may be the case that some graduates prefer remaining out of work in the hope or expectation that they will be employed by the government.

39. MENA countries have been spending more than the world average on education, and although this spending peaked around the turn of the century, some continue to invest well above average; see World Bank data (at databank.worldbank.org) and further in this report for more details.

2.

INTERNATIONALIZATION OF TERTIARY EDUCATION: MODELS AND DIMENSIONS

29. There are multiple definitions of the internationalization of tertiary education. A comprehensive and widely accepted one defines it as “the intentional process of integrating an international, intercultural or global dimension into the purpose, functions and delivery of post-secondary education, in order to enhance the quality of education and research for all students and staff and to make a meaningful contribution to society.”⁴⁰

30. Internationalization of tertiary education is a complex endeavor which can be implemented in diverse ways. One traditional approach has focused on a series of institutional actions still prevalent in the field of international education: Gabriel Hawawini has identified five traditional models of international reach which tertiary education institutions can adopt to implement their internationalization strategies⁴¹ (see Box 1).

BOX 1

Five models of internationalization

- **Import model:** Importers aim to attract students, teachers and faculty staff from around the world to their campuses, and to have many nationalities within their institutions. They increase domestic students’ chances of interacting with international students and of enjoying cross-cultural learning on their campus.
- **Export model:** Exporters send their students abroad in the context of student exchange programs with foreign universities or tertiary education institutions, or offer certain programs (off-site courses) abroad to foreign schools. Exporters also send teachers abroad to teach or do research at foreign universities. One main advantage of this model lies in exposing the students to new cultures in new countries. This can lead to an increase in their knowledge and experience, both of which are assumed may be transferred back to their home campuses.

40. De Wit, et al, 2015

41. The models are neither exclusive nor sequential, which means that an institution can be both an importer and an exporter, and it can open a campus abroad without engaging in any academic partnerships.

- **Academic joint-venture model:** academic or curricular joint-ventures often start as foreign exchange programs and evolve into joint programs, designed and delivered by multiple institutions. On this model, students receive single co-signed degrees or separate degrees from each university.
- **Academic partnerships model:** Academic partnerships refers to the collaboration between two or more institutions who cooperate on initiatives such as student and teacher exchange, research, and joint programs. For example, institutions open their programs and courses to the students enrolled in the partner institution(s), and students who attend courses in each institution receive two degrees. Such partnerships may also enter into new academic joint-ventures, offering joint degrees.
- **Foreign-campus model:** Some institutions decide to go beyond the previously mentioned models by being physically present abroad. To do so, they open branch campuses in foreign countries by relocating some of their staff and teachers to enroll foreign students in their own countries. Countries and institutions decide to open branch campuses according to supply and demand. The supply comes from institutions that want to provide their courses and programs to foreigners who may be restricted in their ability to leave their home countries. The demand arises from countries that want to attract foreign campuses to their territories, to bring a quality education curriculum to the local population, or to become an international education hub.

31. As seen in Hawawini’s models, the complex process of internationalization can include the mobility of both students and faculty, and the mobility of programs and providers, as well as a myriad of other types of collaboration and exchange. Mobility can seem rather integral to internationalization, and indeed, the two are often equated. However, internationalization also includes a range of elements grouped under the term “internationalization at home”, which can include the internationalization of the curriculum, and online and distance learning, amongst other aspects.

32. Terms such as “cross-border education”, “transnational education” or “internationalization abroad” can help distinguish between these different dimensions of internationalization: following Jane Knight (2018), her

preferred term “cross-border education” is one regrouping “the mobility of people, programs, providers, projects, and policies between and among countries”.⁴² It refers to what have been coined the “three generations” of cross-border education.

33. The first generation here refers to the mobility of people (students, staff and scholars), including full degree mobility, short-term study or research abroad, teaching abroad, and exchange programs. Students and academics have moved for educational purposes for centuries, thus the term “first generation”. The second generation, taking off in earnest in the 1990s, regroups program and provider mobility, and covers the movement of programs and of institutions across borders. Program mobility can include twinning and franchise programs, the provision of joint and double degrees and online or distance

⁴² Knight, 2018

learning. Provider mobility can include international branch campuses, mergers and acquisitions, internationally cofounded institutions and franchise universities, virtual universities and independent institutions.

The third generation refers to education hubs: a more recent development in internationalization where countries, cities or special zones aim to attract foreign students, researchers, programs, providers, etc., for education, training, knowledge production and innovation purposes, to become education “hubs”.⁴³

34. Cross-border education, then, as “internationalization abroad”, can be contrasted with “internationalization at home”, as two interdependent dimensions of internationalization. Indeed, over recent years, a lot of attention has been given to the fact that many of Hawawini’s models, and much of cross-border education, requires people to move across borders. This naturally narrows the scope of

internationalization to those students and staff who are able to move, or those who benefit from attending branch campuses, and so on.

35. Internationalization “at home”, then, aims to reach a much wider group of people, since it can be effectuated “at home”, in home tertiary education institutions. Although it can include, and can benefit from, student and faculty mobility (where those at home can benefit from students and staff returning from time abroad with new skills experience...), it is not limited to this, and aims to reach all students and staff at the home institution.

36. The concept of internationalization “at home” has been contested, broadened, and updated over recent years, as further approaches, activities and processes have been developed to support wider internationalization of tertiary education (see Box 2 below).

BOX 2

Definitions around internationalization at home

- **Internationalization “at home”** is a set of activities that helps students develop international understanding and intercultural skills: curriculum and programs, teaching/learning processes, extra-curricular activities, liaison with local cultural/ethnic groups and research or scholarly activity (Knight, 2006).
- **Comprehensive internationalization** is an operational commitment to infuse international and comparative perspectives throughout the teaching, research, and service missions of tertiary education (Hudzik, 2011).
- **Internationalization of the curriculum** is the process of incorporating an international, intercultural and global dimension into the content of the curriculum, assessment tasks, teaching methods and support services of a program of study (Leask, 2015).

43. Ibid.

37. Although the terms “comprehensive internationalization” and “internationalization of the curriculum” aim to capture a wider variety of elements than “internationalization at home”, the myriad of definitions has caused some misconceptions and confusion around internationalization “at home”.

For simplicity, and to capture all the relevant dimensions, in this report we take “internationalization at home” to mean the ensemble of activities which take place “at home”, in a broad sense. Following Beelen and Jones (2015), their newer definition may be useful here, and is as follows: “the purposeful integration of international and intercultural dimensions into the formal and informal curriculum for all students within domestic learning environments”.⁴⁴

38. It is, however, important to note that the development of the concept of “comprehensive internationalization” highlights the need for internationalization to be embedded not only into the teaching-research work of colleges and universities but also into the entire institutional spectrum. It shapes institutional ethos and values, touching the entire education system, and it must be embraced by institutional leadership, governance, faculty, students, and all academic service and support units.⁴⁵ In this sense, comprehensive internationalization does not only impact campus life. It also concerns external relations and partnerships of the tertiary education institution and appears as an imperative given the current global reconfiguration of economies.

39. A wide variety of activities and processes has been developed by tertiary education institutions to promote internationalization “at home”, including, but not limited to: (i) an emphasis on foreign language development, notably by teaching part or the totality of the curriculum in a foreign language; (ii) the

internationalization of the curriculum, such as the inclusion of “international” subjects such as foreign literature, foreign history, geography, international economics, international relations, international trade...; (iii) the promotion of intercultural activities, making use of foreign students and staff; (iv) intercultural activities at the local level such as promoting social and cultural diversity as well as participation in the local society; (v) the development of jointly approved curriculum, in partnership with foreign institutions; (vi) the use of virtual mobility, allowing students to take courses at distance, and Collaborative Online International Learning (COIL).

40. Internationalization is therefore an extremely broad concept, encompassing a whole range of elements, whether “at home” or abroad. In this report, we cannot provide a comprehensive analysis of each of these elements in the MENA context. Some of them are difficult to measure, especially considering that as relatively new and still not very visible activities, reliable or complete data is lacking. One of the few areas in which more information is available for analysis is student mobility: the abundance of data allows us to give a comprehensive overview for the MENA region. Branch campuses and the development of education hubs constitute other elements which are quite quantifiable. Since both activities are ones in which more visible work is being done in internationalization of tertiary education, but which still lack a comprehensive analysis, the report will be somewhat focused on these dimensions. We do, however, understand internationalization in the much broader sense, and regarding the other elements, we aim to give examples from the MENA context where relevant throughout the report. Also, we hope that this baseline review will trigger the interest of scholars and institutions to further study other dimensions of internationalization of tertiary education in MENA.

44. Beelen, J. and Jones, E. (2015) “Redefining Internationalization at Home.” In Curaj A., Matei L., Pricopie R., Salmi J., and Scott P. (eds) *The European Higher Education Area*. Springer, Cham.

45. Hudzik, John (2011) *Comprehensive Internationalization: From Concept to Action*. NAFSA

3.

BENEFITS OF INTERNATIONALIZATION OF TERTIARY EDUCATION

41. The benefits of internationalization are wide-ranging. Not only does internationalization foster the development of cognitive and technical skills; it can also boost that of socio-emotional skills, and increase open-mindedness, employability, growth, social cohesion, and inclusion. According to Gabriel Hawawini, “the ultimate benefit of internationalization for tertiary education institutions is to learn from the world, and not just teach the world what the institution already knows in order to satisfy some educational and economic motives”.⁴⁶

42. More generally, internationalization can and should have positive impacts on (at least) four dimensions: the economy, the quality of tertiary education, countries’ influence, and the employability of graduates, including the development of new skills and citizenship.

1. ECONOMY

43. Preparing students with relevant skills that will equip them to become

competitive at the international scale is a way to enhance the human capital stock of any country. In the increasingly globalized economy, many of the technical and socio-emotional skills required for higher paying salaries and for the enabling of innovation and entrepreneurship, receive a premium in the labor market, resulting in both higher income for individuals and better conditions for the establishing of innovation ecosystems attracting advanced human capital.

44. Student mobility is recognized to have beneficial effects on the economies of the hosting countries to such an extent that it is increasingly being officially labelled as an “exporting” industry, even becoming a central component of foreign trade policies in several countries. Foreign students are revenue generating as they usually contribute higher tuition fees, and as they purchase services and goods during their stays: travel, accommodation, daily living expenses, telephone and internet services, health-related expenses, entertainment, etc.

45. In France, for instance, according to a 2014 report, the cost to the State of hosting international students was around 3 billion

⁴⁶ Hawawini, 2011

euros, while the contribution of those students to the French economy was about 4.65 billion⁴⁷ (see Table 1 for the average monthly amount an international student spends in France). In the U.S. during the 2017-18 academic year, more than 1 million international students studying at colleges and universities contributed the equivalent of 34.7 billion euros to the national economy and supported more than 455,622 jobs.⁴⁸ In Canada, the value of international education services

in 2015, as measured by total spending by international students (the equivalent of 8.4 billion euros), amounted to 12.5 percent of Canada's total service exports to the world. A year later, this value increased to 14.5 percent of Canada's total service exports.⁴⁹ In Australia, in 2017, international education contributed over 32 billion Australian dollars (almost 20 billion euros) to the economy, becoming the country's third largest source of export revenues, behind only iron ore and coal.⁵⁰

TABLE 1 International students' spending in France

MONTHLY EXPENSES OF INTERNATIONAL STUDENTS HAVING JUST RETURNED FROM FRANCE (2010)		
Housing & utilities	€ 383.15	41.60%
Daily living expenses (meals excluding resto U, clothing)	€ 202.84	22.00%
Entertainment (sports, social activities etc.)	€ 100.07	10.90%
Transportation	€ 60.08	6.50%
Resto U (university cafeteria)	€ 55.99	6.10%
Miscellaneous expenses	€ 45.97	5.00%
Phone / Internet services	€ 29.34	3.20%
Health insurance	€ 25.90	2.80%
Other health-related expenses	€ 17.32	1.90%
Monthly total	€ 920.66	100%

Source: BVA-Campus France, 2014.

46. The financial impact of cross-border student mobility has also been evaluated by several studies. For instance, a comparative study by the German Academic Exchange Service, covering six European countries, concluded that **the economies of host countries benefit significantly from value creation resulting from student mobility.**⁵¹ Table 2 compares the cost of hosting international students to returns linked to their presence during and after their studies. It shows how hosting international students and retaining a portion of them after graduation greatly benefits the host country.

47. BVA-Campus France (2014) *Beyond Influence: The Economic Impact of International Students in France*. Campus Notes no. 45

48. See <https://www.nafsa.org/policy-and-advocacy/policy-resources/nafsa-international-student-economic-value-tool-v2>

49. See <https://www.international.gc.ca/education/report-rapport/impact-2017/index.aspx?lang=eng>

50. See <https://www.universitiesaustralia.edu.au/media-item/quality-central-to-australias-international-education-success-story/>

51. German Academic Exchange Service (DAAD) and Prognos (2013) *The Financial Impact of Cross-border Student Mobility on the Economy of the Host Country*.

TABLE 2

Netting out the aggregate costs and returns of state funding in the event that 20% or 30% of international students remain in a host country, in millions of euros and years

TOTAL RETURNS FOR THE STATE						
RETENTION RATE	AGGREGATE COST OF PROVIDING INTERNATIONAL STUDENT SPOT (4 YEARS)	DURING THE STUDIES (STUDENT CONSUMER SPENDING)	AFTER COMPLETION OF STUDIES, PER ANNUM	PERIOD OF EMPLOYMENT NEEDED TO COVER COST (IN YEARS)	AFTER COMPLETION OF STUDIES, PER ANNUM	PERIOD OF EMPLOYMENT NEEDED TO COVER COST (IN YEARS)
			----- 20% -----		----- 30% -----	
Germany	-8,353	1,603	907	7.4	1,361	5.0
The Netherlands	-1,622	343	132	9.7	198	6.5
Austria	-2,683	683	296	6.7	445	4.5
Poland	-282	93	24	7.8	37	5.2
Switzerland	-2,126	229	76	24.9	114	16.6
Spain	-2,495	545	193	10.1	289	6.7

Source: Prognos AG, DAAD, 2013

47. All of the above is not new: in 2008/09 in the United Kingdom, for example, the value to the country of education exports was estimated to be £14.1 billion, with education-related projects attracting a total of £9.6 million in Foreign Direct Investment, and with an estimated annual growth rate of approximately 4.0 percent per annum in real terms.⁵²

48. Student mobility is also positively associated with competitiveness.

There is likely to be a symmetrical link between internationalization and global competitiveness, as while foreign students may seek competitive tertiary education

systems, at the same time, an influx of foreign students is likely to improve the quality of domestic tertiary education. The link between competitiveness and internationalization of tertiary education is evidenced by the positive correlation between the Global Competitiveness Index⁵³ and the share of foreign students⁵⁴ (see Figure 6). This positive association remains after accounting for the quality of education,⁵⁵ using an international scale derived from the PISA and TIMSS scores in mathematics in 2015.⁵⁶ **The correlation between competitiveness and internationalization can also be witnessed within the pool of MENA countries.**

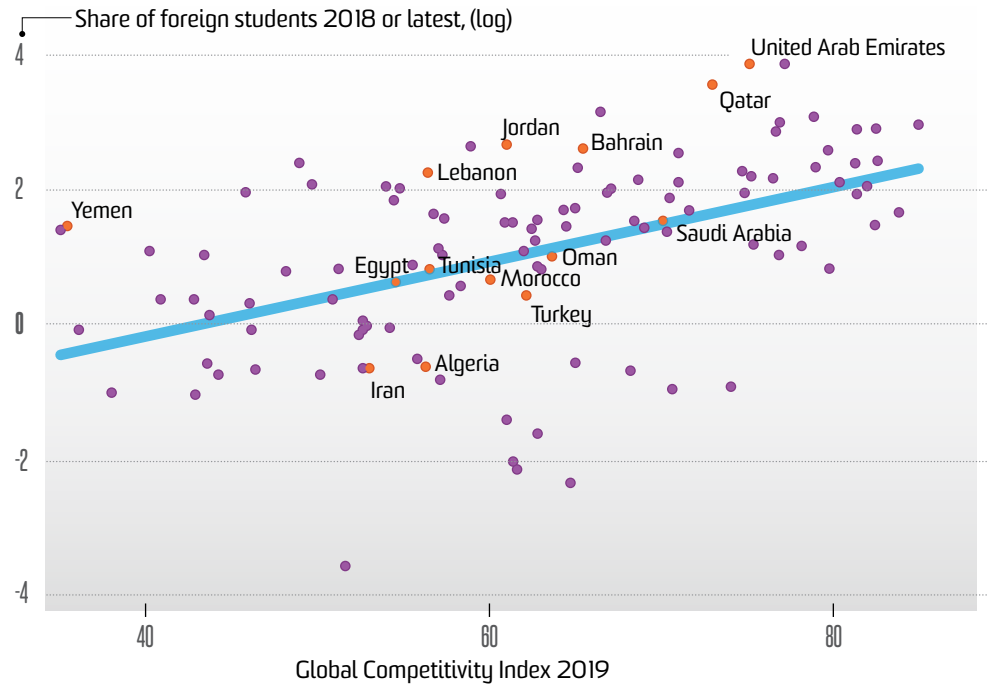
52. UK Department for Business Innovation and Skills (2011) "Estimating the Value to the UK of Education Exports." *BIS Research Paper Number 46*.

53. World Economic Forum (2016) *The Global Competitiveness Report 2016-2017*. Ed. Klaus Schwab

54. UNESCO data.

55. See Table 10 in Appendix for details.

56. Authors' calculations using PISA 2015, TIMSS 2015 and TIMSS 2011; see Table 12 in Appendix for details.

FIGURE 6 Correlation between GCI and share of foreign students in 2018

Source: Authors' calculation using UNESCO and GCI data

Read: Each dot represents a country. For instance, Oman has a global competitiveness index of 63.6 and the share of foreign students in log is about one, which means that the share of foreign students in Oman is about 2.7% (since $\ln(2.71)=1$). Data is 2018 by default for foreign students or the latest year available and 2019 for GCI.

2. QUALITY OF TERTIARY EDUCATION

49. Quality and internationalization of tertiary education are closely related.

Internationalization can and should contribute to the improvement of the quality of tertiary education and, conversely, quality of education is a driver for student mobility.

50. Enhancing the international dimension of teaching, research and service brings value added to the quality of tertiary education systems. Exchanges with peers, adapted methods of teaching, innovative solutions, introduction of common standards and development of communities of practice, mutual learning, cross-cultural understanding, and foreign language

acquisition are all likely to increase the quality of tertiary education. International cooperation and exchange are also expected to contribute to the quality of processes and outcomes at the individual, project, institutional and even system levels.

51. Internationalization of education can thus be seen as an instrument to enhance the quality of education systems, especially if this process focusses on so-called "21st century skills and values"⁵⁷ (cognitive skills, socio-emotional skills, technical or job-relevant skills, and digital skills) allowing the youth to meet today's and the future's labor market needs.

⁵⁷. In general, 21st century skills are considered as those that allow people to live and succeed in today's world and enhance their employability, thus facilitating their personal and economic development. They include: interpersonal skills, knowledge of foreign languages, flexibility, intercultural understanding, etc.

52. However, empirical evidence on the links between the quality of tertiary education and internationalization remains scarce, perhaps due to the fact that no widely used comparative assessment of university students' skills exists at the international level. Two indirect measures of tertiary education quality are nevertheless invoked to help illustrate the connections between internationalization and quality of tertiary education, although they are not exempt from criticism, due to their methodological limitations or narrow approach. First, the Global Competitiveness report, prepared by the World Economic Forum, embeds indirect assessments of tertiary education quality at the national level, based on polls of business leaders. Second, international rankings of universities tend to be used as a proxy of quality on an international scale.

53. At the country level, the quality of tertiary education as perceived by business leaders is positively correlated with the share of foreign students. On average, over the period 2008-2018, the correlation is around 0.53. There is also a positive correlation between the evolution of the perceived quality of education within a country over a three-year period and the evolution of the share of foreign students hosted.⁵⁸ The data does not allow for the assertion of the direction of causality, however, since this is likely to go both ways. Well-reputed education systems may attract more foreign students, while, at the same time, universities may be incited to improve the quality of their services in order to be able to attract foreigners.⁵⁹

54. Internationalization of colleges and universities tends to improve their

performance. Using data from the Times Higher Education university rankings (THE) from 2011 to 2018, one can compare the evolution of the internationalization processes of the world's top universities and their quality improvement. This ranking embeds five different indicators measuring respectively (i) the quality of teaching, (ii) the volume of research activity, (iii) the relevance of this research looking at citations, (iv) the partnerships with industries, and (v) internationalization. This latter indicator reflects the share of foreign students, the share of foreign staff, and the collaboration with foreign researchers.⁶⁰ The four dimensions of university performance can be regressed over the internationalization scale of the previous year to verify whether internationalization does improve the quality of university services. The econometric model is as follows; see (Eq1), with x_t^j being the quality indicator (respectively teaching, research, number of citations and industry income) during the year t at university j and I_{t-1}^j the internationalization indicator at the same university the previous year. A dynamic panel regression with fixed effects (denoted e_j) is used:

$$x_t^j = \rho x_{t-1}^j + \beta I_{t-1}^j + \alpha + e_j + \varepsilon_t^j \quad (\text{Eq1})$$

The coefficient β measures the impact of internationalization on the evolution of quality.

55. As displayed in Table 3, all components tend to be improved by internationalization. When the internationalization indicator increases by

58. See Table 13 in appendix for details.

59. We recognize that the correlation represents only a general trend: this does not rule out the existence of countries with lower quality education who nonetheless host high numbers of international students.

60. As mentioned above, internationalization is about more than these three elements alone. The correlation found here, then, is admittedly somewhat weaker, considering that here, due to a lack of qualitative data, we use only these indicators.

one unit,⁶¹ the teaching indicator increases by 0.05 units, the research index increases by 0.11 units, the citations index increases by 0.14 units and the industry income increases by 0.052 units. All these coefficients are statistically significant. Consistently with what can be found in the literature, however, the impact of internationalization on teaching, although positive, remains modest.⁶²

TABLE 3

Panel regression of the dimensions of tertiary education quality on past internationalization outlook

EXPLAINED VARIABLE	TEACHING	RESEARCH	CITATIONS	INDUSTRY INCOME
Lagged variable	0.15	0.25	0.47	0.43
T stat	(8.7)***	(14.3)***	(30.2)***	(26.3)***
Lagged internationalization	0.05	0.11	0.14	0.052
T stat	(4.7)***	(6.9)***	(6.1)***	(2.1)*
Within R2	0.04	0.09	0.33	0.24
Number of obs.	3410	3410	3410	3202
§Number of universities	975	975	975	971
Panel regression with Fixed effects				

(***) and (*) respectively indicates statistical significance at 0.1 and 5% level.

Source: Authors' calculation using THE rankings.

3. INFLUENCE

56. Internationalization can contribute to building the country's reputation on the global and regional scenes. This is one of the main arguments made when governments use it as a tool for "soft diplomacy" as part of their foreign policy.⁶³ Student mobility, in particular, enables stronger links between the host country and international students. This special relationship fosters exchanges and reinforces influence through the establishment of trust and permanent links among people and a deepened knowledge

of the country. Several countries have included tertiary education international outreach as a key component of their diplomacy policy and operations. This is mainly achieved through fostering student and staff exchanges, but also by stimulating the provision of joint or dual degrees, providing standards and curricula, and supporting the teaching of their country's language. Many countries worldwide have established international cultural and academic centers such as the Cervantes Institutes (Spain), Confucius Centers

61. All the indexes are rated from 0 (minimum) to 100 (maximum).

62. See Ward, Colin (2001) *The Impact of International Students on Domestic Students and Host Institutions*, University of Victoria, for a literature review on the subject.

63. "Soft diplomacy" or "soft power" is defined by Joseph Nye (2003) as "the ability to get what you want by attracting and persuading others to adopt your goals. It differs from hard power, the ability to use the carrots and sticks of economic and military might to make others follow your will"

(China), Alliance Française (France), Goethe Institutes (Germany), etc. Attention is also given to binational programs and to the training of elites from partner countries in specialized schools through bilateral exchanges agreed between countries.

57. This relationship between business, diplomacy, and tertiary education, is apparent in students' mobility statistics. In the MENA region, we see the presence of students from countries with economic and political ties to the host countries. Examples include the significant number of Malaysian students in Egyptian universities, which may have supported the creation of economic ties between the two countries; and political and economic cooperation underlying the presence of Iranians in Qatar, to mention some.

4. EMPLOYABILITY THROUGH SKILLS ENHANCEMENT

58. The importance of socio-emotional "soft", "21st century" skills for employability is today widely acknowledged.⁶⁴ Globalization, digitalization, and the resulting rapidly-changing labor markets are changing both the nature of work and the skills required for entry to the labor force, pushing this emphasis on the development of transferable, transversal, employability skills, and employers are placing increasing importance on the possession of these skills in their potential employees.

59. Employability is one of the widely expected outcomes of tertiary education, and internationalization can have a key role to play in increasing it. Many studies have identified clear connections between study abroad and the development of employability skills;⁶⁵ others have shown increases in employability through internationalization "at home" activities (see Soria and Troisi, 2014; Parsons, 2009; section below).

60. Being exposed to internationalized education, then, can enable students to acquire these skills, thereby enhancing their employability. It can give them the opportunity to build self-confidence, increase interpersonal skills and intercultural understanding, learn languages, build business networks, know more about themselves, and engage with the world beyond their countries' borders. These benefits of internationalization can be seen as motivations for students, but also for states: improving their young populations' skills and employability can be considered as investing in and raising the level of human capital.

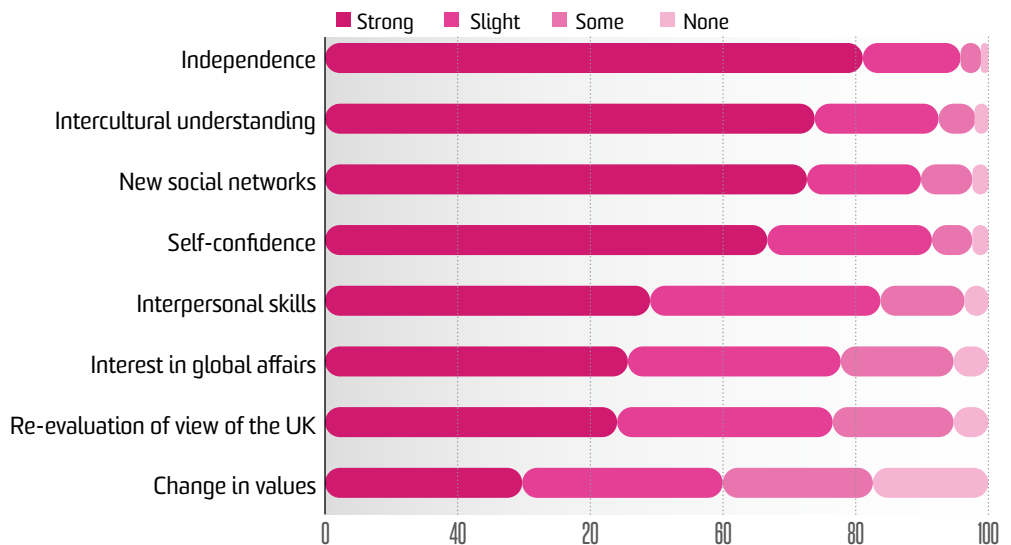
61. Looking at student mobility, the well-documented correlation between international experience and improved employability means that the acquisition of 21st century skills is one of the push factors for study abroad. On Figure 7, UK respondents express how they perceived their time abroad as boosting some of those skills.

64. Some examples confirming this in the literature include the OECD, ILO, and World Bank 2016 Report "Enhancing Employability", the revisions made to the World Economic Forum's Global Competitiveness Index in the framework of the "4th Industrial Revolution", the European Commission's 2014 Erasmus Impact Study, the Worldwide Educating for the Future Index, QS's 2018 "Global Skills Gaps in the 21st Century" report, amongst others.

65. For a selection of these, see: Jones, Elspeth (2019) "Employability in Transnational Education", Chapter 11 in Coelen, Robert and Gribble, Cate (eds.) Internationalization and Employability in Higher Education. Routledge: London and New York; and the case studies given in: Matherly, Cheryl and Tillman, Martin (2019) "Linking Learning Abroad and Employability", Chapter 1 of the same volume.

FIGURE 7

Perceptions of extent of potential personal impacts of time spent abroad for UK respondents who had been mobile



Source: UK HE International Unit and British Council, 2015

62. Undoubtedly, the most visible and impactful student mobility program is the Erasmus Program, launched in 1987 by the European Commission; see Box 3.

BOX 3

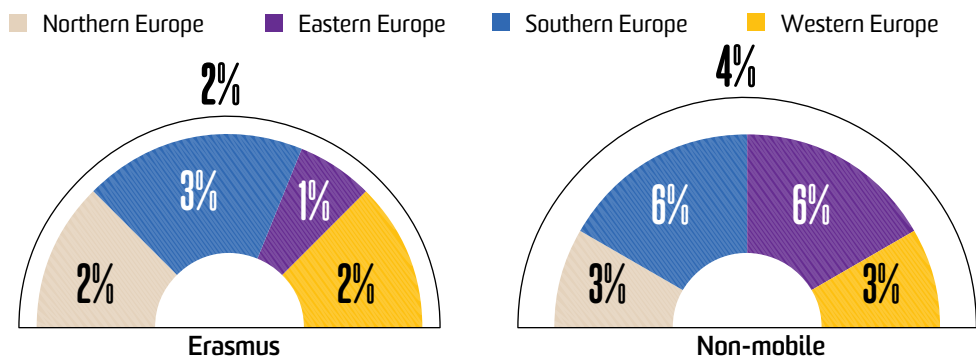
The Erasmus program

- The European Union (EU) recognizes international education as a tool for promoting cultural, social, political and economic understanding and cooperation. The EU-wide student mobility **Erasmus program** has been in place since 1987, and, capitalizing on its success, in 2004 the EU introduced the Erasmus Mundus program.
- **Erasmus Mundus** promotes the EU as an excellence center in learning around the world. As a cooperation and mobility program in the tertiary education field, it supports top-quality master's courses and strengthens the attractiveness of European tertiary education in developing countries. The Erasmus Mundus project provides EU-funded scholarships to enable both EU nationals and developing country nationals to undertake its prestigious master's programs, organized by consortia of well-reputed universities from across the EU and worldwide.
- **Erasmus+** (2014-2020) is the new EU umbrella program for education and training which includes the traditional Erasmus exchange program, the Erasmus Mundus program, and other initiatives. Erasmus+ is a funding scheme to support activities in the fields of education, training, youth, and sport, and is made up of three key actions: mobility, cooperation, and policy.

63. According to the Erasmus Impact Study Regional Analysis,⁶⁶ which assessed the impact of the European exchange program, more than 95 percent of surveyed employers consider skills such as team work, planning and organization, the ability to adapt to and act in new situations, communication, and analysis and problem-solving, highly important for the recruitment and professional development of their employees. The same study showed that most Erasmus students perceived an increase in these skills, based on a pre- and post-mobility experience analysis.

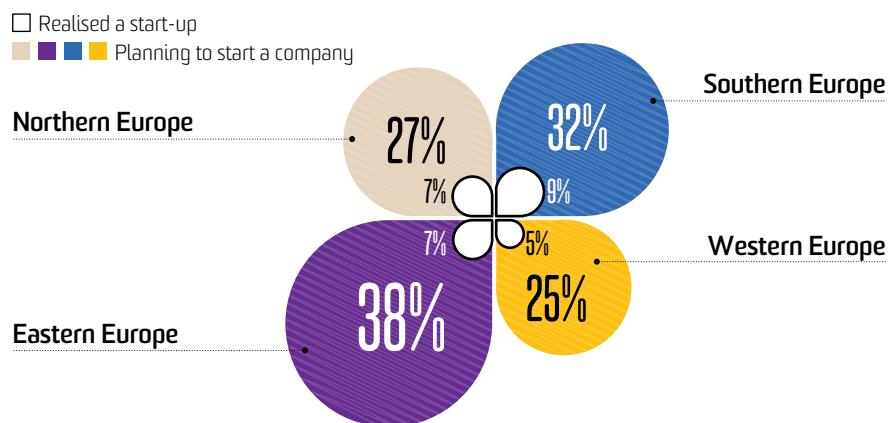
64. The study also showed the Erasmus program to be positively correlated to improved career prospects: when comparing the percentage of alumni in management positions five to ten years after graduation, Erasmus alumni were found in management positions significantly more often than non-mobile alumni. Moreover, Erasmus has also been instrumental in reducing unemployment levels for youth taking part in the program (see Figure 8) and stimulating entrepreneurship (see Figure 9).

FIGURE 8 Long term unemployment of Erasmus and non-mobile alumni (more than 12 months after graduation)



Source: The Erasmus Impact Study Regional Analysis, European Commission, 2016

FIGURE 9 Start-ups realized or planned by Erasmus alumni



Source: The Erasmus Impact Study Regional Analysis, European Commission, 2016

⁶⁶. European Commission, 2016.

65. The Erasmus program, then, has clear benefits for its participants, developing their skills and boosting their employability, as shown above. However, despite the existence of a certain number of grants and scholarships, **not all students are able to participate, due to financial and other obstacles, and the fact that it is essentially a European initiative and not a global one.** One way in which the programs could be further improved would be if a larger number of students could participate, through the broadening of the programs' reach.⁶⁷

66. However, **student mobility is not the only element of internationalization that has been demonstrated to have positive effects on skill development and employability.** Some studies have found increases in soft skills both through study abroad *and through* internationalization "at home".

67. Parsons (2009) showed that **both contact with international students and internationalized curricula have been beneficial to students in the U.S. and Australia, improving their intercultural competence and "world-mindedness".** Travelling abroad to study was also significantly correlated with such skills gains.⁶⁸

68. Sample (2013) also showed that **students who studied one semester abroad and who benefited from an international curriculum saw their intercultural sensitivity increase substantially.**⁶⁹ Soria and Troisi (2014) studied the effects of internationalization

"at home" and the effects of study abroad on the development of students' global, international and intercultural competencies. They found that **participating in some on-campus global or international activities (such as enrolling in global/international coursework and attending internationally/ globally themed lectures and conferences) may actually benefit the development of these competencies more than participating in study abroad.**⁷⁰

69. This evidence of the positive effects to be gained through internationalization without requiring students to be mobile is welcome, given that globally, a very small proportion of tertiary education students are mobile. It demonstrates that **internationalization's benefits are much more wide-ranging than if they were reserved for the few who are able to travel abroad for their studies.**

70. One of the more recently developed aspects of internationalization is Collaborative Online International Learning (COIL), which offers a clear concrete example of the ways in which **internationalized education can boost employability** and prepare students for entry into 21st century labor markets. Technological advances, together with global transformations, mean that increasing numbers of people work remotely, in "virtual teams". COIL-enhanced modules are one element of international education that aim, amongst other objectives, to prepare students for this kind of work; see Box 4.

67. Interestingly, although the Erasmus Program was originally conceived to stimulate student mobility within Europe, its Erasmus+ version includes related efforts aimed at supporting mobility to and from other countries, including an initiative known as the EU-Southern Mediterranean Cooperation which includes related work with countries in the region. See <https://ec.europa.eu/assets/eac/erasmus-plus/factsheets/regional/erasmusplus-regional-south-med2017.pdf>

68. Parsons, R. L. (2009) "The Effects of an Internationalized University Experience on Domestic Students in the United States and Australia." *Journal of Studies in International Education* 14(4): 313-334

69. Sample, S. (2013) "Developing Intercultural Learners Through the International Curriculum." *Journal of Studies in International Education* 17(5): 554-572.

70. Soria, K. M. and Troisi J. (2014) "Internationalization at Home Alternatives to Study Abroad: Implications for Students' Development of Global, International, and Intercultural Competencies." *Journal of Studies in International Education* 18(3): 261-80.

RATIONALE

In the context of an increasingly globalized world, people are required to work remotely and in “virtual teams” more and more. Yet tertiary education institutions, although often used to collaborating on research, usually have little experience in intensive collaborative networking in pedagogy. In parallel, the internationalization of tertiary education is on the increase and much attention is focused on how students “at home” might best benefit from the skills gains and boosts in employability that students who take part in study abroad are assumed to have access to. Collaborative Online International Learning (COIL), then, offers a way for students to develop the soft skills required and provides them with training for employment in the expanding world of virtual teams. It also provides a cost-effective, “at home” internationalization strategy which can reach all students, mobile or not.

WHAT IS COIL?

COIL uses the Internet and “virtual classrooms” to enable students to collaborate across borders, offering its students veritable active and “experiential” learning. COIL-enhanced modules are those in which at least two classrooms and at least two teachers (in different countries) are involved, in which the teachers co-create shared syllabus, leading to collaborative student learning. COIL-enhanced modules usually last between five and seven weeks, and can

take place fully online or, more usually, “blended” – using a mixture of face-to-face teaching in physical classrooms as well as online learning in virtual ones.

In order for COIL-enhanced modules to be the most successful, several elements are to be taken into account. Different time zones, different languages, and variable reliability in terms of internet connection can all have effects that need to be monitored, as well as the fact that participants will come from different countries, cultures and institutional settings, and so have varying expectations about the courses. Developing rapport and trust may be more difficult in an online classroom and so particular attention needs to be paid to making this effective; “ice breaker” activities may be a good starting point here. Indeed, the nature and the success of such modules depends on all of these elements and more, as well as on the subject, type of partnership, the countries and institutions involved, etc. COIL is as such not a one-size-fits-all technique; rather, it must be adapted accordingly.

BENEFITS

COIL represents a unique approach to internationalization of the curriculum for several reasons. It does not entail an expensive transformation of the institutions involved or high costs for the students, so is a good option for lower-income contexts; fees (if any) are usually charged only at the home

71. Rubin, Jon (2019) “Collaborative Online International Learning (COIL): Now Preparing Students for International Virtual Work”, Chapter 15 in Coelen, Robert and Gribble, Cate (eds.) *Internationalization and Employability in Higher Education*. Routledge: London and New York

institution. It also avoids administration difficulties in that credit for COIL courses is usually only given by the home institution. In terms of skill development and employability, the development of COIL can be seen as one response to the predicted 1.3 billion people worldwide who will be working remotely by this year.⁷² It aims to develop the key skills required for such a working environment and give them real-life experience of

virtual or remote collaborative work. Unlike most other courses delivered by tertiary education institutions, COIL-enhanced modules aim to more deeply connect people and cultures, and leverage students' local knowledge: the COIL module "is all about understanding the perspective of those with whom one studies and works collaboratively, so it can also set the stage for working in international virtual teams".⁷³

72. Esbin, Howard (2017) Training Industry: Turning Virtual Strangers into Virtual Teams: Best Practices, cited in Rubin, 2019

73. Rubin, 2019, p.194

4.

TERTIARY EDUCATION AND ITS INTERNATIONALIZATION IN THE MENA REGION

1. CONTEXT OF TERTIARY EDUCATION

71. The MENA region has been referred to as the “cradle of higher education”.⁷⁴ Indeed, situating the region’s tertiary education in its historical context allows us to see its long and rich history: some of the first tertiary education institutions in the world were found in MENA. Al-Karaouine University, Fes, Morocco, was founded in 859 AD, with Al-Azhar University in Cairo following in 970 AD, more than a century before the establishment of Europe’s first universities.⁷⁵

72. In recent decades, there has been a remarkable quantitative expansion of tertiary education in the region. In the contemporary era, and according to the modern understanding of “university”, in 1950, there were only three universities in MENA: Damascus University (founded

in 1923), Cairo University (1925) and Alexandria University (1942).⁷⁶ Explosions in the number of institutions in recent years raised the number of universities in the region to 395 in 2008, however, and in 2018 there were 762,⁷⁷ marking a doubling of the number of institutions within a decade. In addition, there are thousands of non-university tertiary education institutions.

73. Despite this quantitative increase, quality remains an issue for many of those institutions, and the region faces challenges in terms of the capacity of the institutions compared to the growing social demand for tertiary education.

74. In terms of education spending, countries in the MENA region have invested a significant share of their fiscal resources in education. For decades, countries were spending much more

^{74.} Devarajan, Shanta (2016) The Paradox of Higher Education in MENA. Future Development blog, Brookings. Available at: <https://www.brookings.edu/blog/future-development/2016/06/27/the-paradox-of-higher-education-in-mena/>

^{75.} Such an ordering is somewhat contested, mostly due to semantics (the meaning of the word “university” etc.: some of the institutions in MENA were essentially centers of Arabic and religious studies), but scholars agree that MENA has some of the oldest tertiary education institutions in the world.

^{76.} Althbyta, Mileihan Maad (2000) Universities: Establishment, concept and functions: descriptive study, Journal of Education, No. 54, Kuwait University

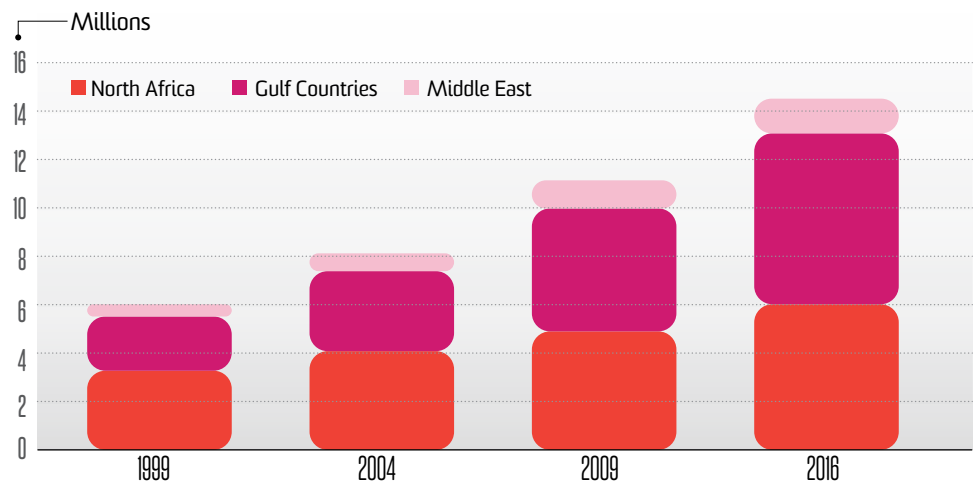
^{77.} International Association of Universities, World Higher Education Database; see Table 14 in appendix for details.

than the global average on education and, although this high level of spending peaked at the turn of the century, MENA governments on average currently invest similar amounts on education as the world average, at around 4.3 percent of their GDP. Some countries continue to invest much more than average: Tunisia spends over 20 percent of its national budget on education (6.6 percent of its GDP), compared to the OECD average of 12.7 percent, with Iran investing 20 percent of its budget on education, and Oman 15.3 percent, for example.⁷⁸ This has made it possible for the region to develop good infrastructure, to achieve nearly universal basic education, and to extend post-basic education coverage while reducing gender discrimination. These efforts have pushed up the enrolment rate in upper secondary from around 51 percent in 1999 to around 65 percent in 2016.⁷⁹ As more youth have been completing secondary education,

the demand for tertiary education has risen dramatically.

75. Considering enrolment, the number of students in tertiary education in the region rose from around 6 million in 1999 to more than 14.6 million in 2016, which marks a jump of 143 percent, as shown in Figure 10. About one third of this enrolment boost is directly connected to demographic changes, as the population aged 19 to 23 grew by 29.2 percent, increasing from 23.2 million in 1999 to 30.1 million in 2016.⁸⁰ The expansion of access at the upper secondary level accounts for another third of the student population growth. The remaining third is explained by the large increase in the share of students deciding to continue in tertiary education institutions instead of leaving school after completing secondary education. In 1999, only 40.4 percent of upper secondary pupils were entering tertiary education after completion, compared to 54.3 percent in 2016.⁸¹

FIGURE 10 Enrolment in tertiary education in the MENA region, number of students



Source: Constructed by the CMI using UNESCO data.

Total enrolment in tertiary from UNESCO by countries was clustered in three groups: North Africa: Algeria, Egypt, Libya, Morocco, and Tunisia; Middle East: Jordan, Lebanon, Palestine, and Syria; Gulf countries: Bahrain, Djibouti, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates, and Yemen.

78. See the World Bank's "World Development Indicators" at databank.worldbank.org, for latest years available. The world average spending on education is 4.9 percent of GDP.

79. UNESCO data. Gross enrolment rates except for Bahrain, Saudi Arabia and Oman where Net enrolment rates are used.

80. United Nations Population Division, World Population Prospects 2017.

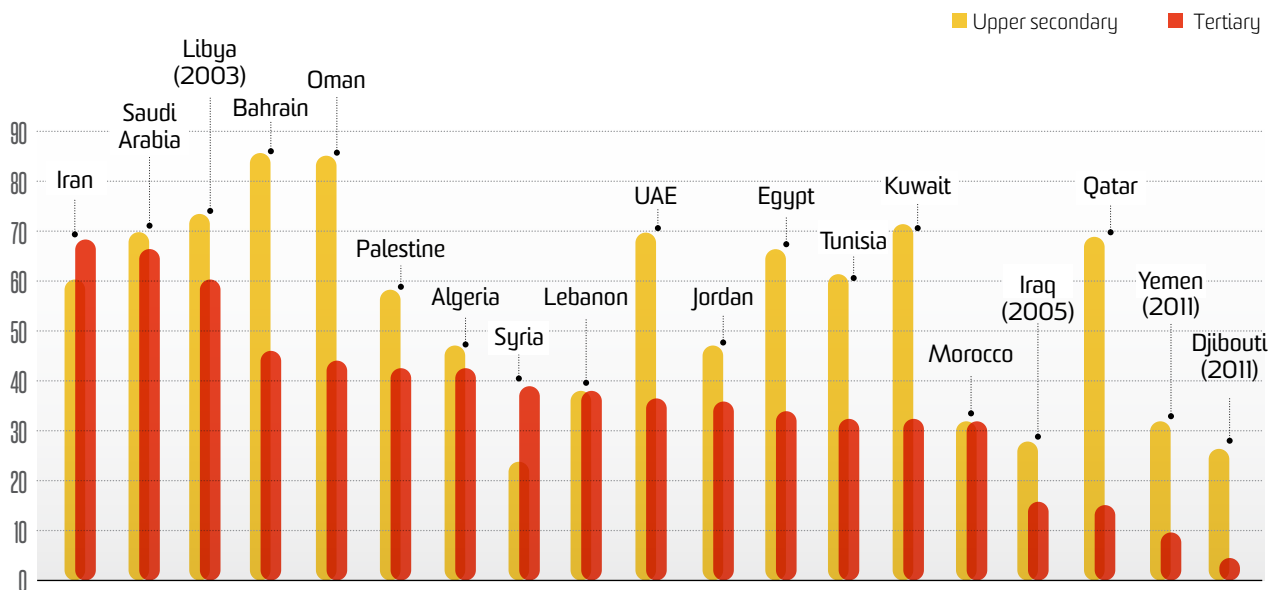
81. Projected Net enrolment rates using UNESCO data.

76. Access to tertiary education nevertheless differs substantially across the MENA region. The Gross Enrolment Ratio⁸² (GER) (Figure 11) varies from about 70 percent in Iran to 5 percent in Djibouti. These differences in access to tertiary education are explained by a variety of factors. In addition to access-related policies, national policies, or the economic context, such as urbanization or standards of living, may also play a role. A panel data analysis shows indeed that on average, when access to upper secondary increases by 1 percent all other things equal, access to tertiary increase by 1.2 percent.⁸³ Additionally, when urbanization increases by 1 percent, access to tertiary education in

the MENA region improves by 2.8 percent. Once access to secondary and urbanization are accounted for, standards of living, as measured by real GDP per capita, do not have any discernible additional impact on access to tertiary education in the region. These empirical results also underline the importance of national policies, as national factors account for most of the variance in the GER. Participation in tertiary education is high in Iran and Saudi Arabia, where enrolment rates rest above 60 percent. It is, on the contrary, rather limited - below 20 percent - in Iraq, Qatar, Yemen and Djibouti. In the rest of the MENA region, access to tertiary education benefits between 30 percent to 40 percent of youth.

FIGURE 11

Enrolment ratios, tertiary (gross) and upper secondary (net), both sexes (%), 2016⁸⁴



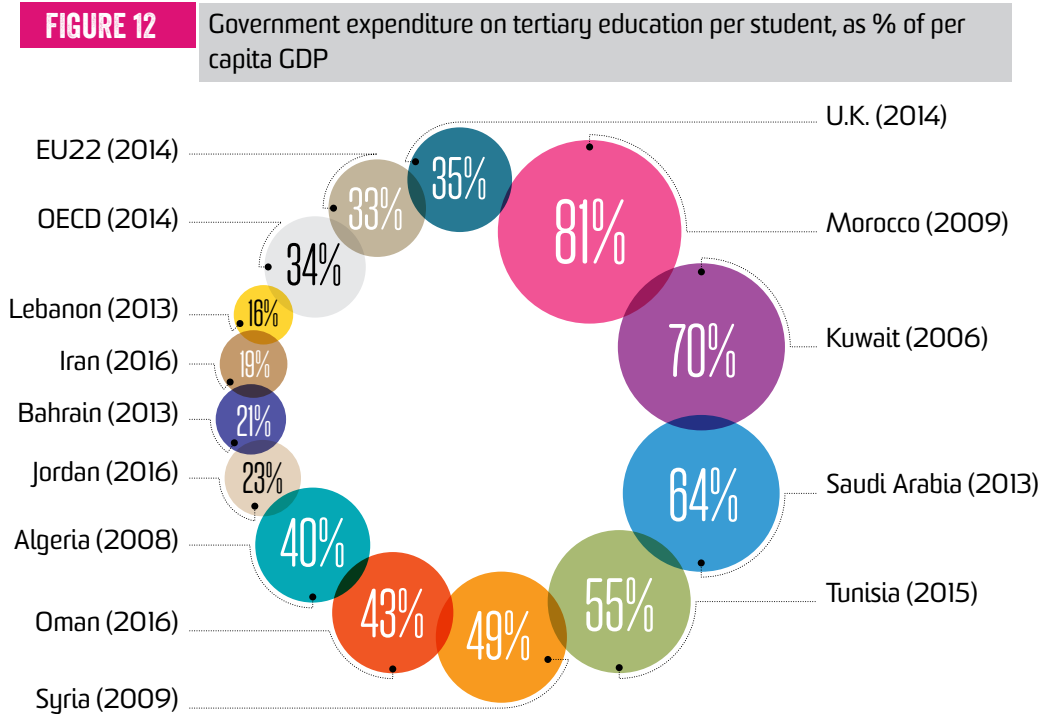
Source: Authors' calculation using UNESCO data. Upper secondary enrolment rates are reported net, which takes into account repetitions and late entry. Tertiary enrolment ratios are reported gross as there is no international data on repetitions in university and age of entry.

82. The GER is the number of pupils enrolled in each level of education, regardless of age, expressed as a percentage of the population in the theoretical age group for the same level of education. It is calculated as $100 \times (\text{Tertiary enrolment} / \text{Five-year age cohort})$, following theoretical age of secondary education completion.

83. See Table 9 in appendix for details.

84. The tertiary enrolment rates for some of the smaller GCC countries may be underestimated due to the large cohorts of migrants – of the relevant age group – residing there.

77. Governments are investing significant resources in tertiary education in MENA. Faced with a growing student population, many governments of the region have responded with increased support to tertiary education. In many MENA countries for which data is available, per capita spending in relative terms tends to be higher than in industrialized countries. Even countries in the region facing financial constraints such as Morocco or Tunisia, tend to spend, in relative terms, more than OECD countries (see Figure 12). Nevertheless, per student spending appears relatively lower in Jordan, Bahrain, Iran and Lebanon.



Source: Authors' calculation using UNESCO data. Government spending on tertiary education, expressed as a percentage of GDP, is divided by the number of students enrolled at the tertiary level in the corresponding year (UNESCO data) and multiplied by the total population of the country (World Bank data).

78. However, despite the resources invested and a rising demand, education systems in MENA have fallen short of their promise for social and economic inclusion. International assessment tests show that the success in expanding access has not led to the necessary learning required for economic inclusion and development; education quality remains low in many countries across the region.

79. It is somewhat difficult to quantify education quality since there is no one single indicator that can measure it. Nevertheless, several indicators do exist

– all somewhat indirect, albeit to different extents – which, taken together, can help demonstrate this constant. Two of these indicators have been referred to earlier in this report: university rankings, such as those compiled by Times Higher Education (THE), and the Global Competitiveness Index (GCI), developed by the World Economic Forum. University rankings have been criticized for several reasons, including for the way in which criteria are selected, for the system's consequence of encouraging homogenization of universities, and other limitations. In the absence of global comparable assessments, rankings tend to

be used as a proxy for education quality. As described above, **MENA universities generally lag behind, with the best university in the region ranking lower than 200th in the 2019 THE, and all but three universities ranking below 300th.**⁸⁵ With respect to the GCI, although two-thirds of its data comes from perceptions of business leaders, and so may be regarded as rather subjective, three out of the 12 pillars used to calculate the GCI are directly related to education. Here once again, **most MENA countries have competitiveness ratings below the world average.**

80. Other indicators used in this report are students' test scores in secondary education, measured in mathematics, science and reading, compiled by PISA and TIMSS. These show MENA to be among the lowest ranked regions in terms of quality of education (see Figure 13a); Bahrain, the country with the highest math proficiency, remains below Cyprus, the least-well performing EU country. On average, the math proficiency of 15-year-old students in MENA countries is falling behind what 13-year-olds can achieve in the other regions, with the exception of South Asia and Sub-Saharan Africa. TIMSS data also shows that in Egypt, only 42 percent of eighth-grade students have a basic understanding of science, while in Morocco, only 36 percent of fourth-grade students reached minimum reading literacy levels.⁸⁶

81. Types of teaching methods and time devoted to different subjects may also affect the quality of education. World Bank statistics show a heavy focus on memorization in MENA, to the detriment of the development of critical thinking skills: the numbers of eighth-grade students being asked to memorize facts, procedures and rules in MENA is almost twice the

international average. Moreover, the proportion of time devoted to subjects such as religious education is once again well above the OECD average, meaning for less time for other subjects.⁸⁷

82. With regard to tertiary education, the World Bank has also found that higher autonomy in tertiary education institutions is correlated with better performance, and that most MENA universities have very limited autonomy over academic, staffing and financial matters. Lastly, the reforms that may be necessary in order to improve education quality may also be stalled at the political level, since turnover in the leadership of education ministries has been very high across the region: between 2010 and 2017, Egypt had seven higher education ministers, Jordan six, and Lebanon four.⁸⁸

83. The picture painted by this ensemble of indicators regarding the quality of education in MENA is one that shows MENA seriously lagging behind. Moreover, it can be argued that youth are leaving school without the required skills for life and work, leading to higher risk of exclusion from political, social, and economic life, with limited opportunities and voice in public life.

84. The recently launched World Bank 2018 MENA regional educational strategy identified the following four sets of tensions that are holding back education in the region: credentials and skills, discipline and inquiry, control and autonomy, and tradition and modernity (some of these referred to in the preceding paragraphs). It also signaled that to realize the potential of education, MENA countries need to establish education systems that prepare all students for a productive and successful future, by a framework which includes: a concerted push for learning that starts early

^{85.} This low performance may be explained to some extent by limitations in English language facility: some of the biggest rankings focus heavily on research output and faculty mobility, and language obstacles may prevent many MENA universities from figuring more prominently in such rankings.

^{86.} See World Bank, 2018b.

^{87.} Ibid.

^{88.} Ibid.

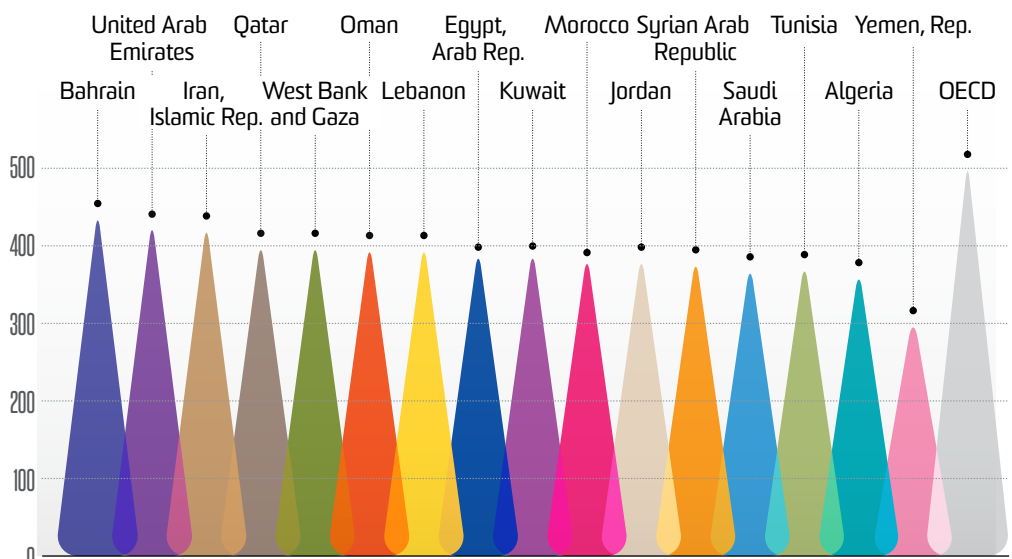
for all children regardless of background; a stronger pull for skills by all stakeholders in the labor market and society that involves coordinated multi-system reforms within and beyond the education system; and a new pact for education at the national level with a unified vision and shared responsibilities and accountabilities.⁸⁹

85. The MENA region has a large reservoir of untapped human resources, considering that it has the world's highest unemployment rate among the youth (see Figure 13b). Around 26 percent of youth in the MENA region are unemployed, and only 40 percent of youth work in the formal sector. Moreover, with a female labor force participation rate at 20.6 percent, MENA is the region where women participate the least in the labor force at the global level.⁹⁰ Youth unemployment in the region displays unusual features by international comparison: (i) youth unemployment

rates are 3.7 times higher than for adults; (ii) the school-to-work transition is very lengthy; (iii) youth are facing high levels of job informality; (iv) more than one third of the unemployed are educated to tertiary level; (v) unemployment rates are higher among women than among men and (vi) unemployment rates tend to increase with the level of education, something which is unheard of outside of the region.⁹¹ In sum, with the exception of the Gulf states, and in particular in comparison with the OECD countries, education quality remains low and unemployment much higher than the OECD average. This suggests that **low quality education systems may indeed contribute to youth unemployment by not providing youth with the relevant skills to succeed on local labor markets.** Of course, other factors should be considered as well, such as the limited capacity of the employer's sector, and a traditional assumption that scarce public sector jobs provide long term stability, etc.

FIGURE 13 Education quality and youth unemployment

FIGURE 13A Education quality in MENA (PISA scale) and the OECD

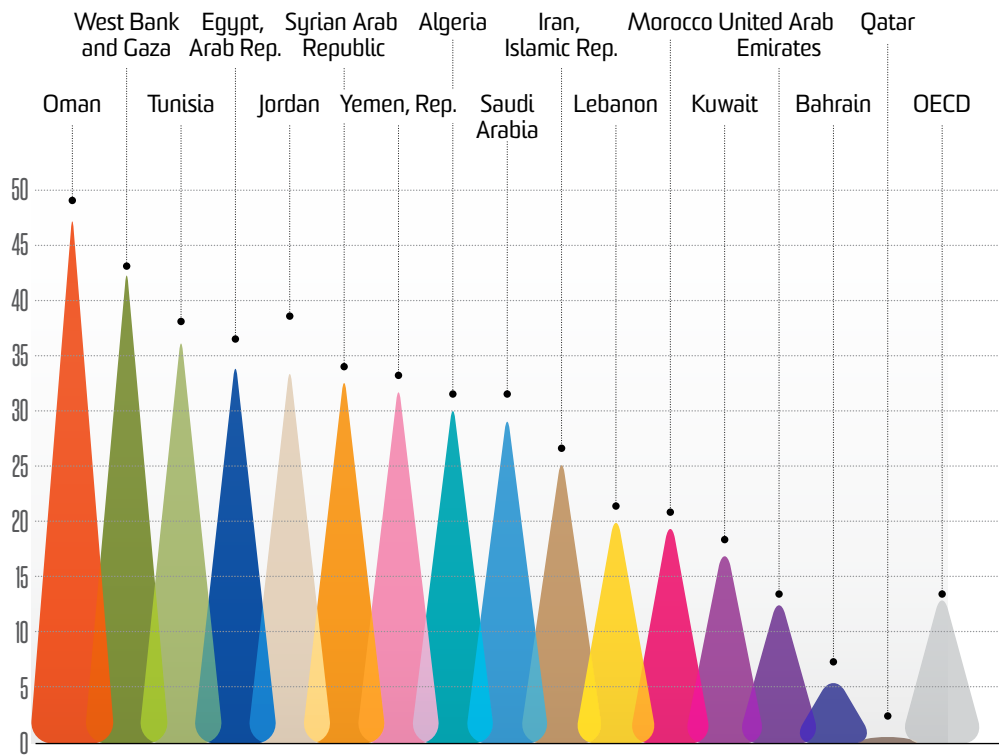


⁸⁹. Ibid.

⁹⁰. International Labour Organization, ILOSTAT database. Data retrieved in September 2018.

⁹¹. ILO (2015) Global Employment Trends for Youth 2015: Scaling up investments in decent jobs for youth. ILO: Geneva

FIGURE 13B Youth unemployment rates (%) in MENA and the OECD (2016)



Source: ILOSTAT database (for countries), OECD statistics (PISA), EIA (TIMSS)
 Education quality scale computed by CMI using math scores in PISA and TIMSS (8th grade) in 2015.
 Youth unemployment rate is reported in percentage. Education quality is commensurate to the PISA scale, where the OECD average is set to 500 and the OECD standard deviation is set to 100.

86. While the public sector did guarantee employment to nationals with tertiary education degrees in past generations, this is no longer the case today, although the share of public employment remains larger in the region than in the rest of the

world (see Table 4). Furthermore, the private sector is also unable to absorb the increasing numbers of educated young adults, and the mismatch between the labor supply and demand is resulting in social and economic exclusion.

TABLE 4 Share of public employment 2012-2015. selected countries

Saudi Arabia	67.9%
Egypt	25.7%
Tunisia	22.6%
Occupied Palestinian Territory	22.0%
Yemen	19.4%
Iran, Islamic Republic of	16.8%
Qatar	10.9%
Bahrain	9.7%
Morocco	9.1%
Rest of the world	17.5%

Source: Authors' calculation using ILO data

87. Social and economic exclusion generates more grievances and increases the probability of the youth embracing extremist ideas. A study conducted by the World Bank in 2016⁹² showed a strong association between a country's male unemployment rate and the propensity of that country to supply terrorist organizations with foreign recruits. In contrast, the study indicated that there is no direct correlation between low levels of education and radicalization, and individuals who resort to violence are far from being uneducated or illiterate. Indeed, 69 percent of Daesh recruits interviewed in the study report to have at least a secondary education and a large fraction claim to have gone to university, while only 15 percent left school before high school and less than 2 percent are illiterate.

88. Moreover, studies demonstrate the low social and political returns to education in the MENA region. While tertiary education has been shown to have

positive effects on MENA youth's political and social values, these effects are much less pronounced when compared to tertiary education's emancipatory effects on youth globally speaking.⁹³

89. In Table 5, the econometric model is as follows, see (Eq4) with x_i^j , the social development indicator of individual i in country j , h_i^j a human capital index derived from education attainment, a_i^j the age and S_i^j the gender:

$$x_i^j = \beta_a a_i^j + \beta_s S_i^j + \beta_h h_i^j + \varepsilon_i^j \quad (\text{Eq4})$$

The coefficient β_h measures the marginal impact of human capital on the social development indicators. Table 5 displays that when human capital increases by one unit, the gender equality index, for instance, increases only by 0.021 unit in MENA countries, versus 0.025 unit in non-MENA countries, demonstrating how the benefits of education on social development outcomes tend to be lower in the MENA region.

92. Devarajan, Shanta et al (2016) "Economic and Social Inclusion to Prevent Violent Extremism." *Middle East and North Africa Economic Monitor* (October), World Bank, Washington, DC

93. See Ishac Diwan's 2016 work on this, which takes data from the World Values Survey. In particular: *Low Social and Political Returns to Education in the Arab World*, Economic Research Forum, Policy Brief No. 17; and "Values, identities and civic participation", Chapter 2 in *UNDP Arab Human Development Report 2016: Youth and the Prospects for Human Development in a Changing Reality*.

TABLE 5

Marginal impact of human capital on social development indicators in MENA and non-MENA countries

	MARGINAL IMPACT OF HUMAN CAPITAL...		
	IN MENA	NON-MENA	DIFFERENCE
Civic activism	0.036**	0.019***	0.017
Gender equality	0.021**	0.025***	-0.004
Trust	0.008**	0.011**	-0.004
Discrimination against minorities	0.002	0.014	-0.011
Safety and crime perception	0.004	0.011*	-0.008
Support for democracy	-0.015**	-0.004**	-0.011
Propensity to justify violence	0.007**	0.017***	-0.010
Clubs & associations	0.024***	0.007	0.016
Pedagogy preference	0.012*	0.023***	-0.011

Observations are clustered by country. (*), (**), (***) indicate respectively statistically significant at the 5%, 1% and 0,1% level.

Source: Authors' calculation using World Values Survey, wave 6.

90. What this suggests is that the low quality of education in the MENA region is associated with limited social development, increasing the risk for a vulnerable and excluded youth.

2. CURRENT STATUS OF INTERNATIONALIZATION

91. Internationalization is not a recent phenomenon in the MENA region; indeed, in terms of mobility, scholars and students have moved around for centuries. Egypt's Al-Azhar University has attracted students and religious intellectuals from across Africa and Asia, and sent its academics around the world to teach, since its establishment over one thousand years ago;⁹⁴ many of the Gulf Cooperation Council (GCC) countries have also been sending students and

faculty members abroad since the late 19th century,⁹⁵ to mention some.

92. Today, in terms of attracting foreign students, many colleges and universities in the region are hardly open to foreigners, although a handful of countries – Bahrain, Jordan, Lebanon, Qatar and the UAE – are massively recruiting foreign students (see Table 6). This has the effect of pushing the *inbound mobility* figure up to 3.1 percent for the whole MENA region, despite the inbound rate in North Africa being lower than the global average.

93. In terms of *outbound mobility*, MENA students do tend to be more mobile than average. While 2.4 percent of students worldwide travel abroad for their studies, this figure rises to 4.5 percent for students from the MENA region (see Table 6).

^{94.} Radwan, M. M. (2016). Arab Republic of Egypt. In Lai, Y.M., Ahmed, A.R., & Wan, C.D. (Eds.), Higher Education in the Middle East and North Africa: Exploring regional and country specific potential. Springer: Singapore.

^{95.} Alsharari, N. M. (2018) Internationalization of the higher education system: an interpretive analysis. International Journal of Educational Management, 32(3), 359-381

TABLE 6

Share of inbound and outbound students as percentages of total enrolment (average of 2016, 2017 and 2018) by countries

COUNTRY	SHARE OF INTERNATIONAL STUDENTS (INBOUND)	SHARE OF STUDENTS ABROAD (OUTBOUND)
United Arab Emirates	48.6	6.6
Qatar	35.8	23.3
Jordan	14.3	8.3
Bahrain	13.1	13.6
Lebanon	9.0	7.8
Saudi Arabia	4.7	5.1
Oman	2.7	13.2
Tunisia	2.2	7.9
Egypt	1.8	1.2
Morocco	1.9	5.0
Algeria	0.5	1.7
Iran (Islamic Republic of)	0.5	1.4
Syria	-	6.7
MENA	3.1	4.5
World	2.4	2.4

Source: Authors' calculation using UNESCO data

94. A significant challenge being faced in MENA regarding internationalization efforts is the limited attractiveness of the region for engagement with peer institutions in other parts of the world. Worldwide, very few tertiary education institutions surveyed by the International Association of Universities consider MENA as a high priority for their internationalization partnerships.

Moreover, unlike in the case of the majority of other regions, where institutions tend to give first priority to other institutions from the same region, even institutions from *within* the MENA region mostly prefer to develop partnerships with institutions in other regions. In *other* words, in terms of international partnerships, the MENA region is rather marginal on the global scene⁹⁶ (see Figure 14).

⁹⁶. Marinoni, Giorgio (2019) Internationalization of Higher Education: An Evolving Landscape, Locally and Globally. International Association of Universities 5th Global Survey

FIGURE 14 Geographic priority in internationalization policy (2019)

GEOGRAPHICAL PRIORITY ATTRIBUTED TO:	REGION					
	AFRICA	ASIA AND PACIFIC	EUROPE	LATIN AMERICA & CARIBBEAN	MIDDLE EAST & NORTH AFRICA	NORTH AMERICA
Africa	1					
Asia and Pacific		1	2			1
Europe	2	2	1	2	1	2
Latin America & Caribbean				1		2
Middle East & North Africa					2	
North America	3	3	3	3	3	

Source: International Association of Universities

95. Despite this limited interest in MENA institutions by those in other regions, there are nonetheless many concrete examples of partnerships. This may be most apparent in the Gulf countries, with many types of collaboration, partnership

and twinning models present. Regarding the Maghreb, see Box 5 and Box 6 for two examples of cross-Mediterranean partnership: the Franco-Tunisian university for the Mediterranean and Africa and the Euro-Mediterranean University of Fes.

BOX 5 University for the Mediterranean and Africa

The Franco-Tunisian university for the Mediterranean and Africa (*Université franco-tunisienne pour l'Afrique et la Méditerranée, UFTAM*)⁹⁷ opened its doors for the academic year 2019-2020, welcoming its first cohort of around 250 students. Situated in Tunisia, UFTAM is the fruit of an agreement between the French and Tunisian ministries of higher education and of the cooperation between five French and eight Tunisian tertiary education institutes, amongst other partners. With programs co-taught by its reputed partners, UFTAM offers master's degrees and several other certificates to French and Tunisian

students, as well as to those from across the Mediterranean and Sub-Saharan Africa.

UFTAM's programs are based on the principle of interdisciplinarity and are designed to train the next generation of workers and entrepreneurs in the region, with a focus on employability. The master's degrees offered center around key issues for the region, including water and environment management, development and economics, and data science and new digital professions. UFTAM also offers diplomas and training designed to develop students'

97. For further information, see <http://uftam.net/>

soft and 21st century skills, innovation and entrepreneurship: these include workshops on problem-solving and innovation techniques, and courses aiming to equip students with the skills to find innovative solutions in business or to solve social problems, as well as to develop entrepreneurial spirit and to help kick start concepts and start-ups.

This collaborative project, with its focus on highly relevant study topics and skill sets for today's world, highlights a Franco-Tunisian interest in cementing the political will to develop a platform for education between Europe and Africa, contributing to the objective of the development of a regional tertiary education hub in Tunisia.⁹⁸

BOX 6

The Euro-Mediterranean University of Fes

The Euro-Mediterranean University of Fes, Morocco (*Université euro-méditerranéenne de Fès, UEMF*)⁹⁹ was established in November 2012, and is labelled by the Union for the Mediterranean (UfM). A partnership model is adopted, at institutional, academic, and socio-economic levels: partners include key Moroccan ministries (of higher education, finance and foreign affairs), a consortium of Euro-Mediterranean universities and other tertiary education institutions, and several businesses, such as Total and Credit Agricole.

With this regional approach and scope, the UEMF aims to promote exchange, intercultural dialogue, and cultural and academic partnerships in the Euro-Mediterranean region, as well as high level research and training. It acts as a platform for cooperation based on excellence in teaching and research, specifically on themes pertinent for the region: its two main areas of teaching and research are engineering and architecture, and human and social sciences.

UEMF cites as amongst its values multilingualism (working in four main languages, Arabic, English, French and Spanish), multiculturalism, and social and ecological responsibility. It also promotes entrepreneurship, supporting students in the school to work transition and in their business creation. Mobility is key at UEMF, both for students, who may undertake exchanges at Euro-Mediterranean partner institutions with the possibility of double degrees, and for faculty, who may embark on exchanges in the framework of PhD co-tutoring and joint research.

UEMF also offers several bursaries and scholarships, including for those from low incomes and for Sub-Saharan African students. With this inclusive offer, its focus on mobility and on regionally relevant areas of study, UEMF represents another key example of Mediterranean cooperation and partnership in tertiary education.

98. Galtier, Mathieu (2019) L'université franco-tunisienne pour l'Afrique et la Méditerranée ouvrira à la rentrée 2019, JeuneAfrique press article. Available online at: <https://www.jeuneafrique.com/emploi-formation/748965/universite-franco-tunisienne-pour-lafrique-et-la-mediterranee-ouvrira-a-la-rentree-2019/>

99. See www.ueuomed.org for further information.

96. Internationalization “at home” is not the easiest element of internationalization to quantify and measure, and so here we do not attempt to provide a comprehensive analysis of its status in the region. However, as detailed above, it includes elements such as the addition of international or global subjects or aspects to the curriculum: see **Box 7** for some examples of this in the Egyptian context.

BOX 7

Examples of internationalization at home in Egypt¹⁰⁰

In Egypt, several departments, programs and institutes have a focus on the study of international and regional affairs – a clear example of internationalization “at home”. These include Cairo University’s African Studies and Research Institute, African Urban Studies Center, and Center for Languages and Arabic Culture, as well as Fayoum University’s Institute for Research and Strategic Studies of Nile Basin Countries; and Zagazig University’s Higher Institute of Ancient Near East Civilization and Institute of Asian Studies and Research.

97. Online learning, or e-learning, is another technique which can be adopted when implementing internationalization “at home”, especially through the ways in which it can facilitate the creation of virtual classrooms and collaborative learning such as COIL.

98. Online learning is on the rise in MENA’s tertiary education sector: although these models of learning have been rather widely unrecognized, unaccredited, and generally models which governments or institutions in the region have been wary of, it is increasingly gaining traction. A recent study by the Open University¹⁰¹ found that while several barriers remain, there are examples of innovative practices in the region, with some countries taking trailblazing roles.

99. In case studies carried out in Egypt, Jordan, and the UAE, the Open University

found the three countries to have significant online learning dimensions in their tertiary education systems. In the UAE, government-funded education is moving towards a “no books just tablets” regime; institutions in the Emirates are developing links with online and blended learning universities around the world, as well as developing research and development programs in online learning.¹⁰² In Egypt, the Egyptian Knowledge Bank (EKB) online repository is central to the extensive reforms underway in its tertiary education sector, with all Egypt’s information needs due to be provided through it; moreover, the National e-Learning Centre is rolling out blended e-learning widely. In both Egypt and Jordan, online learning modules are increasingly accredited, with few barriers to accreditation and recognition of online qualifications in place to date in the UAE.

^{100.} De Wit et al (2019) International Mapping of National Tertiary Education Internationalization Strategies and Plans (NTEISPs), CIHE Perspectives No. 12. The Boston College Center for International Higher Education, and World Bank Group.

^{101.} The Open University (2018) Online Learning in Tertiary Education in the Middle East and North Africa. November 2018.

^{102.} An example of an online university in the UAE is Dubai’s Hamdan Bin Mohammed Smart University (HBMSU), the first accredited e-learning institution in the country. For further information, see: <https://www.hbmsu.ac.ae/>

100. In addition, there are Massive Open Online Courses (MOOCs) delivered in Arabic, often through the platform Edraak.

Numerous innovative practices were also identified, in particular in Jordan: to mention some, Edraak itself was developed by the Queen Rania Foundation to promote knowledge in the Arab world, whereas the Jamiya Project, which aims to boost access to higher education for Syrian refugees, is offering, in partnership with the University of Gothenburg, pilot online courses in Applied IT and Global Studies, delivered through a blended learning approach. Also, tertiary education institutions in the

region have partnered with leading MOOC organizations to develop content aimed at global audiences. This is the case of the partnership between Hamad Bin Khalifa University in Qatar and edX, resulting in the development and releasing of a set of courses in Solar Energy in Hot Desert Environments.

101. Through the wider adoption of online learning, MENA countries will be increasingly prepared to partner with institutions across borders and co-create collaborative and virtual exchange modules. See Box 8 for an example.

BOX 8

The Stevens Initiative at the SUNY COIL Center

The Stevens Initiative¹⁰³ provides an example of virtual exchange projects in which MENA institutions partner with those in the USA. The Initiative supports several projects across the USA and MENA and has as a main objective the building of global competence skills for young people through virtual exchange; it “combines best practices in cross-cultural education and interactive technology to enable deep, meaningful educational interactions”.¹⁰⁴ In one of these projects, the State University of New York (SUNY) COIL center was awarded the Stevens Grant to partner with MENA universities through COIL.

The SUNY COIL center ran a series of COIL courses, in partnership with tertiary education institutions in Egypt, Lebanon and Morocco, and was able to

utilize technology to connect students from MENA – an area that is often underrepresented in traditional student exchange programs. The project lasted 21 months, involving three cohorts of students, and an assessment was undertaken which showed students to have had generally positive experiences.¹⁰⁵ Students saw the COIL module as an opportunity to learn from other people (rather than from books and lecturers), to gain authentic perspectives that they may have been unfamiliar with, and to develop their soft or 21st century skills.

^{103.} See <https://www.stevensinitiative.org/> for more information.

^{104.} Stevens Initiative, 2020.

^{105.} See <http://coil.suny.edu/sites/default/files/2018-01/SUNY%20COIL%20Stevens%20Initiative%20Assessment.pdf>

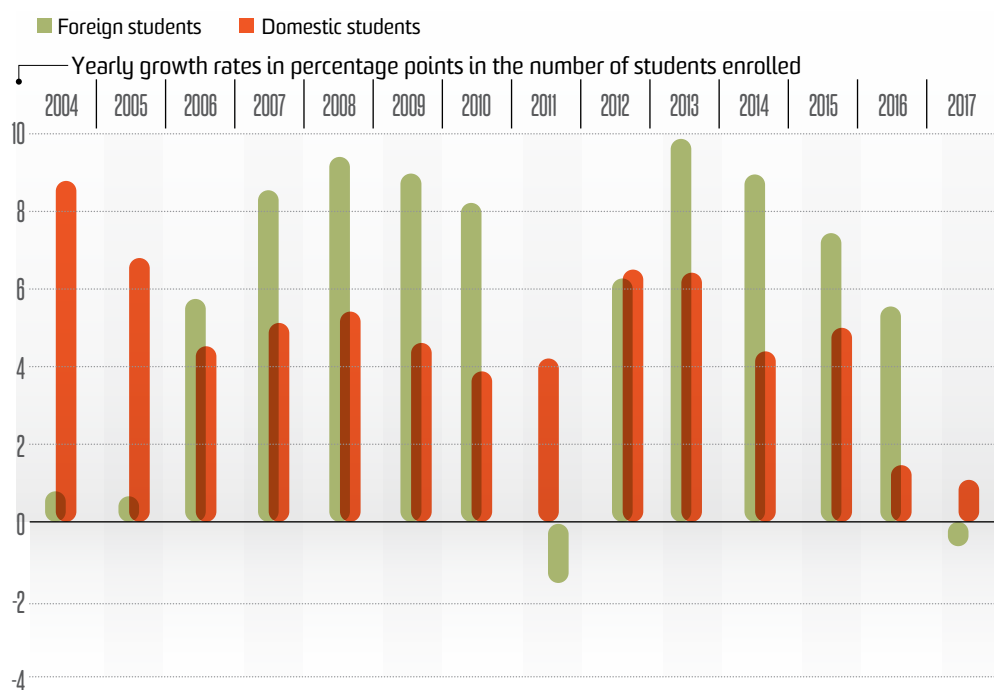
3. STUDENT MOBILITY

102. A key element of internationalization that can be analyzed to help demonstrate to what extent institutions in the MENA region are internationalizing is student mobility.¹⁰⁶ The mobility of students can be seen from two distinct points of view: from that of the country they are leaving – outbound mobility; or, from that of the country they are entering – inbound mobility. As the inflows to and outflows from are most of the time unbalanced, inbound and outbound mobility are not symmetrical; they may be explained by different factors and are of different proportions.

A. INBOUND MOBILITY

103. Percentagewise, inbound mobility, measured by the number of foreign students enrolled, has been growing steadily within the past decade in MENA. Moreover, enrolment of foreign students grew faster than domestic enrolment. Although the overall enrolment witnessed a drop in 2011 due to the Arab Spring, foreign enrolment continued climbing steadily. Inbound mobility represented about 5 percent of the total increase in enrolment between 2005 and 2015. It is to be noted that foreign enrolment decreased in 2017, but it remains to be seen if this particular year has announced a shift in foreign demand for higher education in Arab States in the coming years.

FIGURE 15 Growth of domestic and foreign students enrollment in Arab states (UNESCO definition)



Source: Constructed by the Authors using UNESCO data

^{106.} On student mobility: UNESCO data on mobile students (used frequently in this report) only includes students who undertake full degrees abroad and not short-term exchange students; indeed, data on the latter is not usually collected across the region. Moreover, “outbound” students usually have no formal connection with tertiary education institutions at home.

104. During the last decade, foreign enrolment grew faster than domestic enrolment in all MENA countries with the exception of Algeria and Saudi Arabia.¹⁰⁷

There was also an obvious positive correlation between the domestic growth and the foreign growth, as can be seen on Figure 16. In fact, the MENA countries can be divided into four types of destinations for tertiary education services to foreigners, as described in Figure 16:

- a) **Emerging destinations:** in most of the MENA countries, the domestic student population grew significantly while the foreign student population grew more dramatically. This is the case in Iran, the Gulf countries and Morocco, which together form the emerging destinations for international tertiary education. Although these countries may not be already big international players, their rapid increase in foreign students enrolled prefigures a rising international status.
- b) **Transition destinations:** Tunisia is the only country where the domestic student population declined, although the foreign student population grew by 8 percent on average per year. By opening to the outside, Tunisian institutions seek to compensate for the domestic demographic decline, putting the tertiary education system on a transition, pivoting from the domestic to the foreign market. Other countries in the region, which are likely to follow a demographic decline in the future, such as Egypt for instance, may fall into that category within the coming decades.
- c) **Closed destinations:** in Algeria, the domestic student population continued to grow at a significant rate, but foreign enrolment grew at a slow pace, reflecting the fact that the country is opening only timidly to the outside, while most of tertiary education remains closed

to foreigners. Palestine is in a similar situation of isolation, although for different political reasons, as its 14 universities are closed to foreigners due to access restriction to the Palestinian territories.

- d) **Mature destinations:** in Jordan, Lebanon and Egypt, both the domestic and foreign enrolment grew at moderate rates, as tertiary education institutions are older and more mature in these countries, in contrast with the Gulf countries and Morocco, where universities have been mushrooming only since the mid-2000s. These countries may fall in the transition category in the coming decades, as they may have to increase their foreign enrolment to compensate for declining number of domestic students.

EMERGING DESTINATIONS

105. Gulf countries are leading the growth of internationalization trends in MENA while other countries' contributions remain poor. Indeed, institutions in Qatar and in the UAE host large numbers of internationally mobile students. Gulf countries have also exerted intense efforts in hosting foreign branch campuses with foreign teaching staff. The States of the Gulf Cooperation Council (GCC) are home to many foreign branch campuses originally from Europe and North America. Initiatives such as Education City in Qatar are a good example of massive efforts towards internationalization by attracting foreign institutions while strengthening the domestic ones. Other countries in the region have opted to significantly support one or two institutions. This is the case of King Abdullah University of Science and Technology (KAUST) in Saudi Arabia and other research-oriented universities in the GCC countries which have rapidly established an academic presence globally by hiring prestigious academics from abroad.

¹⁰⁷. No data was available for Iraq, Syria and Libya.

106. Figure 17 displays on the right axis the inbound mobility rate in the countries receiving students.¹⁰⁸ The UAE and Qatar have the highest inbound mobility rates, where a huge percentage of the tertiary enrolled students are foreigners. The bulk of foreign students in these countries comes from inside the region while students from East and Central Asia only make up a small portion of the visiting students.

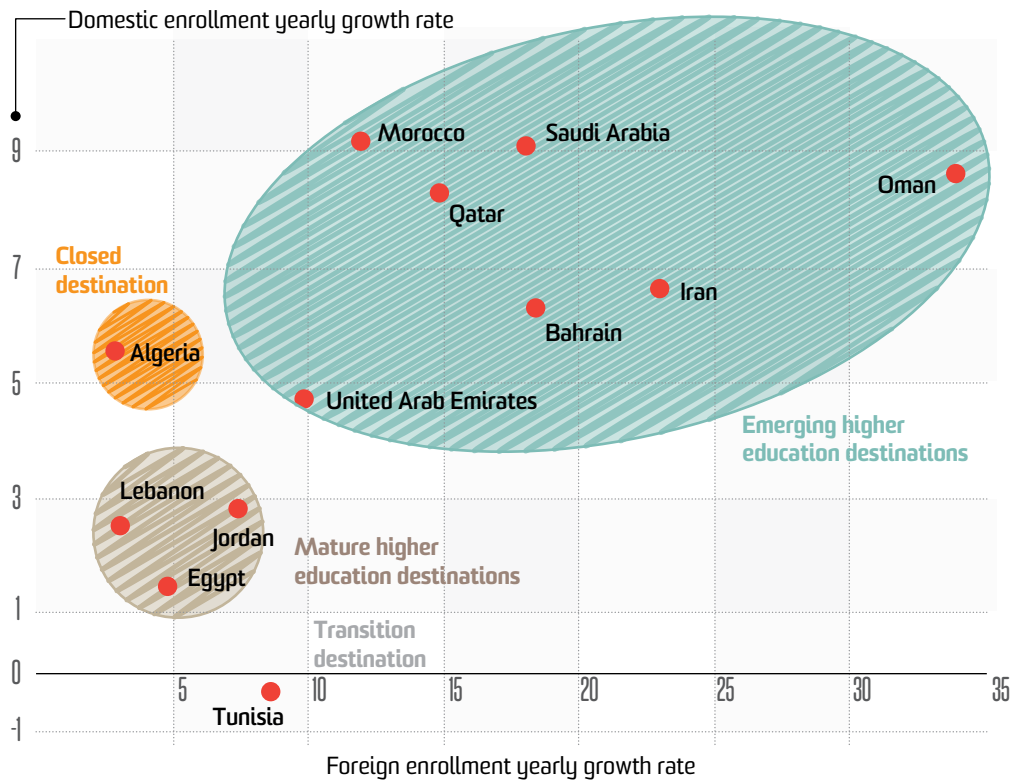
107. Qatar also ranks high as a preferred education destination nowadays by students in the Middle East. The rank is due to factors such as the presence of reputable foreign universities that have established branch campuses there, and simpler visa procedures. Qatar University has topped

the list of the world's most internationalized institutions, based on data from the Times Higher Education World University Rankings 2015-2016.

108. Considering absolute numbers, Saudi Arabia is now the largest provider of tertiary education for foreign students in the Middle East, having overtaken the UAE in 2016 (see Figure 17, left axis). With one fifth of the world's oil reserves, its universities are offering leading courses in the field of oil and gas engineering, open to foreigners. In a few years, Saudi Arabia has become the 13th destination for international students, above OECD countries like South Korea, Turkey or Switzerland.

FIGURE 16

Comparison of the annual growth rate of the domestic and foreign student population over the period 2005-2016



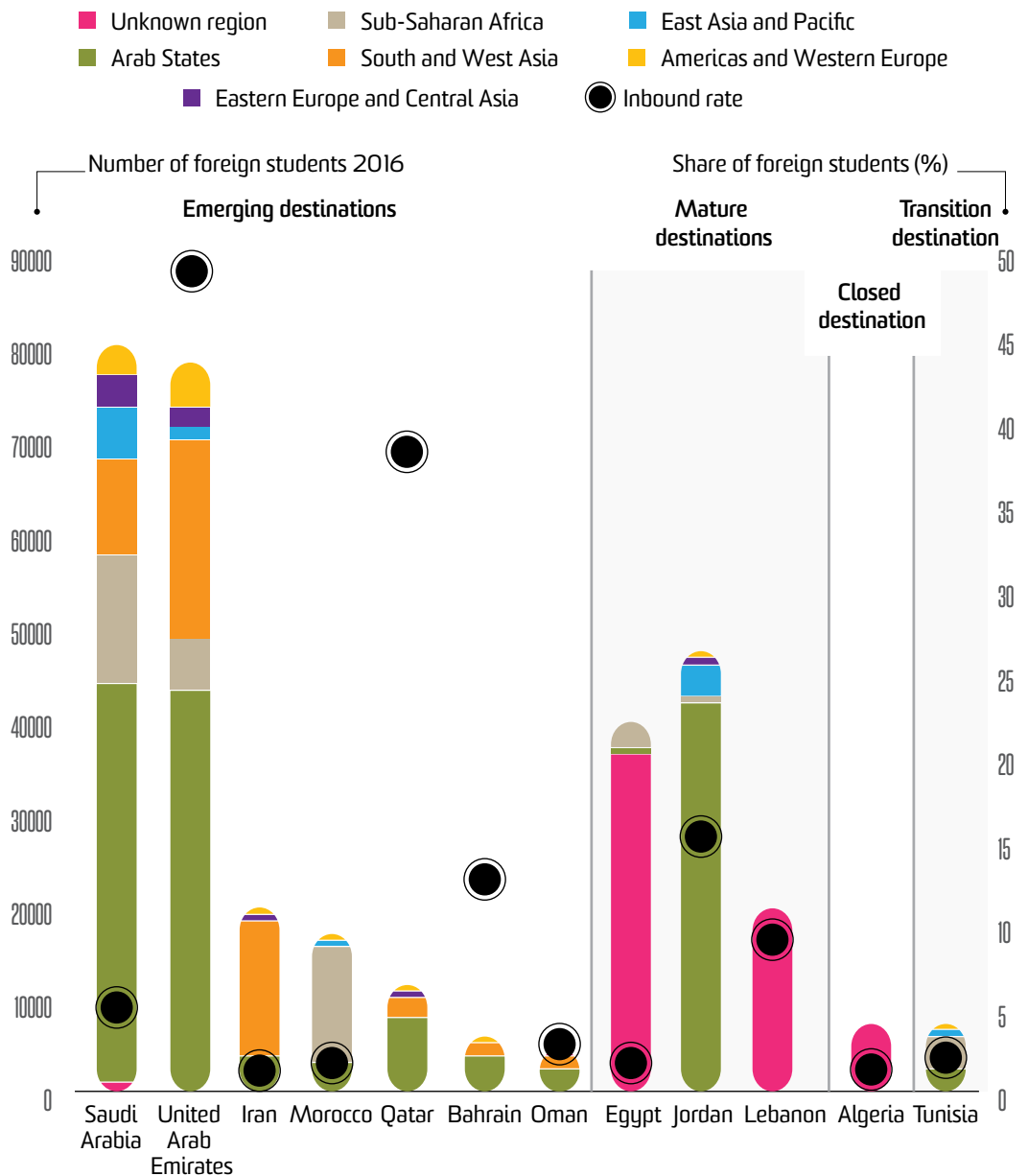
Source: Authors' construction using UNESCO data

^{108.} The inbound mobility rate is the number of foreign students studying in each country, expressed as a percentage of total tertiary enrolment in that country (UNESCO).

109. Morocco has become a significant exporter of its tertiary education services, with an offer tailored to African students, who make up three quarters of its foreign students (see Figure 17). The share of foreign students in Moroccan universities nonetheless remains fairly limited, below 2 percent, underlining the strong growth potential of the national sector in serving additional foreign students, see Figure 17.

110. In terms of both the absolute number of foreign students and its growth, Iran appears as a very dynamic market for international education. But the outreach of the country appears restricted to a handful of countries. Afghans make up 75 percent of foreign students in Iran, while Iraqis make up about 12 percent. Students from Lebanon (3 percent) and Syria (4 percent) also have a significant presence in Iranian universities.

FIGURE 17 Number of foreign students by region of origin, 2016



Source: Authors' calculation using UNESCO data

MATURE DESTINATIONS

111. Egypt, Jordan and Lebanon have been welcoming foreign students for a longer time.¹⁰⁹ And although their inflows are still rising, their growth in inbound students, about 5 percent a year, remains in line with the global internationalization movement.¹¹⁰ **Egypt has the largest tertiary education system in the MENA region** and has seen foreign universities setting up satellite campuses on its territory. Egypt has been an historical actor in enrolling foreign students, owing to: (i) limited tuition fees,¹¹¹ especially in comparison with the policy of most universities in the Gulf countries; (ii) scholarship programs open to foreigners, especially in religious studies; and (iii) prestigious universities. The popularity of Egyptian tertiary education has, however, been declining in the aftermath of the Arab Spring.

112. Jordan has been hosting a diverse pool of foreign students from the neighboring countries as well as from Malaysia (5 percent). It is the first recipient of mobile Palestinian students; Palestinian students represent one in four foreign students in Jordan. Moreover, the population of foreign students in Jordan rose by 43 percent between 2012 and 2015, following the Arab Spring and the refugee crisis. The number of Syrian students, for instance, quadrupled between 2011 and 2016.

113. In Lebanon, the number of foreign students peaked in 2011 but has been declining since then. The origin of foreign students is not known in Lebanon, so the true roots of this decline remain unclear. The

war in neighboring Syria, macroeconomic difficulties and the tense budgetary situation may have driven foreigners, as well as locals, away. The massive inflows of children and youth from Syria has been putting pressure on the Lebanese education system; universities, as well as schools, are struggling to integrate Syrian students suffering from poverty, trauma, low academic performance and lack of credentials.

OUTLIERS

114. Algeria and Tunisia appear as two outliers in a regional perspective of international education. Tunisia is currently experiencing a demographic decline which is emptying its universities.¹¹² The country has engaged in a voluntary expansion of its international education services, which can be seen as a form of compensation for this decline. Access to tertiary education could, however, still be improved, as less than one youth in three goes to university.¹¹³ But academic deficiencies of secondary school leavers, as well as the very limited returns of tertiary education due to significant constraints in the labor market, tend to cap enrolment in tertiary education.

115. Algeria is still benefiting from demographic trends at the tertiary level, thanks to a steady expansion of access cumulated with sustained demographic growth. The country remains isolated from outside nations on many levels, with restriction on borders also affecting the entry of international students, who only account for 0.5 percent of total enrolment in tertiary education.¹¹⁴

¹⁰⁹. These countries, together with Syria and Yemen, have also traditionally welcomed students who came to study Arabic, although recent civil wars in the region may have reduced their number.

¹¹⁰. The total number of international students grew by 4.8 percent per year between 2005 and 2016.

¹¹¹. Foreigners pay twice the tuition fees of local students and they must settle their payment in British or U.S. currency. Students from Syria, Sudan and Libya pay the local fees.

¹¹². The number of outbound students has remained stable as well since 2009, demonstrating that enrolment in higher education is not skewed by a massive flight of young people abroad.

¹¹³. According to UNESCO data, the gross enrollment rate at tertiary level was 32.5% in Tunisia in 2016 and 36.8% in Algeria in 2015.

¹¹⁴. UNESCO data.

GEOGRAPHICAL OUTREACH

116. The bulk of international students in MENA countries come from within the region, with 45 percent coming from the Middle East and 10 percent from North Africa (see Figure 18). Students from Sub-Saharan Africa represent about 17 percent of international students in MENA, with students from Sudan and Nigeria each amounting to 2 percent of international students. From an in-depth country analysis, we can see that Gulf countries primarily attract students from the MENA region, whilst northern African countries mainly attract those from Sub-Saharan Africa.

117. The oil-producing Arab countries are the main destinations of the interregional mobile students within the MENA region: the GCC countries, notably using their financial incentives and stable security and political conditions, compete with the attractions of the western states. The

freedom of movement for GCC citizens may matter in students' choices, facilitating intra-GCC students' mobility.

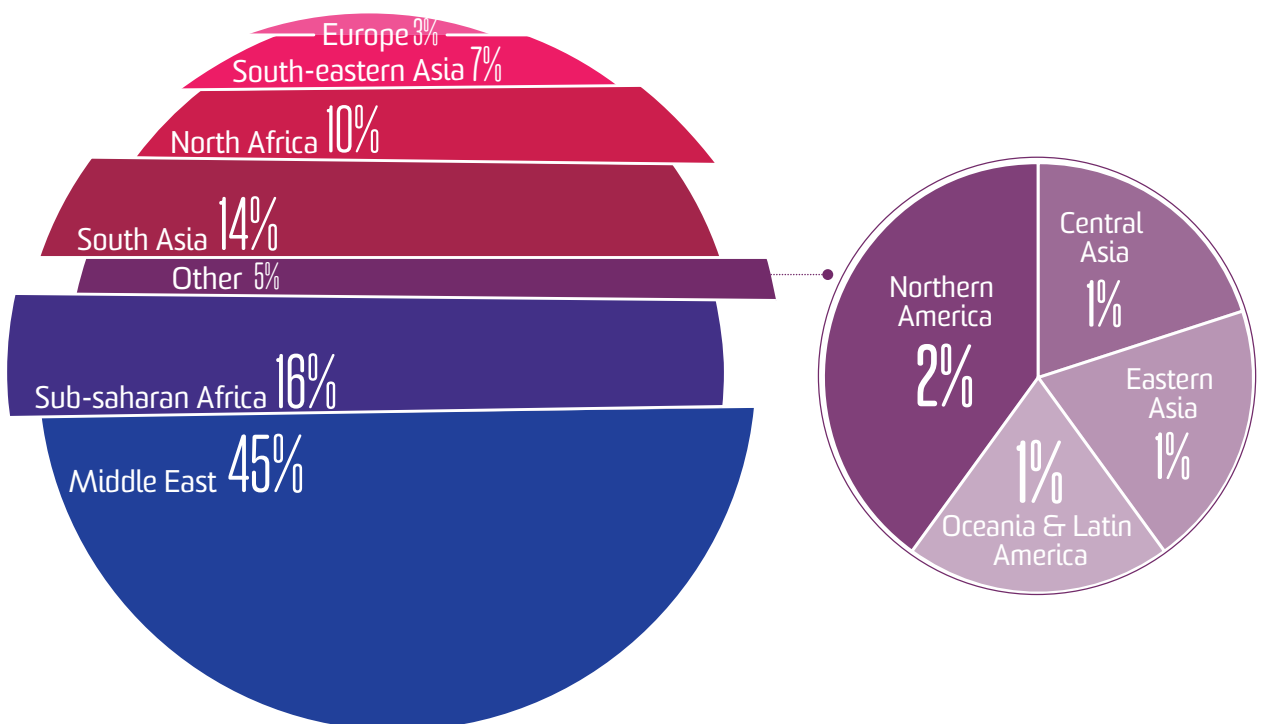
118. A fair number of foreign students in MENA come from South Asian countries (about 14 percent), most of whom come from India and Pakistan.

119. MENA universities are also attracting students from South-East Asia, especially Malaysia (about 3 percent of all foreign students) and Indonesia (1.6 percent). This may be influenced by the bilateral agreements that exist between MENA countries and other Muslim-majority countries in Asia.

120. The region hardly attracts any students from Europe, North America, Latin America, Oceania or East Asia, who combined, amount to less than 8 percent of the foreign students in MENA.

FIGURE 18

Distribution of foreign students studying in MENA by region of origin, 2016



Source: Authors' calculation using UNESCO data

121. Universities of the MENA region are less likely to attract students from well-performing education systems than universities of other regions may. One can roughly gauge the average skills of foreign students arriving in a given country by using the education quality scale derived from international assessment of the country of origin of the student. Such a procedure is likely to underestimate the skills of the students, as those youth who access tertiary education are likely to score above the average of the upper secondary population. This simple calculation, using the PISA and TIMSS results from 2015 (see Table 12 in Annex) gives, nevertheless, a rough proxy of the likely academic level of foreign students from one country to another. The average foreign student around the world comes from a country where education quality, measured at the age of 15, is about 445 points (see Figure 19), corresponding to two years of schooling below the OECD

average. The average foreign student in a MENA country comes, however, from places where education quality is about 378 points,¹¹⁵ meaning two years below the average global student and 4 years below the average OECD 15-year-old.

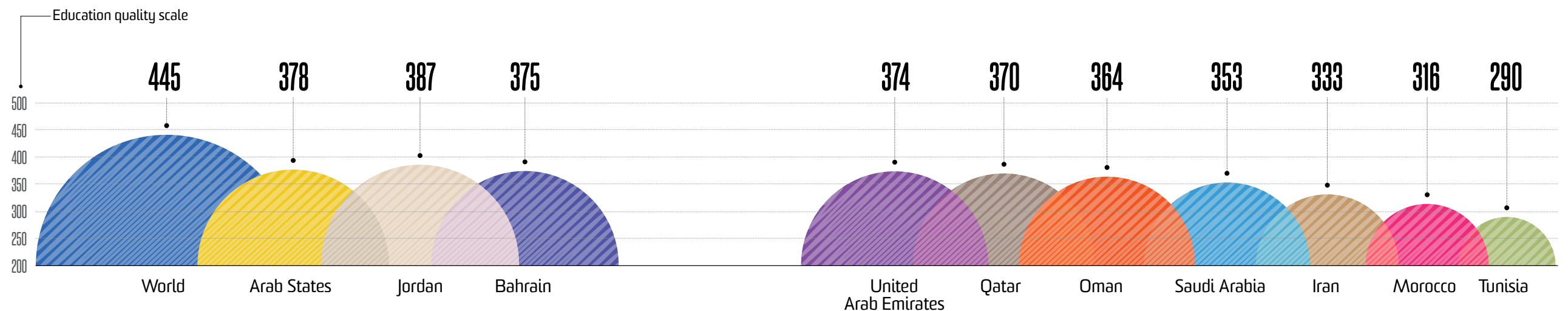
122. Across the region, MENA countries clearly differ in terms of the average academic performance of the countries of origin of the foreign students they enroll. By using the average education quality scale of the country of origin as a proxy for the foreign students' skill levels, one can compare the recruits across the region. The results are displayed in Figure 19 and are consistent with the difference in policies chosen by the region's countries. The Gulf countries, which have been making large investments and opening private institutions with high fees are indeed attracting more skilled students. Morocco and Tunisia, which are more focused on Sub-Saharan

Africa and have developed a less costly economic model, are consistently attracting less proficient students. Saudi Arabia is in an intermediary position, as its outreach is wider and larger, covering at the same time Sub-Saharan Africa, the Middle East and Muslim majority nations of Asia. The position of Iran is less favorable, as it is focusing on enrolling students from Southern Asia, who come from lower quality education systems. Finally, the favorable position of Jordan is unique as its economic model does not rely on high-quality/high-fees private universities, but benefits rather from massive inflows of Palestinian students (about 25 percent of the inbound students), who are among the most proficient from a regional perspective.¹¹⁶

123. The origins of students in each MENA country vary in line with the cultural and diplomatic ties that are reflected in their

deliberately targeted policies (see Table 7). These can explain, for instance, the connections between countries with Shiite populations, the presence of Malaysian students or the pivot of Morocco toward Western Africa. Saudi Arabia has diversified its recruitment, although it is not attracting students from North Africa besides Egyptians. The UAE are very much focused on South Asia (India and Pakistan) and the Middle East, but they also attract students from OECD countries, which underlines their ambition of playing on a global scale. Jordan is very focused on its neighboring countries, but also attracts students from South-East Asian countries. The outreach of Iran is clearly facing the East, with students from Central and South Asia, although its foreign students are overwhelmingly from Afghanistan. Morocco has a very diversified foreign student population, albeit almost entirely from Sub-Saharan Africa.

FIGURE 19 Average education quality scale of inbound students



Source: Authors' calculation using UNESCO and World Bank data

Computations could not be done for Egypt or Lebanon, as the origin of foreign students is not fully known. The quality scale of education is derived from the PISA (2015) and the TIMSS (2015 & 2011) surveys, see Table 12 in appendix.

^{115.} Education scales have been projected using a regression model featuring per capita GDP, education attainment of adult and secondary and tertiary enrollment rates for countries which never participated in an international standardized student assessment.

^{116.} According to TIMSS 2-15 results, the average PISA math score in Palestine would be around 400 points, just below Qatar, the top performer in MENA.

TABLE 7

Top countries and regions of origin of foreign students in selected countries in MENA

- Middle East ■ Gulf countries ■ Other Asian countries
■ North Africa ■ Sub-Saharan Africa ■ OECD countries.

SAUDI ARABIA	UNITED ARAB EMIRATES	JORDAN	IRAN	MOROCCO
Syria	India	Palestine	Afghanistan	Ivory Coast
Yemen	Syria	Iraq	Iraq	Mali
Egypt	Jordan	Syria	Syria	Guinea
Jordan	Egypt	Kuwait	Lebanon	Senegal
Pakistan	Oman	Malaysia	Pakistan	Niger
Palestine	Pakistan	Oman	China	Mauritania
Sudan	Palestine	Saudi Arabia	Tajikistan	Congo
Nigeria	Yemen	Yemen	Yemen	Cameroon
India	Iraq	Egypt	India	Gabon
Indonesia	Iran	Bahrain	Turkey	Comoros
Afghanistan	Sudan	Libya	Azerbaijan	Chad
Lebanon	Saudi Arabia	Thailand	Nigeria	Burkina Faso
Mauritania	Nigeria	Qatar	Palestine	Tunisia
Mali	Lebanon	China	Italy	France
Kuwait	Comoros	United States	Bahrain	Guinea-Bissau
China	United States	Philippines	Ethiopia	Djibouti
Bangladesh	Kuwait	Lebanon	United Kingdom	Togo
Eritrea	Bahrain	Turkey	United States	Benin
Canada	Canada	Nigeria	Kazakhstan	Libya

Source: Authors' calculation using UNESCO data.

Read: The size of the font is proportional to the number of foreign students.

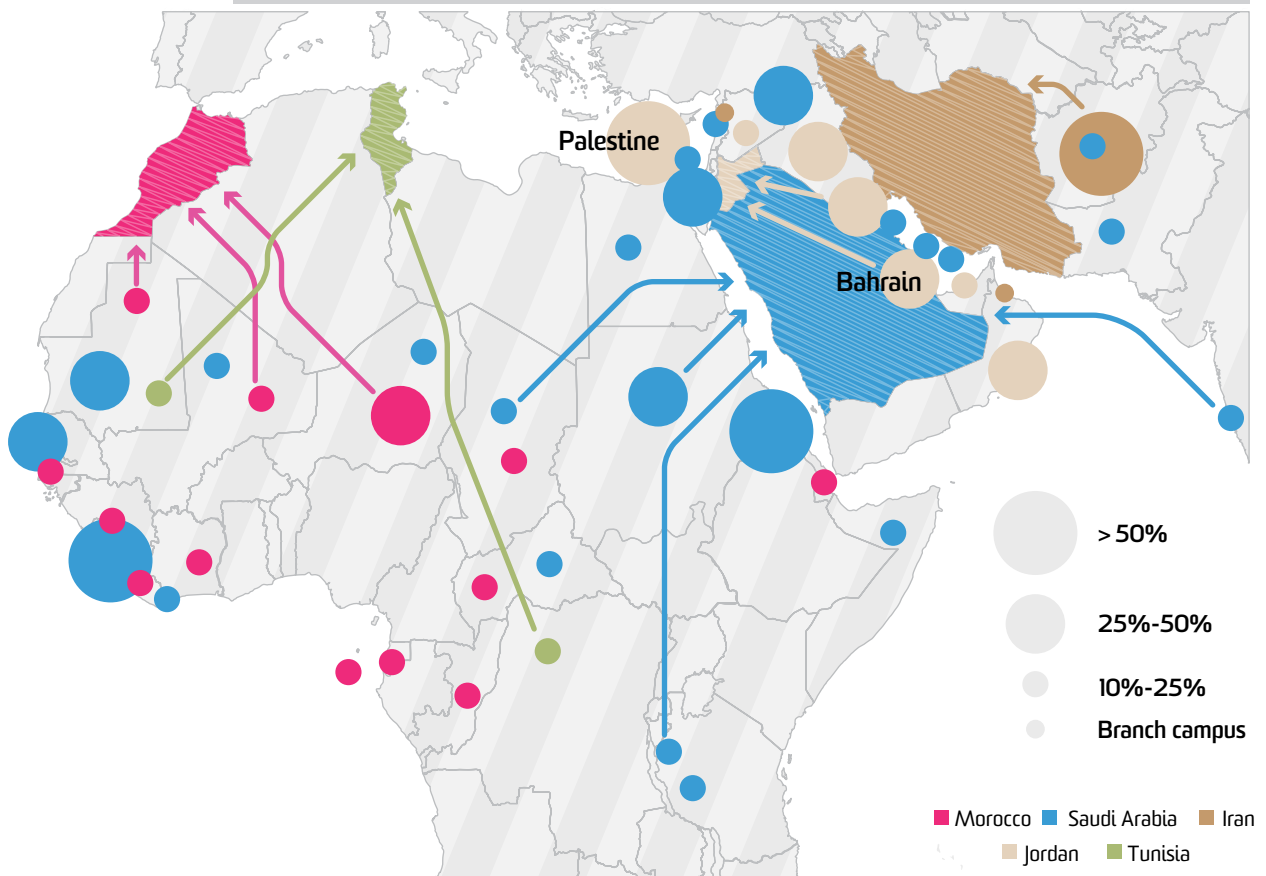
124. Looking at the origin of international students can also help illustrate to which extent MENA countries gain influence through internationalization. Figure 20 shows selected MENA countries which manage to attract high proportions of other given countries' outbound students. The countries of origin of these mobile students are shown on Figure 20 when at least 10 percent of their outbound students travel to one of those MENA countries to study. Saudi Arabia, Morocco and Jordan are the most influential countries in the region on that level.

125. The area of influence of Saudi Arabia tertiary education extends to Southern Africa (Burundi and Uganda), Southern Asia (Maldives, Pakistan) and Western Africa

(Sierra Leone, Gambia). It even attracts about 17 percent of the travelling students from Panama. The influence of Moroccan universities does not reach the Arabic Peninsula, but covers more thoroughly Northern and Central Africa, down to Congo. Jordanian universities are also attracting significant shares of foreign students, but its influence is limited to Middle East and Gulf countries. Tunisian universities have significant influence in two African countries only, Mauritania and the Democratic Republic of the Congo. The influence of Iran is limited to the neighboring Afghanistan, where it captures, however, 60 percent of the outbound students. Iran also has two branch campuses in Lebanon and the United Arab Emirates (UAE).

FIGURE 20

Share of internationally mobile students studying in Saudi Arabia, Morocco, Jordan, Tunisia and Iran*, 2016



Source: Authors' calculation using UNESCO data

Read: Between 25 and 50% of students from Mauritania travelling to study abroad do so in Saudi Arabia, between 10 and 25% study in Morocco and between 10 and 25% study in Tunisia.

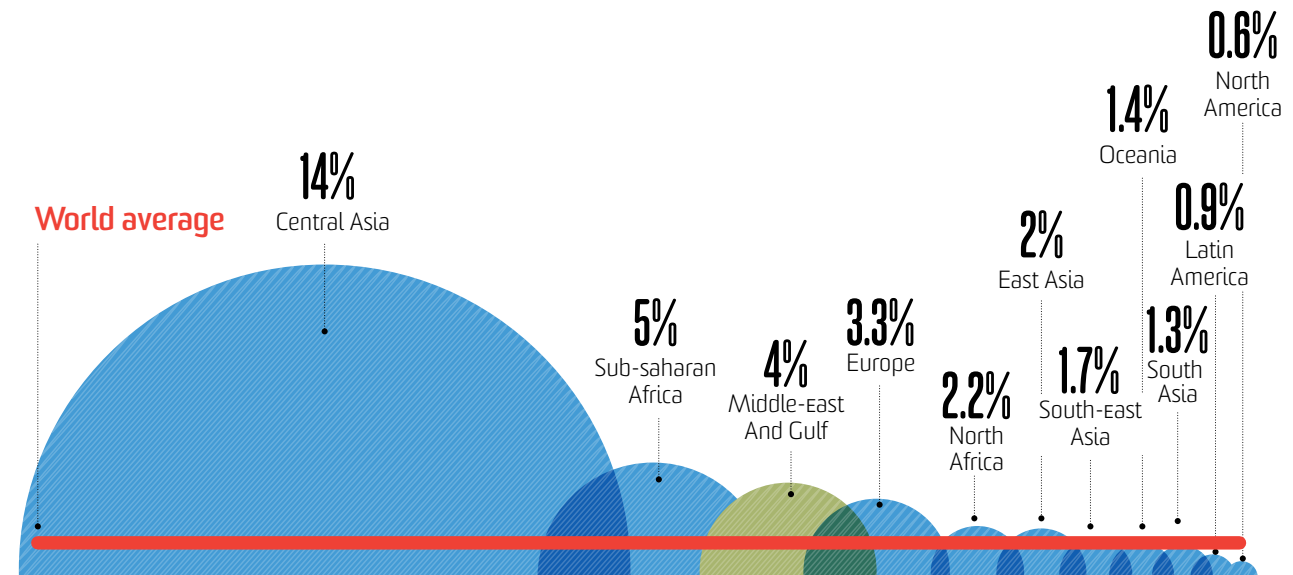
*Inbound flows per country of origin are not available for Egypt and the United Arab Emirates, two countries which are nevertheless welcoming a large number of foreign students.

B. OUTBOUND MOBILITY

126. Outbound mobility from the Middle East countries is about twice as large as the world average, while in North Africa the outbound mobility rate is similar to the global average; see Figure 21.

FIGURE 21

Share of students leaving their country to study by region (outbound mobility rate), 2016



Source: Authors' calculation using UNESCO data

127. Students may decide of their own accord to study abroad, but also many governments invest in scholarship programs and actively send their students abroad to study, often to European and North American countries. There are several motivations behind this, but a key one rests on the idea that students will return with new skills and knowledge, representing investments in human capital for home countries.

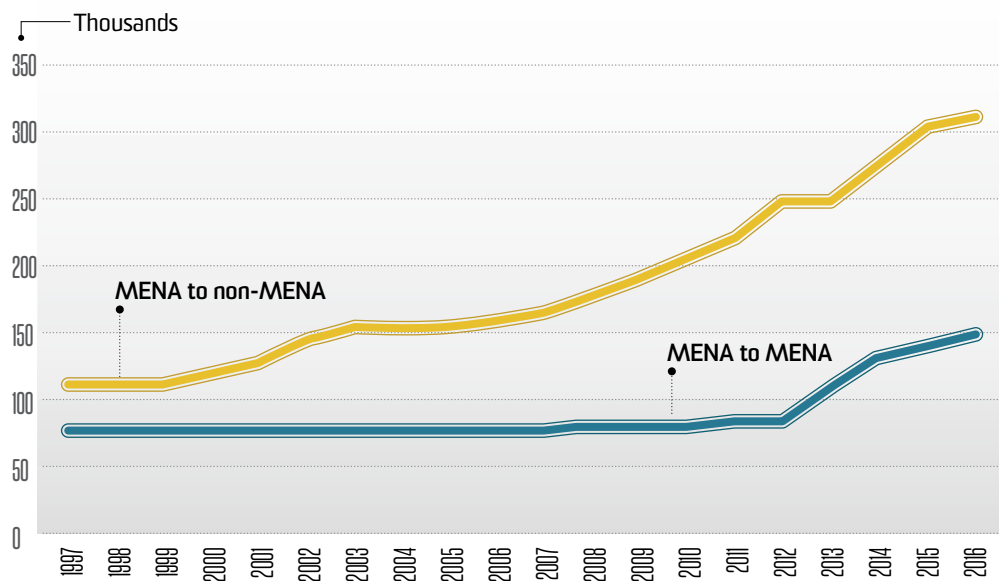
128. Saudi Arabia is an example of a MENA country that sends huge numbers of students abroad. Saudi national scholarship schemes have existed since the time of King Abdulaziz, the country's founder, and has rapidly expanded since then. The most recent

scheme has been in place since 2005, the King Abdullah Scholarship Program (KASP), sending thousands of students abroad. In 2012, almost 200,000 Saudi students were abroad, with around 166,000 of them government funded.¹¹⁷

129. At the same time and alongside these motivations, while inbound mobility is a clear indicator of a country's effort to attract students and its ambition to raise its tertiary education to an international level of competition and presence, the high outbound mobility from MENA may signal, on the other hand, some shortcomings in the quality of teaching and research and in the study programs offered domestically.

¹¹⁷ Ahmed, Manail Anis (2015) Saudi Students Abroad. University World News. Available at: <https://www.universityworldnews.com/post.php?story=20151208190817896>

130. Moreover, the weak attractiveness of the region is illustrated by the comparison between inter- and intra-regional mobility in MENA. First, in 2016, more than two thirds (68 percent) of mobile MENA students chose to leave the region, rather than enroll in a university in another MENA country (see Figure 22).¹¹⁸ Second, the attractiveness of the region has declined, as in 1999, only 59 percent of mobile students were choosing to study outside the region (see Figure 22). Third, the number of exiting students stalled during the Arab Spring, but the attractiveness of the region has dropped further since 2014.

FIGURE 22**Evolution of inter-regional and intra-regional students leaving their country in the MENA region**

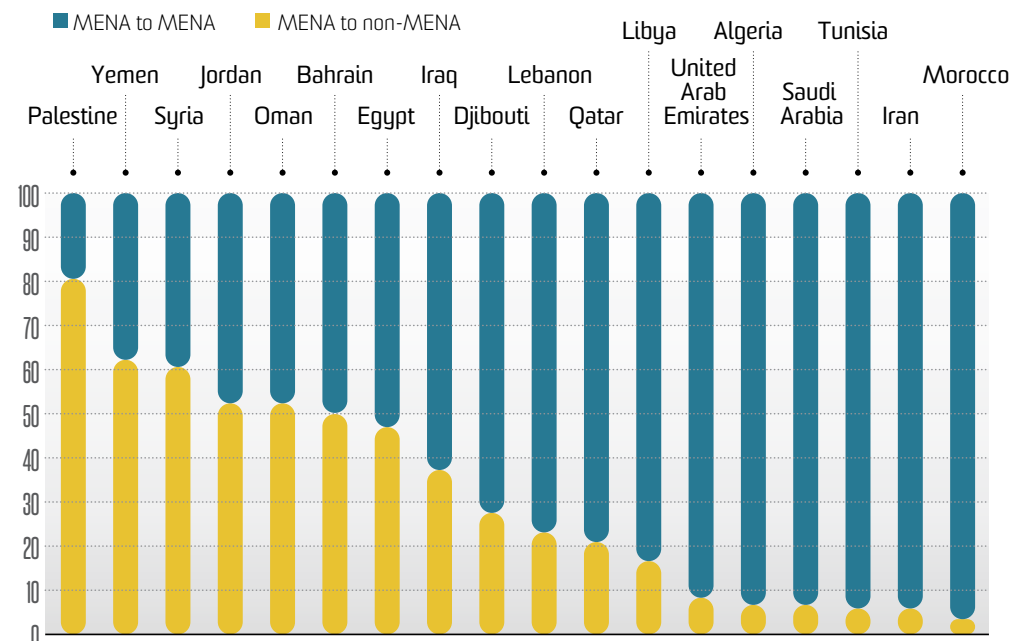
Source: UNESCO data

131. Intra-regional (MENA-to-MENA) to inter-regional (MENA to non-MENA) mobility can be compared for each individual country in the region. As shown in Figure 23, 80 percent of mobile students from the Palestinian Authority remain in the MENA region, as do 62 percent of mobile students from Yemen, and 61 percent from Syria. In Oman, Egypt, Bahrain and Jordan, about half of the mobile students stay in the

region. At the other end of the spectrum, a massive proportion (more than 90 percent) of the mobile students of the Maghreb (Algeria, Morocco, and Tunisia) decide to leave the region; they usually study in France. The same phenomenon can be seen in Iran and the Emirates, although these students do not choose France as a main destination.

¹¹⁸ In 1999, 78,234 out of 191,869 expatriated students were studying in the region. In 2016, 147,463 out of 458,821 expatriated students were studying in the region.

FIGURE 23 MENA to MENA versus MENA to non-MENA student mobility compared, 2016

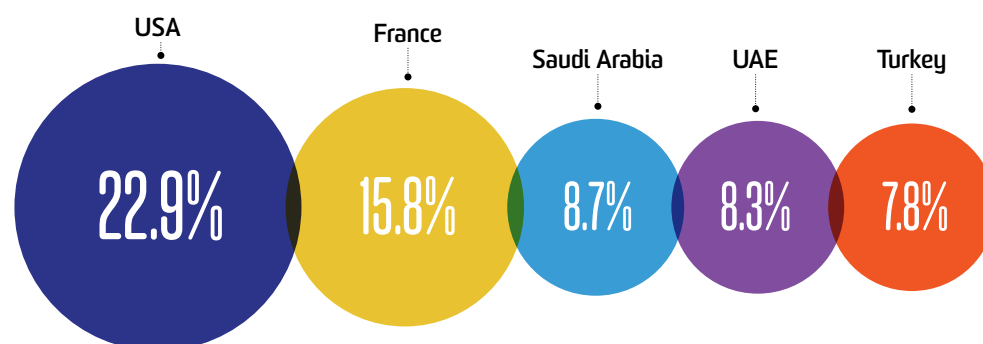


Source: Authors' calculation using UNESCO data

132. As outbound mobility has increased dramatically, especially from the Middle East and Gulf countries, the distribution of the destination countries of this outbound mobility has shifted from France, which mostly enrolls students from francophone countries, to English-speaking OECD countries; see Figure 24.

133. This picture also highlights the emergence of new tertiary education providers, which may not have been perceived as global players until now, both within the region, such as Saudi Arabia, the Emirates and Jordan, but also outside of MENA, such as Malaysia and Ukraine.

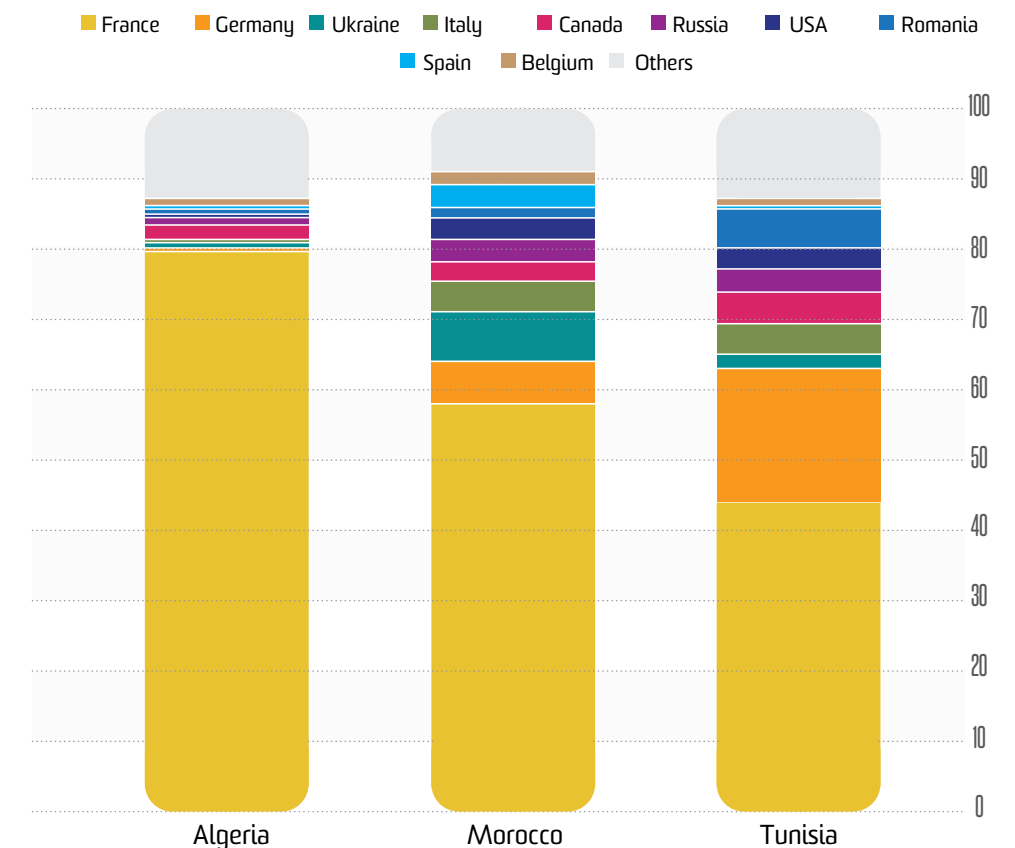
FIGURE 24 Distribution of MENA students studying abroad in 2017 by major destination



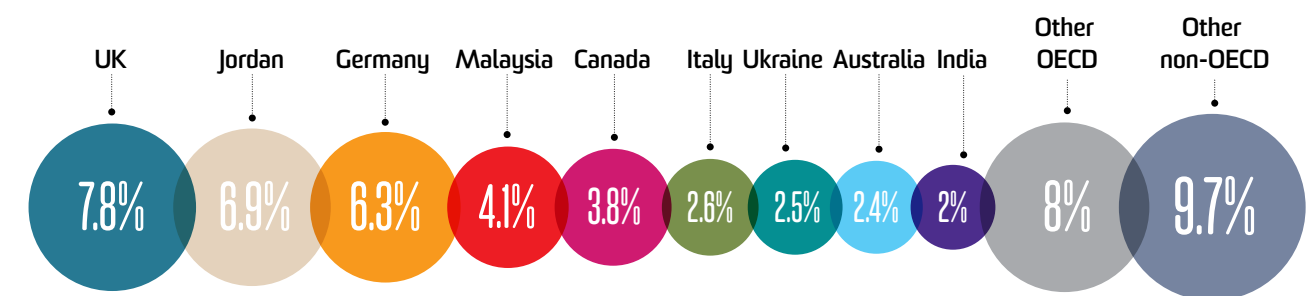
134. When looking at the destinations of MENA students on a regional and country level, we see that language plays an important role in the choice: Maghreb students tend to choose France first (see Figure 25), whereas students from Gulf

countries tend to go to the United States, but also the UK, Malaysia and other Gulf countries (Figure 26). Students from the Mashreq tend to prefer Arabic-speaking and English-speaking countries (see Figure 27).

FIGURE 25 Shares of outbound students from Maghreb countries by destination: Top 10, 2018



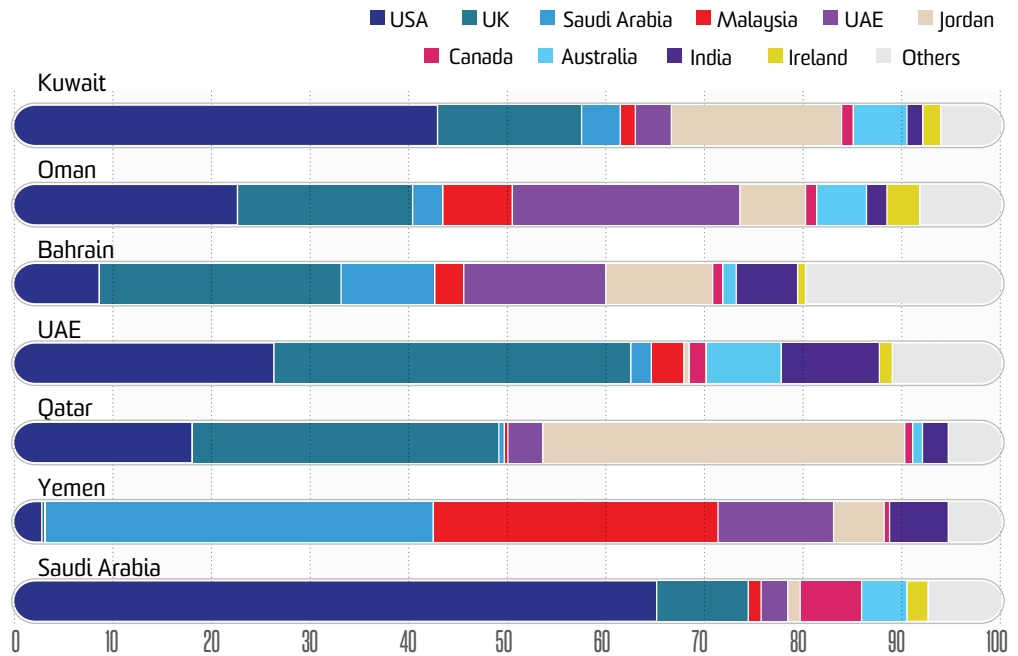
Source: Authors' calculation using UNESCO data



Source: Authors' calculation using UNESCO data

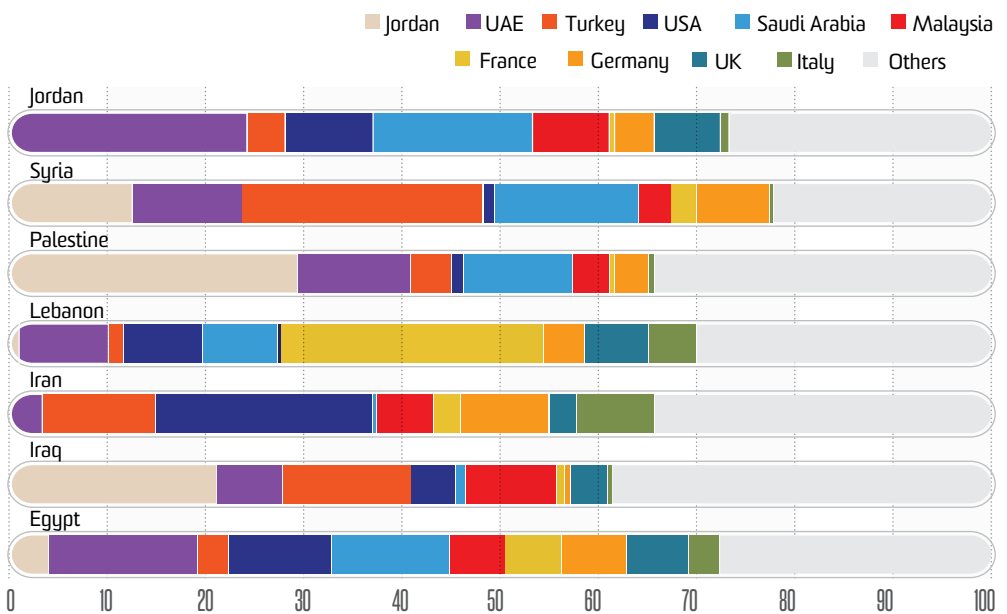
135. Linkages can also be observed between income and geographical proximity (see Figures 26 and 27). Students from lower income countries tend to stay inside the MENA region while those from higher income countries choose to study outside of the region more often.

FIGURE 26 Shares of outbound students from Gulf countries by destination: Top 10, 2018



Source: Authors' calculation using UNESCO data

FIGURE 27 Shares of outbound students from Mashreq countries by destination: Top 10, 2018



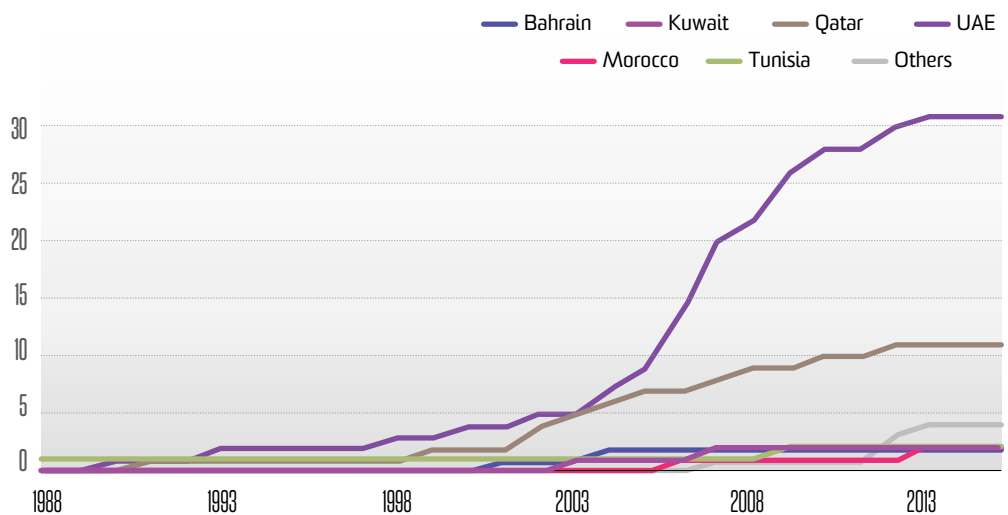
Source: Authors' calculation using UNESCO data

4. BRANCH CAMPUSES

136. Another emergent phenomenon in the internationalization of tertiary education in the MENA region is the opening of branch campuses, where tertiary education institutions open up branches of their institution abroad.

137. Most branch campuses in the MENA region were set up in the 2000s, with a rapid expansion of such campuses from 2005 onwards. However, the distribution of branch campuses across the MENA region is very uneven, with the bulk of branch campuses located in the Gulf countries, namely in the UAE and Qatar (see Figure 28).

FIGURE 28 Evolution of the number of branch campuses in MENA



Source: C-BERT's Branch Campus Listing

138. Branch campuses are a mixed strategy, combining the features of outbound mobility, inbound mobility and internationalization “at home”. Set up by foreign institutions, branch campuses offer diversified curricula, including courses in foreign languages, and heavily expose their students to intercultural activities. Furthermore, some researchers argue that branch campuses can constitute less restrictive social environments, in which students – especially women – can move more freely and thus build their autonomy and personal growth.¹¹⁹

5. INTERNATIONAL EDUCATION HUBS

139. Connected to branch campuses, insofar as they generally tend to host high numbers of branch campuses, international education hubs represent one of the more recent developments in the internationalization of tertiary education. Looking at those countries which are establishing themselves as education hubs in MENA, we see that once again, the GCC countries are leading in this area.

119. See Al Mutawa, R. (2017) “Women and Restrictive Campus Environments: A Comparative Analysis Between Public Universities and International Branch Campuses in the UAE.” In *Higher Education in the Gulf States: Present & Future*. Oxford University publication

140. A hub can consist of a country, a city, or even a specific zone, and can be defined as follows: “an education hub is a planned effort to build a critical mass of local and international actors strategically engaged in cross-border education, training, knowledge production and innovation initiatives”.¹²⁰ Education hubs can vary in terms of both objectives and characteristics, but generally the term “hub” is used to refer to countries or areas aiming to position themselves as centers for education and training, student recruitment, and research and innovation. Jane Knight’s typology of hubs distinguishes, based on rationale, three types of hub: Student Hubs, Talent Hubs, and Knowledge-Innovation Hubs.¹²¹

141. In term of country-level hubs, today six countries can be considered as seriously establishing themselves as education hubs: Botswana, Hong Kong, Malaysia, Singapore, and, in the MENA region, Qatar and the UAE. The two MENA education hubs have been classified by Knight as Student-Talent education hubs. The Qatari education hub is centered around Education City,¹²² an initiative launched by the Qatar Foundation in 1997, which now hosts eight international branch campuses, of which seven are American. Qatar also boasts a science and technology park set up in a free zone, and is pursuing a wider research strategy, including developing further international research partnerships, building research facilities and training researchers.¹²³ In addition, a research-oriented in-house university –

Hamad Bin Khalifa University – has been established at the Education City campus, in addition to schools, from kindergarten through high school. This makes Education City in Qatar the most comprehensive education hub at a global scale.

142. The UAE has also attracted high numbers of branch campuses in its development as an education hub, many of which are grouped together in areas such as the Knowledge Village and the Dubai International Academic City, both in Dubai. It has also invested in partnerships with foreign universities to develop centers of excellence, such as Masdar City, in Abu Dhabi.¹²⁴

6. SPOTLIGHT: INTERNATIONALIZATION AND REFUGEES IN THE MENA REGION

A. REFUGEES IN THE MENA REGION

143. One of the characteristics of the MENA region today is the extremely high number of refugees and asylum seekers who are hosted there, mostly those fleeing conflict in Syria. According to UNHCR data, the majority of the more than five million registered Syrian refugees are in the neighboring countries (Iraq, Jordan, Lebanon, Turkey, and also Egypt), with around 3.5 million registered in Turkey and a further 2 million registered in Egypt, Iraq, Jordan and Lebanon.¹²⁵ In Lebanon, for example, Syrian refugees make up more than a quarter of the entire population of the country, whereas in Jordan, the Syrians present (registered as refugees or not) increase Jordan’s population by almost 20 percent.

^{120.} Knight, 2018, p.644

^{121.} See Knight, 2018, pp.646-7 for a full typology of education hubs.

^{122.} See <https://www.qf.org.qa/education/education-city>

^{123.} Knight, 2018, p.648

^{124.} Ibid.

^{125.} See Syria Regional Refugee Response, UNCHR, 2018; data accessible at <https://data2.unhcr.org/en/situations/syria>

144. This unprecedented influx of people naturally has an impact on the education systems of the host countries and on the education paths of the refugees themselves. According to one estimate, the percentage of Syrians aged 18-24 in tertiary education was at 20 percent before the war, and at less than 5 percent in 2016.¹²⁶ Indeed, globally speaking, UNHCR has shown that only 1 percent of refugee youth are enrolled in tertiary education, compared to the 36 percent of youth worldwide.¹²⁷

B. REFUGEES' ACCESS TO TERTIARY EDUCATION

145. For several reasons, Syrians are often unable to access tertiary education in the host countries. In Jordan, the rising costs of living – coupled with Syrian refugees' typically low incomes – are major obstacles, as is the common English language requirement, considering that Syrians have mostly completed their school education in Arabic. Further barriers include the low enrolment rates of Syrians in pre-tertiary education, as well as the insufficient number of scholarships available to them.¹²⁸

146. In Lebanon, reports found barriers to tertiary education for Syrians ranging from lack of resources to discriminatory practices, as well as an absence of policies that address those barriers.¹²⁹ Moreover, restrictions that prevent foreigners working in certain sectors in Lebanon, coupled with

the 2015 further restriction on Syrians in particular that allows them to work in only three sectors (agriculture, construction and environment), hardly incentivize refugees to continue their studies at the tertiary level in the restricted sectors.¹³⁰

147. Another barrier to tertiary education for refugees is the lack of recognition of qualifications gained in the home countries. Although some countries in the MENA region have bilateral agreements for the mutual recognition of secondary and tertiary qualifications (for example between Syria and Lebanon), until 2019 no regionwide agreement had been signed since the *Convention on the Recognition of Studies, Diplomas and Degrees concerning Higher Education in the Arab States* in 1978¹³¹ and in many cases those students don't have access to the physical documents showing their credentials. In November 2019, however, a new *Global Convention on the Recognition of Qualifications concerning Higher Education* was adopted by UNESCO's General Conference, as the first legally binding UN treaty on higher education. The Convention aims to facilitate student mobility by providing a framework for "fair, transparent and non-discriminatory recognition of higher education qualifications".¹³² Recognizing the urgency of the forced migration situation, UNESCO also launched a "Qualifications Passport" for refugees and vulnerable migrants, currently being piloted.¹³³ Both of these initiatives

126. EU Regional Trust Fund in Response to the Syrian Crisis, the 'MadadFund' (2016) *Action Document for Vocational Education and Training & Higher Education Programme for Vulnerable Syrian Youth*

127. UNHCR (2017) "The Other One Per Cent - Refugee Students in Higher Education." DAFI Annual Report 2017

128. El-Ghali, Hana Addam and Al-Hawamdeh, Ahmad (2017) *Higher Education and Syrian Refugee Students: The Case of Jordan*. Issam Fares Institute for Public Policy and International Affairs

129. El-Ghali, Hana Addam; Berjaoui, Roula; and DeKnight, Jennifer (2017) *Higher Education and Syrian Refugee Students: The Case of Lebanon*. Issam Fares Institute for Public Policy and International Affairs

130. Ibid.

131. Ibid.

132. More information available here: <https://en.unesco.org/news/what-global-convention-higher-education>

133. See <https://en.unesco.org/news/what-you-need-know-about-unesco-qualifications-passport-refugees-and-vulnerable-migrants>

being very recent developments, it is yet to be seen – pending ratification of the Convention and wider implementation of the initiatives – to what extent this may improve refugees’ access to tertiary education.

148. The abovementioned difficulties are a major challenge for education in the MENA region as well as for the wider development of the region. As UNESCO has recognized, the **education of refugees is necessary for their full integration, and research supports the inclusion of tertiary education in the global movement for the provision of education for refugees** due to the benefits it holds both for the refugees themselves and for the host countries.¹³⁴ In fact, giving further attention to the issue of refugees and migrants is also another area of work and further involvement of international education.¹³⁵

C. POINTERS FOR ACTION

149. Several recommendations can be found in the literature regarding widening access to tertiary education for refugees in the MENA region. These are often aimed at governments and the international community in terms of policy recommendations, but recommendations are also given for tertiary education institutions themselves, and some initiatives may be integrated into those institutions’ internationalization strategies.

150. The case of Syrians in Turkey is of interest in this context. Turkey hosts more Syrian refugees than any other country worldwide, and in response, **the Turkish government is strategically**

internationalizing three functions of Turkish universities to accommodate Syrians. Ergin et al (2019) detail the ways in which this “forced internationalization” has been taking place:¹³⁶ first, the government has reformed both academic and financial admissions policies. It has required universities to admit both those Syrian students who can produce proof of previous qualifications (as “regular students”) and those who cannot (as “special students”); Arabic taught-programs have been introduced to facilitate Syrians’ access at eight universities close to the Syrian border; and in terms of financial policies, Syrian students have been provided with scholarships, and the usual international student fees have been waived. **These reforms have led to a huge rise in enrolment of Syrians at Turkish universities: numbers rose from just over 600 in 2011 to over 20,000 in 2018.**

151. Second, Turkey has made concerted efforts to attract more Syrian faculty, in particular through the creation of an online platform collecting CVs. Third, the government has internationalized the public service function of Turkish universities to ensure that Syrian refugees, including those who are not students or academics, can access certain university services: this includes some universities offering free services such as information seminars, language classes, and healthcare, and so on.

152. There are naturally both benefits and challenges arising from this strategy, as demonstrated by Ergin et al. Such a huge increase in student numbers, together with fee waivers and the necessary financial aid, may cause serious economic pressure.

^{134.} Dryden-Peterson, Sarah (2010) “The Politics of Higher Education for Refugees in a Global Movement for Primary Education.” *Refuge: Canada’s Periodical on Refugees*, 27(2): 10-18

^{135.} Streitwieser, B. (2019). “Why migrants and refugees have a place in international education.” NAFSA Trends & Insights. NAFSA, Washington

^{136.} Ergin, et al., 2019

Moreover, the host society may feel that, in a context where access to tertiary education is highly competitive, Syrians have an unfair advantage. But there are also important benefits, although some of them may only appear in the longer term. Having more diversity in classes and the “brain gain” Syrians may bring may contribute to enhance the quality of learning and teaching, and more broadly, this diversity can enrich the wider society. Economically speaking, Turkey is likely to benefit from the innovation

and entrepreneurship that migrants so often bring. Finally, following Streitwieser (2018), Ergin et al point out that **cases like these may add another, positive layer to the rationale for internationalization: a “humanitarian rationale”.**

153. Another concrete example of an internationalization initiative working on access to tertiary education for refugees is the Italian university UNINETTUNO and its *University for Refugees* project (see Box 9).

BOX 9

Case study – UNINETTUNO, university for refugees¹³⁷

The International Telematic University UNINETTUNO was established in 2005. It offers bachelor’s and master’s degrees, with professors from around the world delivering courses in its Internet-based real and virtual spaces. It offers its courses online in five languages: Arabic, English, French, Greek and Italian. One outcome of the implementation of the university’s model and its wide international collaboration has been the creation of the Internet-based portal the University for Refugees – *Education without Boundaries*.

Rationale and pedagogy

UNINETTUNO recognizes that the very first universities (in the 9th and 10th centuries) realized a networked model in which students moved across different countries, shaping their own study paths; universities represented transnational networks and played an important role in cultural relations between Europe and the Islamic world. Moreover, in today’s globalized and interconnected world, universities must

continue to play an essential role in human progress, spreading knowledge to citizens worldwide and acting as instruments of peace and respect for difference. According to the rationale behind UNINETTUNO, in today’s 21st century world, technological advances and the Internet mean that the modern university can be both a real and a virtual place. New technological infrastructure ought to be added to the physical buildings and new pedagogical models can be developed. Over years of research, UNINETTUNO developed, together with its partner universities across the world, common curricular and shared psycho-pedagogical-didactic models, which use the Internet to realize constructive and collaborative teaching and learning environments in which communication is synchronic, two-way and interactive, and where students actively participate in the construction of knowledge.

Internationalization

UNINETTUNO’s educative model has quickly become a global model,

137. Garito, Maria Amata (2017) A University for Refugees: Education without Boundaries. *Journal of Modern Education Review* 7(8): 568-575. Also see <https://www.uninettunouniversity.net/en/default.aspx> for more information.

recognized at the international level. Indeed, at least two internationalization models are reflected in UNINETTUNO: the first, where the Internet allows users to make study choices according to their own interests; through this spontaneous, non-top-down networking mechanism, UNINETTUNO has been able to attract students from 163 countries. The second is found in its academic partnerships: the university's agreements with universities and ministries around the world which aim at creating, harmonizing and sharing curricula.

Migrants and refugees

With the above rationale in mind, and in the face of increasing flows of people crossing the Mediterranean for Europe from the MENA region and Sub-Saharan Africa, the University for Refugees aims to promote integration for refugees and other immigrants, enabling them to acquire the skills and knowledge needed to play a constructive role in the social, economic and cultural life of the host countries. The Internet-based portal allows refugees and migrants to access the university for free from anywhere in the world: it includes free enrolment to UNINETTUNO's degree courses; recognition of qualifications earned in their home countries in order to be eligible tertiary education; the recognition

of professional skills; language classes in numerous languages; and access to online healthcare services as well as information on reciprocal rights and duties.

At the *University for Refugees*, 27 different degree courses are available online, as well as vocational training courses, and the aim is to enhance and support the academic development of refugees and immigrants as well as foster their professional inclusion in the host countries. Furthermore, the digitized lessons are delivered by highly-reputed professors from across the world, including those who have themselves had to leave their home countries due to war and violence. By September 2018, 72 refugees and asylum seekers had enrolled in bachelor's and master's programs, of whom 14 came from MENA countries. Testimonies demonstrate that students who are also fleeing violence have been able to find courses given by their professors whom they are no longer able to see in person, enabling them to complete study paths which have been interrupted due to war, etc. This can in turn increase their chances of integration in the host countries and help pave the way toward active participation in social, economic and cultural life.

5.

THE WAY FORWARD

154. Internationalized tertiary education has been shown to hold several advantages. Students themselves benefit from internationalized curricula, from exchanges with international students and from study abroad. Tertiary education institutions benefit from adding a global dimension to their academic curriculum, making it more relevant, and, in general, they may boost their education quality thanks to the positive effects of the mix of international and domestic students and professors present, and from those students who return from abroad with skills gains. Countries too may benefit, in economic terms as well as in terms of their influence and competitiveness on the regional and global scale.

155. In the MENA region, although internationalization has begun to take hold, the analysis has shown that it remains limited in scope: MENA institutions are not those prioritized by other regions for academic partnerships, and most MENA countries fail to attract large numbers of international students, for example. **Rethinking internationalization strategies may, then, enable MENA to take further advantage of the benefits of internationalization.**

156. However, it must be recalled that the internationalization of tertiary education is not something that happens in a vacuum. **Neither does internationalization have significant meaning or impact if it is not situated in the context of broader reforms of tertiary education.** One key issue for the successful implementation of internationalization strategies relates to the governance practices followed by tertiary education institutions. Indeed, governance of tertiary education institutions – including financial and academic autonomy – is an important driver of change: **institutions that are governed fairly and openly are likely to be more successful in achieving their goals than institutions which follow weak governance practices.** Improving governance and strengthening autonomy in the MENA region would help tertiary education institutions take full advantage of the benefits of internationalization and would be conducive to improving education outcomes. **One way in which institutions might take action on this would be to participate in initiatives such as the University Governance Screening Card (UGSC)¹³⁸** benchmarking exercise. This type of initiative could provide participating institutions with a better understanding of the strengths and

138. The University Governance Screening Card (UGSC) is a benchmarking tool, developed by the World Bank and CMI to assess the extent to which tertiary education institutions are following governance practices aligned with their institutional goals and international trends. It has been successfully implemented in more than 150 tertiary education institutions in eight MENA countries and four European countries. For more information, see the report http://www.cmimarseille.org/highereducations/docs/Benchmarking_Governance_100_Universities_Book.pdf

weaknesses of their own governance practices and those of other institutions, which would in turn allow for the identification of potential areas for improvement.

1. DIFFERING INTERNATIONALIZATION STRATEGIES FOR DIFFERING CONTEXTS

157. In the MENA region, a handful of countries do manage to attract huge numbers of foreign students, as well as succeeding in sending many students to study abroad. This is most apparent in the Gulf countries, where inbound rates are very high, especially in Qatar and the UAE. Several endogenous factors make these countries very attractive to foreign students, especially for students from within the MENA region, but also for those from other parts of the world. As employment prospects and education quality may be perceived as comparatively high in many Gulf countries, many foreign students may consider the economic returns of their degree when choosing to study there. The Gulf countries' high average incomes also permit more domestic students to study abroad, notably in other high-income countries. Inbound and outbound mobility may therefore be high due to structural and macro-economic factors.

158. These countries have, however, also pursued an active internationalization agenda and developed their own models of internationalization. One cornerstone of this model has been establishing the use of English as a major language of study. Teaching is indeed increasingly done in English in many state universities in the Gulf countries, while 75 percent of branch campuses use English exclusively.

159. The second key element of the Gulf countries' internationalization model has been facilitating the opening of private

higher education institutions, in many cases demanding very high tuition fees. Among these, branch campuses figure as particularly attractive institutions for both foreign and domestic students. As seen in the previous section, most of the branch campuses set up in MENA are indeed found in the Gulf, namely in the UAE and Qatar.

160. This type of model of internationalization, however, may not be feasible for all the countries in MENA. Tuition fees often being extremely high in branch campuses, they remain rather exclusive and more viable in higher-income countries. Furthermore, countries with fewer employment prospects may be less 'naturally' attractive to foreign students and may have to elaborate their internationalization strategies around other strengths that could reinforce their attractiveness. Social, political and economic contexts vary enormously from one country to another, and different strategies may therefore be more appropriate depending on those contexts; there is no "one size fits all" internationalization strategy that may be applied across the region.

161. Each MENA country, and indeed each tertiary education institution itself, ought then to develop its own unique internationalization strategy based on its specific context and the wide range of variables present, embedding its rationale in the socio-economic and tertiary education context of the country.

2. INCREASING INTERNATIONALIZATION ACROSS MENA

162. Several approaches for further internationalizing tertiary education therefore appear as relevant for MENA, with the varying contexts throughout the region meaning that each of these

approaches may be more – or less – appropriate, depending on those contexts. MENA institutions may make efforts to establish wider collaboration, partnership and exchange with institutions within the region and further afield in many ways; they may look into establishing further research partnerships, sending more staff abroad and attracting more foreign staff at their institutions, amongst many other strategies. Here, we mention in more detail three key elements which institutions can incorporate into their broader approaches (increasing inbound mobility, increasing outbound mobility, and increasing internationalization “at home”), and we also give some reflections on how the coronavirus (COVID-19) crisis may affect institutions’ capacities to implement such strategies, both in terms of the challenges it presents, and the opportunities that may be highlighted by it. Then, we move on to some broader recommendations.

A. INBOUND MOBILITY

163. In order to attract larger numbers of foreign students, the factors behind mobility must be accounted for – and several aspects may play a role in students’ decisions regarding where to study abroad.

- **Language is one of these factors:** students may decide to study in a country in which their mother tongue is spoken, or where at least English, or another widely used “international” language, is spoken. Given the widespread use of English and French in the Middle East and in North Africa, respectively, tertiary education institutions in MENA could make strategic partnerships or exchange programs with institutions in other English- and French-speaking countries. However, language barriers do also naturally restrict the reach that institutions have in terms of attracting foreign students. Also, “international education” often by default refers to

“English-taught education”, a further difficulty for countries in North Africa where tertiary education is currently mostly taught in French.

- **Education quality also plays a role:** students may prefer to study abroad in places where the quality of education is high. Since education in the MENA region is perceived to be lower than average in quality, this represents a difficulty for MENA countries in attracting foreign students. This may also, however, act as an incentive for MENA tertiary education institutions to invest further in quality education in order to become more attractive to foreign students, as well as to visiting professors.
- **Employment prospects are important:** if students intend on remaining in the destination countries after their studies, they may be put off by limited opportunities for employment. This is problematic for many MENA countries, where youth unemployment is already extremely high. However, this could be a reason to further review education to employment policies and regulations at the government level; and to promote short-term exchange programs at the institutional level, which are also beneficial, and in which such difficulties arise less.
- **Geographical proximity counts:** for financial reasons and based on cultural proximity, it may be easier to attract students from nearby. It may therefore be worth prioritizing attracting students in neighboring countries, although given MENA’s geographical positioning, for many MENA countries this may mean attracting a majority of students from other countries in which education quality is relatively low, and so from which students’ performances are also lacking.

164. If MENA governments and tertiary education institutions account for the above variables and the differing implications they

have for their internationalization strategies, increasing inbound mobility to MENA may indeed represent an important way of boosting internationalization.¹³⁹

165. Nonetheless, it cannot be assumed that the presence of foreign students alone will have major positive effects. The assumed benefits of contact with foreign students may be limited: several studies indicate indeed that interactions between international and national students are generally low, and lower than expected by the visiting students.¹⁴⁰ Bringing in foreign students on a campus is not sufficient to guarantee social and cultural interactions. The host tertiary education institution must provide structures and enabling mechanisms (an international service...) to ensure that foreign students are duly welcomed and properly included, and it must organize activities to maximize interactions and cultural exchanges, both on and off campus.

166. On the other hand, recruiting foreign students requires the institution to guarantee a number of conditions, from which domestic students too then benefit indirectly. For instance, the language of teaching may be diversified, the curricula may be at least partially internationalized, the university may seek excellency by specializing in a given field, academic research may be strengthened, partnerships with foreign universities and research labs may be established, and talented researchers may be hired from abroad. As improving academic quality is a requirement to be able to attract foreign students, domestic students too are very likely to benefit from a policy aimed at promoting inbound mobility. Moreover, these indirect benefits may materialize even during the ramp-up years, during which the university

is still building its reputation on the global stage but welcoming only a limited number of foreign students.

167. Within this mobility framework, MENA institutions could also make efforts to attract more foreign staff, as well as promoting twinning programs with foreign institutions.

B. OUTBOUND MOBILITY

168. The previous section showed that outbound student mobility from Middle Eastern and Gulf countries is around twice the global average, while that from North Africa is roughly in line with the global average.

169. It also showed that the implications of a country or a region's outbound rate are not immediately obvious. Although increased student mobility represents increased internationalization, it can also be a sign that students see better education opportunities elsewhere, and thereby represents students' lack of confidence in their own local education systems. Moreover, in the case of MENA, the high number of students leaving the region entirely to study in another region further highlights the struggles MENA deals with in terms of education quality and in terms of attracting, or retaining, students.

170. It is not evident, then, that outbound mobility should always be promoted. If students leave to study abroad, especially to places where education is of higher quality and where employment opportunities are more abundant, there is a risk that those students decide to stay in those destination countries. Although the "brain drain" phenomenon is a hotly debated topic, there

^{139.} Once again, it should be recalled that this may not be the most appropriate technique for all MENA countries, for example for those countries in which the tertiary education institutions already experience extremely high enrolment and therefore

^{140.} See Geary (2012), Ward (2001), Brown and Daly (2004).

is a real worry that the brightest young people, together with their talents and capacities for innovation, may leave the region for good, to the detriment of their home countries.

171. On the other hand, MENA students may benefit greatly from study abroad in terms of the skills and employability boosts they may witness. Moreover, if well-designed mechanisms are in place to make sure they do return, or at least keep connected professionally with local institutions, they may contribute to a so-called “brain gain” and “brain circulation” phenomenon, in which those returning, or being still tied to local institutions, with new skills, essentially represent an investment in the overall level of human capital back home. Indeed, the existence of national scholarship schemes, such as the Saudi scheme mentioned above, highlights to what extent some governments have recognized this human capital argument for promoting outbound mobility of their students. Nevertheless, given the potential risks, one strategy that governments and tertiary education institutions could pursue would be to promote short-term study abroad and exchange programs that best foster such win-win situations.

172. However, many MENA students face great barriers to study abroad in the form of financial constraints and visa restrictions, especially when the chosen destinations are in Europe or North America. Governments would do well to put policies in place that facilitate this, such as making more grants available to meet the costs of study abroad and drawing up bilateral and multilateral agreements with destination countries aimed at increasing affordability and facilitating the expedition of student visas.

C. INTERNATIONALIZATION “AT HOME”

173. A rather different but complementary approach to student mobility, internationalization “at home” has a much wider reach in terms of who it can benefit. Many students face difficulties around travelling to study abroad. Establishing – at an institutional level – a strategy for internationalization “at home” allows them to gain international experience and awareness by studying on an internationalized campus with internationalized curricula.

174. Students have been shown to benefit from skills gains as a result of an internationalized education, witnessing increases their soft skills, their “world-mindedness” and global, international and intercultural competencies both as a result of internationalization “at home” and as a result of study abroad programs. Indeed, one study found internationalization “at home” to lead to even greater skills gains in these areas than study abroad. The researchers suggest therefore that internationalization “at home” ought to be further promoted through “Cocurricular activities, engagement with international students, and academic coursework on campuses may be more accessible and more effective ways for colleges and universities to enhance students’ development of [global, international and intercultural] competencies.”¹⁴¹ Another study, emphasizing the benefits of internationalization “at home”, concludes by making the case for paying greater attention to it, due to its advantages and wider reach.¹⁴²

175. Despite these results, the importance of internationalization “at home” is sometimes overlooked. Internationalization “at home” has been said to be hard to

¹⁴¹. Soria & Troisi, 2014

¹⁴². Parsons, 2009

define, with many, sometimes misleading or confusing definitions around it.¹⁴³ It has sometimes been compared too directly with study abroad, thereby missing its particularities.¹⁴⁴ Some of its activities may appear difficult to implement (requiring specially trained teachers, extensive measures...); they could seem somewhat artificial or random (adding an international element into certain subjects may seem arbitrary, or forced...), or they could seem to depend, despite proponents claiming the contrary, on student mobility (where “engagement with international students” is sometimes included in the activities grouped under internationalization “at home”).¹⁴⁵

176. Some of the critique of internationalization “at home” has some basis in reality: it may indeed sometimes be difficult to implement, and its meaning may be somewhat lost among the definitions and semantic issues. **Obstacles in the way of internationalization “at home” are several and varied,** including the existence of misconceptions about its meaning, as well as many challenges in its implementation at both program and institutional levels.¹⁴⁶

177. However, many of these obstacles may be overcome, or their effects mitigated. Scholars of internationalization have maintained that recognizing and further emphasizing the skills gains that internationalization “at home” can generate, rather than focusing on the many definitions and the semantics, may be a

good starting point.¹⁴⁷ Despite the seeming difficulties in incorporating international elements throughout the curriculum, **some scholars have emphasized that, for example, employability skills indeed can be embedded into the curriculum,** with guidelines given on how to embed an international perspective even into STEM subjects¹⁴⁸ (science, technology, engineering and mathematics – those subjects for which the “random” or “artificial” arguments may have had the most weight). In practice, other ways to help ensure effective implementation of internationalization “at home” include making certain elements, such as global or international-focused seminars, very low cost – or free – to enrol on, or allowing students to gain extra credit for taking such types of course, to incentivize them to take part in international parts of the curriculum. Such international components could also be incorporated into general education courses.

178. Moreover, we may recognize that implementing internationalization “at home” is not always simple, but that with time invested and proper support from across faculties, support staff, and wider stakeholders, it can be very effective. Indeed, in order for internationalization “at home” to have its widest reach and be the most equitable possible, it must be recognized that **strong institutional leadership, rigorous curriculum design and evaluation, and professional development opportunities for staff, are**

143. Beelen, Jos (2019) “Employability Skills as Guiding Principles for Internationalising Home Curricula”, Chapter 16 in Coelen, Robert and Gribble, Cate (eds.) *Internationalization and Employability in Higher Education*. Routledge: London and New York

144. Rubin, 2019

145. Beelen and Jones, 2015

146. Beelen, 2019

147. De Wit, Hans and Jones, Elspeth (2014) We Need to Change the Language of Internationalisation. *University World News*. Available at: <https://www.universityworldnews.com/post.php?story=20141112125546605>

148. Jones, 2019

all required.¹⁴⁹ Some concrete policies that MENA governments and institutions could implement to further foster the development of internationalization “at home” would include: enhancing internet access to universities; building virtual partnerships with international universities for joint classes; creating student forums to engage in exchange and research, fostering language training programs offered by universities through affordable online courses, and so on.

179. If MENA’s tertiary education institutions and governments, with the right support from wider stakeholders, account for the above points, it appears that **boosting internationalization “at home”, with its wide reach, proven benefits, and low cost of implementation, does appear as a good starting point for tertiary education institutions in MENA.**

D. COVID-19: CHALLENGES AND OPPORTUNITIES

180. The global pandemic of COVID-19, the disease caused by the novel coronavirus that has spread across the world since December 2019, has had – and will continue to have – **serious impacts on tertiary education globally and on its internationalization.** At the time of writing, the crisis is still unfolding, and the extent of its current and future impact is still not entirely known. In terms of immediate impact however, the closure of thousands of tertiary education institutions across the globe, the cancelling of courses, the stranding of international students in both home and host countries due to border

closures and travel bans, are all having their effects, while economies are grinding to a halt in the midst of government-imposed lockdowns. In terms of longer-term effects, **it is expected that COVID-19 will have a serious and prolonged negative impact on economies worldwide, on international travel, and beyond.** Given this background, **student mobility is likely to decrease:** studies carried out during the pandemic already showed large numbers of prospective international students intending to defer their studies to the next year, in the face of uncertainty brought about by COVID-19. These numbers increased rapidly as the pandemic took hold, to around 50% by the end of March 2020.¹⁵⁰ The longer-term effects on international enrolment are yet to be seen, but it is expected to decrease. **What this means for MENA institutions, as well as for those across the world, is that they may struggle in their efforts to increase both inbound and outbound mobility.**

181. However, this challenge may be complemented by certain opportunities that COVID-19 may help highlight. The crisis has already forced thousands of institutions to make radical changes, such as moving whole courses to online learning models. And although abrupt, some changes may be positive: given that the world of education is likely to be impacted for the long term post-COVID-19, **one of the ways in which it could react would be to decide to consciously adapt to the “new normal”, by recognizing that it will be impossible (and undesirable) to return to business as usual, and by adopting new and innovative models and ways of thinking for a post-COVID-19 world.** The increase in online

¹⁴⁹. Gribble and Coelen, 2019

¹⁵⁰. Quacquarelli Symonds (QS). (2020) The Impact of the Coronavirus on Global Higher Education. Available here: <http://info.qs.com/rs/335-VIN-535/images/The-Impact-of-the-Coronavirus-on-Global-Higher-Education.pdf>

learning is one example of something MENA institutions may benefit from: as seen above, virtual mobility and innovative programs such as COIL modules, for instance, hold several benefits.¹⁵¹

182. More broadly, the crisis, through highlighting the need for rethinking education models, and through the way it may restrict mobility, can also be seen as a further rationale for institutions to increase their internationalization “at home”. This is a strategy which, as seen above, already holds potential for MENA for several reasons, and within the COVID-19 context, it may hold further advantages. We saw above that across MENA, many countries and institutions are lagging behind somewhat in terms of internationalization, and indeed, in pre-crisis times, difficulties connected to lack of prestige, perceived lower quality of education, and so on, made it more difficult for many institutions to attract large numbers of international students, for example. Today, physical mobility is restricted worldwide, and institutions are scrambling to move online; internationalization efforts are likely to be refocused on “at home” activities. This is an area within which there are fewer barriers in place that can slow MENA’s progress (when compared to student mobility), and thereby, **focusing on internationalization “at home” may be a key strategy for MENA to follow in order to most quickly “catch up” with other regions in internationalization.** Moreover, internationalization “at home” can have the effect of boosting institutions’ capacity in the implementation of internationalization and is likely to increase institutions’ awareness of the advantages of internationalization, thereby leaving them in a better position in terms of

internationalization, in relative terms, than they were pre-crisis.

183. Thus, while the pandemic is certainly likely to produce a myriad of challenges for tertiary education and for internationalization, MENA governments and institutions may be able to draw out certain opportunities. It appears indeed imperative that institutions in MENA not allow the crisis to deflect attention from the importance of internationalization, but rather to use the momentum to further prioritize it.

3. FILLING RESEARCH GAPS

184. In parallel to the strategies mentioned above, one measure that could be taken immediately would be the fostering of further research on internationalization, since there are several areas in which research is lacking. Although data on student mobility and branch campuses is readily available, this is not the only relevant data in terms of monitoring internationalization. Also, more research is required into the effects and benefits of internationalization. Three main areas appear as key in order to have a better understanding of how internationalization might best benefit MENA.

185. Research on the extent to which internationalization is already in place, and if and how it is being promoted, or increased:

- Develop statistical indicators and surveys for effective internationalization monitoring, as well as data on student mobility. Such indicators may include:
 - Students using a foreign language as a medium of instruction;

¹⁵¹. Equally, the uneven reach of and access to the internet, as well as mixed levels of students’ digital skills, must be taken into account. Any distance or e-learning programs put in place would need to be well thought-through and intentionally targeted to avoid excluding those with limited access or lower digital literacy levels.

- Students benefiting from foreign language courses;
 - The number, types and impact of exchange programs available;
 - Teachers taking part in international exchange programs and foreign faculty members;
 - The number, type and impact of joint/dual degrees with foreign institutions; and
 - The number of existing effective policies in place that support internationalization of higher education.
- Monitor the status of internationalization “at home” across MENA, to complement the existing data on student mobility.

186. Research on the effects, potential and benefits of internationalization:

- Initiate further studies on the economic impact of international mobility, both on origin and destination countries, as well as on students themselves.
- Carry out studies on the wider effects of internationalization “at home”, both on students and on tertiary education institutions.
- Carry out research on the possible risks engendered by, or potential negative effects of, internationalization, including obstacles in the way of its implementation, with the aim of developing actions that minimize obstacles and mitigate risks.¹⁵²
- Conduct studies on employability and other externalities associated with an internationalized education for graduates of higher education institutions in the region, including research into better ways of measuring and evaluating employability skills, aside from self-reporting and perceptions.¹⁵³
- Conduct studies on the overall impact,

benefits and limitations of branch campuses in MENA.

187. Research on the most appropriate and beneficial internationalization strategies for countries and tertiary education institutions in MENA:

- Monitor the success of internationalization in MENA countries, with a view to replicating the most successful strategies in other MENA countries with similar social, political and economic situations.
- Review the impact of national internationalization strategies established in countries in the MENA region and their comparability with other countries outside of the region.
- Carry out research into what role policy may have in promoting internationalization of tertiary education in the region.¹⁵⁴

4. AWARENESS RAISING AND PRIORITIZING INTERNATIONALIZATION

188. A key starting point in the efforts to boost internationalization across the MENA region would be both to **raise awareness about internationalization and to encourage tertiary education institutions and governments to make it a key priority, not as an additional task to be included but as a contributing means towards the overall improvement and relevance of tertiary education.** In order to become effective, any envisioned internationalization strategy should be properly aligned with the overall national education strategy, and with the institutional plans of universities.

189. Part of this awareness-raising and prioritizing lies in communication. Many

^{152.} De Wit et al, 2019

^{153.} Gribble and Coelen, 2019

^{154.} Ibid.

of the academics and professionals directly involved in internationalization may be well aware of its benefits, but this does not automatically follow for all relevant stakeholders; it may be that those involved sometimes communicate in an “echo chamber”.¹⁵⁵ First, **the links between internationalized education and the skills gains, or gains in education quality, must be more clearly articulated** – a task for institutions – and second, given the lack of understanding and even misinformation around international education, **tertiary education institutions may look for ways to develop more effective communication channels between relevant stakeholders.**¹⁵⁶

190. The research needed, mentioned above, may also help contribute, but **governments, together with other relevant stakeholders, could also help accelerate this process, through the following:**

- **Encourage tertiary education institutions to build up their international profile at home and across borders,** offering financial incentives such as targeted funds to promote internationalization and to promote the tertiary education sector as a whole abroad in relevant fairs and fora, and the modulation of tuition fees for international students.
- **Reduce the number of barriers impeding the internationalization of tertiary education,** such as visa regulations and labor market restrictions.
- **Improve the information provided to international students** and encourage tertiary education institutions to provide specific support strategies for international students before their arrival and during their studies.
- **Extend internationalization to vocational training** through mobility and the creation of

international networks of vocational training institutions to promote knowledge and technology exchange, scale up quality, and facilitate matching with labor market needs.

191. What emerges from these recommendations is the need for internationalization strategies to be conceived and implemented at the inter-ministerial level. This process of awareness raising and prioritizing internationalization in the region requires coordinated efforts by ensembles of ministries in a comprehensive manner.

5. INTERNATIONALIZATION IN CONTEXTS OF FRAGILITY

192. As seen in the previous section, many countries in the MENA region are witnessing large influxes of refugees, which can constitute both a challenge as well as an opportunity for the region. **In the context of the digital revolution, one example given above of a way of integrating refugees into tertiary education systems is through the use of online courses.** Virtual mobility does indeed constitute an important part of internationalization that MENA could take further advantage of. Moreover, several other recommendations appear as pertinent for tertiary education institutions in the context of persisting fragility:

- **Provide scholarships for refugees:** scholarships should not be limited to only those who have obtained legal refugee status but be made available more widely. Moreover, some scholarships ought to be available for host country students to help limit social tensions between refugee and host communities.
- **Offer preparatory programs at universities to improve access to**

155. Ibid.

156. Ibid.

tertiary education for refugees. These programs may offer instruction in core subjects including languages to ensure that students with limited proficiency in certain areas – due to interruption of studies, or pre-tertiary education in different languages – are prepared to pursue regular university classes.

193. Governments, for their part, could implement policies in parallel:

- **Consider tertiary education as a fundamental right of refugees** and consequently consider it an essential part of any humanitarian response to refugee crises, as well as future development efforts.
- **Improve refugees' access to primary and secondary education, as a means to ensuring their improved access to tertiary education.** In parallel, ensure that refugees are systematically included in tertiary education plans and programs, including monitoring their participation, educational attainment and drop-out rates. Some examples in this vein were seen above, such as in the Turkish case, but worldwide, wider adoption of such policies is required.
- **Provide a legal framework in which refugees are enabled to have their competences recognized,** since they often do not have access to the documents necessary for admission at the tertiary level. In the longer term, the elaboration of bilateral and regionwide agreements on the mutual recognition of qualifications is desirable. As seen above, the 2019 UNESCO Convention on this is, at the time of writing, pending ratification, and its effects yet to be seen.

6. A REGIONAL APPROACH AND REGIONAL NETWORKS

194. Tertiary education institutions could take advantage of the fact that it is often easier – due to geographical proximity and sometimes cultural ties – to attract foreign students and teachers from nearby. **They may thereby adopt a regional approach in their internationalization efforts, drawing in students and professors from other countries in the region or neighboring regions, and setting up partnerships and exchange programs at the regional level.** Taking steps in the direction of “regionalization”, due to the sometimes-lower cost and relative ease in terms of both mobility and partnerships, may be particularly relevant for the MENA region and hold several benefits.

195. Moreover, drawing on networks of tertiary education institutions already in place in the region, such as the University Governance Screening Card network and the Tethys network,¹⁵⁷ **new strategic South-South and North-South networks of tertiary education institutions could be created and developed.** This could involve activities such as the creation of a platform to facilitate exchanges and cooperation amongst the network members and would allow for the cooperative drafting of a regional strategy for internationalization in the region. **Such a network could also support the capacity building of individual institutions in the drafting of their own internationalization strategies, as well as enhancing both the attractiveness of tertiary education institutions in the region and North-South and South-South mobility.**¹⁵⁸

157. The Tethys network is a Euro-Mediterranean network of universities, created in 2000 by Aix Marseille University, and is composed of more than 60 Universities in the Euro-Mediterranean area. For more information, see <https://tethys.univ-amu.fr/en>

158. Existing networks in the European context, such as the European Association for International Education (EIAE), may be of use for MENA institutions who may assess the replicability of such types of networks, in the region. See www.eiae.org

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7. APPENDIX

TABLE 8 Student mobility indicators in MENA

YEAR	2010			2011			2012			2013		
	COUNTRY OF ORIGIN	NUMBER OF MOBILE STUDENTS	SHARE(%) IN TOTAL MENA MOBILE STUDENTS	NUMBER OF MOBILE STUDENTS	SHARE(%) IN TERTIARY EDUCATION STUDENTS	SHARE(%) IN TOTAL MENA MOBILE STUDENTS	NUMBER OF MOBILE STUDENTS	SHARE(%) IN TERTIARY EDUCATION STUDENTS	SHARE(%) IN TOTAL MENA MOBILE STUDENTS	NUMBER OF MOBILE STUDENTS	SHARE(%) IN TERTIARY EDUCATION STUDENTS	SHARE(%) IN TOTAL MENA MOBILE STUDENTS
Algeria	22850	1.958	7.315371	23962	1.976	7.097076	24701	2.000	6.816814	20695	1.625	5.421087
Bahrain	4118	na	1.318368	3975	9	1.177317	4106	9	1.133146	4481	11	1.173805
Djibouti	1793	36	0.574025	1849	28	0.547638	1781	na	0.491508	1846	na	0.483563
Egypt	14325	0.54	4.586113	14738	0.65	4.365108	16266	0.70	4.48898	19744	0.79	5.171971
Iran	44152	1.15	14.13515	49564	1.19	14.67989	51071	1.15	14.09423	50053	1.13	13.11146
Iraq	12583	na	4.028416	13147	na	3.893884	14310	na	3.949177	16039	na	4.201441
Jordan	15128	5.8	4.843192	15791	5.9	4.676986	16677	5.2	4.602405	19366	na	5.072954
Kuwait	9997	na	3.200515	11025	na	3.26539	13746	na	3.793528	16799	18.96	4.400524
Lebanon	13243	6.14	4.239714	13160	5.72	3.897735	12596	5.60	3.476159	12000	4.95	3.143418
Libya	7389	na	2.36557	7420	na	2.197659	6811	na	1.879654	6448	na	1.689064
Morocco	42829	8.74	13.71116	43381	7.9	12.8486	43494	6.70	12.00318	38599	5.17	10.11107
Oman	10085	0.11	3.228688	9827	9.92	2.910565	10125	na	2.794229	11284	12.65	2.955861
Palestine	15400	7.3	4.930272	16621	7.2	4.922815	18913	8.0	5.219482	20918	8.9	5.479502
Qatar	2825	16.9	0.904417	2859	15.7	0.84678	3585	17.2	0.989364	5039	19.4	1.319974
Saudi Arabia	42651	4.5	13.65461	51679	4.8	15.30631	63833	5.0	17.6162	73548	5.1	19.26601
Sudan	na	na	na	na	na	na	na	na	na	na	na	na
Syrian Arab Republic	16150	2.7	5.170383	17267	2.9	5.114148	18303	2.7	5.051138	22591	3.5	5.917747
Tunisia	19779	5.1	6.332198	19525	5.1	5.782923	18908	5.0	5.218102	16889	4.8	4.4241
United Arab Emirates	8047	7.3	2.576227	8396	6.9	2.486731	8452	6.5	2.332526	8530	6.0	2.234447
Yemen	9012	3.21	2.885169	13446	4.79	3.982442	14676	na	4.050183	16881	na	4.422004
MENA	312356	-	-	337632	-	-	362354	-	-	381750	-	-

TABLE 9 Panel regression of the tertiary enrollment rate in MENA

EXPLAINING VARIABLES	ESTIMATE	T STAT	P. VALUE
Net Enrollment ratio in upper secondary (log)	1.18	11.5	0.00
Urbanization (log)	2.85	4.1	0.00
Intercept	-13.54	-4.8	0.00
FIXED-EFFECTS (WITHIN) REGRESSION			
N. Obs	200		
N. Countries	19		
R2 within	0.56		
R2 between	0.37		
R2 overall	0.36		
Fraction of variance due to country fixed effects	0.95		

Source: Authors' calculation using UNESCO and WB data.

TABLE 10 Cross country regression of the global competitiveness index in 2017-2018 over the share of foreign students and the quality of education

EXPLAINING VARIABLES	ESTIMATE	T STAT	P. VALUE
Quality of education scale (extension of PISA 2015)	0.18	9.5	0.00
Share of foreign students (log)	3.00	3.8	0.00
Intercept	-22.11	2.7	0.01
N. Countries	76		
R2	0.65		

Source: Authors' calculation using UNESCO and WB data.

TABLE 11 Linear regressions to project PISA 2015 math scores using TIMSS math scores

EXPLAINING VARIABLES	ESTIMATE	T STAT	P. VALUE
TIMSS math score, 8 th grade 2015	0.78	11.9	0.00
Intercept	82.50	2.5	0.02
N. Countries	24		
R2	0.86		
TIMSS math score, 8 th grade 2011	0.80	9.8	0.00
Intercept	72.20	1.8	0.09
N. Countries	24		
R2	0.80		

EXPLAINING VARIABLES	ESTIMATE	T STAT	P. VALUE
TIMSS math score, 4 th grade 2011	0.71	11.2	0.00
Intercept	125.00	3.8	0.00
N. Countries	30		
R2	0.81		

Source: Authors' calculation using UNESCO and WB data.

TABLE 12

Quality of education scale consolidated using math test scores from PISA (2015) and TIMSS (2015 & 2011)

COUNTRY	QUALITY SCALE	SOURCE FOR MATH SCORE	YEAR OF SURVEY
Albania	413	PISA	2015
Algeria	360	PISA	2015
Argentina	456	PISA	2015
Armenia	450	TIMSS, 8 th grade	2011
Australia	494	PISA	2015
Austria	497	PISA	2015
Azerbaijan	452	TIMSS, 4 th grade	2011
Bahrain	437	TIMSS, 8 th grade	2015
Belgium	507	PISA	2015
Botswana	388	TIMSS, 8 th grade	2015
Brazil	377	PISA	2015
Bulgaria	441	PISA	2015
Canada	516	PISA	2015
Chile	423	PISA	2015
China	531	PISA	2015
Colombia	390	PISA	2015
Costa Rica	400	PISA	2015
Croatia	471	TIMSS, 4 th grade	2011
Cyprus	437	PISA	2015
Czech Republic	492	PISA	2015
Denmark	511	PISA	2015
Dominican Republic	328	PISA	2015
Egypt	388	TIMSS, 8 th grade	2015
Estonia	520	PISA	2015
Finland	511	PISA	2015
France	493	PISA	2015
Georgia	423	TIMSS, 8 th grade	2011
Germany	506	PISA	2015

COUNTRY	QUALITY SCALE	SOURCE FOR MATH SCORE	YEAR OF SURVEY
Ghana	339	TIMSS, 8 th grade	2011
Greece	454	PISA	2015
Honduras	342	TIMSS, 8 th grade	2011
Hong Kong SAR	548	PISA	2015
Hungary	477	PISA	2015
Iceland	488	PISA	2015
Indonesia	386	PISA	2015
Iran, Islamic Rep.	423	TIMSS, 8 th grade	2015
Ireland	504	PISA	2015
Israel	470	PISA	2015
Italy	490	PISA	2015
Thailand	419	TIMSS, 8 th grade	2015
Trinidad and Tobago	417	PISA	2015
Tunisia	367	PISA	2015
Turkey	420	PISA	2015
Ukraine	463	TIMSS, 8 th grade	2011
United Arab Emirates	427	PISA	2015
Japan	532	PISA	2015
Jordan	380	PISA	2015
Kazakhstan	495	TIMSS, 8 th grade	2015
Korea, Rep.	524	PISA	2015
Kosovo	362	PISA	2015
Kuwait	388	TIMSS, 8 th grade	2015
Latvia	482	PISA	2015
Lebanon	396	PISA	2015
Lithuania	481	TIMSS, 8 th grade	2015
Luxembourg	486	PISA	2015
Macao SAR, China	544	PISA	2015
Macedonia, FYR	408	TIMSS, 8 th grade	2011
Malaysia	445	TIMSS, 8 th grade	2015
Malta	479	PISA	2015
Mexico	408	PISA	2015
Moldova	420	PISA	2015
Montenegro	371	PISA	2015
Morocco	382	TIMSS, 8 th grade	2015
Netherlands	512	PISA	2015
New Zealand	495	PISA	2015
Norway	502	PISA	2015
Oman	397	TIMSS, 8 th grade	2015

COUNTRY	QUALITY SCALE	SOURCE FOR MATH SCORE	YEAR OF SURVEY
Peru	387	PISA	2015
Poland	504	PISA	2015
Portugal	492	PISA	2015
Qatar	402	PISA	2015
Romania	448	TIMSS, 8 th grade	2011
Russian Fed.	494	PISA	2015
Saudi Arabia	370	TIMSS, 8 th grade	2015
Serbia	490	TIMSS, 4 th grade	2011
Singapore	564	PISA	2015
Slovakia	475	PISA	2015
Slovenia	510	PISA	2015
South Africa	373	TIMSS, 8 th grade	2015
Spain	486	PISA	2015
Sweden	494	PISA	2015
Switzerland	521	PISA	2015
Syrian Arab Rep.	378	TIMSS, 8 th grade	2015
Taiwan, China	542	PISA	2015
United Kingdom	492	PISA	2015
United States	470	PISA	2015
Uruguay	418	PISA	2015
Viet Nam	495	PISA	2015
Palestine	401	TIMSS, 8 th grade	2015
Yemen	300	TIMSS, 4 th grade	2011

Source: Authors' calculation using OECD and EIA data.

TABLE 13

Cross country regression between the change in the higher education quality index derived from the global competitiveness index and the change in the share of foreign students over three-year periods, 2008- 2016

EXPLAINING VARIABLES	ESTIMATE	T STAT	P. VALUE
Change in share of foreign students (3-year average)	0.33	7.4	0.00
Intercept	-0.13	-1.6	0.12
N. Obs	139		
N. of countries	63		
R2	0.28		

Source: Authors' calculation using UNESCO and GCI data.

TABLE 14 Number of universities by country of the MENA region in 2018

Morocco	156
Iran	150
Algeria	92
Saudi Arabia	49
Egypt	49
United Arab Emirates	43
Tunisia	41
Lebanon	39
Iraq	34
Jordan	31
Palestine	27
Oman	15
Libya	15
Bahrain	14
Kuwait	6
Qatar	1
Total	762

Source: International Association of Universities' Worldwide Database of Higher Education Institutions, Systems and Credentials, 2018.

TABLE 15 Determinants of the number of foreign students among the universities appearing in the TIME ranking, 2016-2018

EXPLAINING VARIABLE	FOREIGN STUDENTS (LOG)	T-STAT
Total students (log)	0.87	28.0**
Staff/student ratio (log)	0.03	1.0
Research	0.01	7.9**
Citations	0.004	6.5**
Teaching	0.004	2.1*
Industry income	0.001	0.8
2017	0.04	3.8**
2018	0.07	7.4**
N. obs.	2,729	
R2	0.46	

** , * indicate respectively statistical significance at the 0.1 and 5% level.

TABLE 16

Determinants of the number of foreign students by country, 1999-2016 and 2000, 2005 and 2010

EXPLAINING VARIABLE	FOREIGN STUDENTS (LOG)	T-STAT	FOREIGN STUDENTS (LOG)	T-STAT
Total students (log)	0.49	17.5**	0.62	9.5**
Enrollment rate in tertiary education (log)	0.49	9.6**	0.11	0.9
Number of students in TIME-ranked universities (log)	0.05	5.9*	0.00	0.0
Distance to market (log)	0.44	4.9**	0.60	3.1*
Civic activism			8.8	5.2**
N. obs.	1057		193	
R2	0.58		0.63	

** , * indicate respectively statistical significance at the 0.1 and 1% level.

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