Regional Integration in the Union for the Mediterranean

PROGRESS REPORT

with the mandate of
Union for the Mediterranean
Union pour la Méditerranée
الاتحاد من أجل المتوسط

OECD

Regional Integration in the Union for the Mediterranean

PROGRESS REPORT

OECD
BETTER POLICIES FOR BETTER LIVES

Please cite this publication as:
OECD (2021), *Regional Integration in the Union for the Mediterranean: Progress Report*, OECD Publishing, Paris, *https://doi.org/10.1787/325884b3-en*.

ISBN 978-92-64-54442-0 (print)
ISBN 978-92-64-50462-2 (pdf)

Photo credits: Cover © Zwiebackesser/Shutterstock.com.

Corrigenda to publications may be found on line at: *www.oecd.org/about/publishing/corrigenda.htm*.

Preface by the Union for the Mediterranean

I am pleased to present this first edition of the UfM Progress Report on Regional Integration at a time when the Union for the Mediterranean Region (and the whole world) experiences the wind of change brought about by the digital and value-chain disruptions and awakens to the immensity of the socio-economic losses triggered by the current COVID-19 pandemic. It is precisely at this threshold of a new era that the case for reinforced regional integration becomes more than evident; it becomes a vision for confronting a broad array of challenges, the scale and scope of which are beyond the capacities of any one country or entity.

This Report fulfills the mandate given to the UfM Secretariat by its Member States and outlined in the 2017 UfM Roadmap for Action, with a view to elaborate a progress report on regional integration in order to assess progress achieved in regional integration, using specific performance indicators which would allow for analysis of major trends and evolutions. It is also anchored to the UfM mission, the essence of which is to promote regional cooperation and integration in a way conducive to the creation of a common area of peace, stability, security, and prosperity.

There was a clear need for an evidence-based Report prepared by a credible and neutral third-party that would use sound data and scientific statistical models to cover the key policy domains of integration; namely trade finance, infrastructure, movement of people, as well as higher education. Furthermore, this groundbreaking Report had to transcend the classical presentation of key findings to the provision of pragmatic policy recommendations. Among other findings in the Report, evidence shows that there has been progress in regional integration since the 1995 Barcelona Process, but it also indicates that the progress has been slow and remains below the potential of the region in terms of capacities and resources. We believe in this potential, and we are determined to join the efforts meant to unleash it.

Regional integration is engrained in the Mediterranean mindset since times immemorial, being one of the very tenets of Mediterranean resilience and regeneration. I trust that this Report will help guide our collective compass towards enhanced cooperation and will flag the indispensable policy reforms that would create an enabling environment for a sustainable, responsible and inclusive progress that fulfills the legitimate aspirations of our people.

I invite you to read this first edition of the Progress Report which will be followed by other editions periodically, allowing us to keep track of the state-of-play of integration in the region.

Nasser Kamel

Secretary General, Union for the Mediterranean

Preface by the OECD

The countries of the Euro-Mediterranean region share a wealth of historical and cultural links that have shaped some of the most brilliant pages of human history. Today, this part of the world also shares a series of important challenges that demand urgent policy responses. From climate change to youth employment; from a wise management of the movement of people to an effective response to the impact of the COVID-19; the need to articulate and implement ambitious strategies is evident. For the OECD, the Euro-Mediterranean region is one of strategic relevance, a unique combination of member and partner countries that are linked through a regional policy dialogue facilitated by the Middle East and North Africa-OECD Initiative on Governance and Competitiveness for Development. Regional integration is a central focus of this initiative, an instrument for countries to build inclusive, resilient and sustainable economies in line with the 2030 Agenda for Sustainable Development. The OECD works side by side with the Union for the Mediterranean to realise this common purpose within the framework of a long-standing and valued partnership.

This first *Progress Report* on *Regional Integration in the Union for the Mediterranean* provides rigorous, evidence-based research on integration in the region, building on OECD's methodologies and expertise. It reviews the state of Euro-Mediterranean integration through indicators covering trade, finances, infrastructure for transport and energy, the movement of people, research and higher education. The quantitative and qualitative indicators presented allow readers to gauge the advancements made so far, and the distance yet to cover.

The approach that is adopted to monitor regional integration in the report has distinctive features. *First*, for each of the integration dimensions examined, the notion of integration reflects on a series of considerations on the conditions that should exist in a country to ensure that the benefits from regional integration can be fully realised. *Second*, the study uses a limited number of sound indicators. It applies OECD principles of data quality, which encompass relevance, accuracy, accessibility and interpretability. *Third*, by conducting analysis at a granular, disaggregated level, the study unveils developments in regional integration that have taken place but remain "under the radar" of pattern and trend analysis conducted at the more aggregate level.

The analysis and recommendations outlined in this report are the result of a participative process, including extensive consultations with policy makers and experts across the region. The aim is to contribute to a deeper understanding of regional integration dynamics in the Euro-Mediterranean and, most importantly, to provide actionable tools to ensure that reforms translate into tangible impact. In a few years, a new *Progress Report* will review and assess the effectiveness of the implementation process, and measure the achievements of integration in the critical policy domains covered by the publication. Political commitment to implement reforms will be key to achieve these results. We invite governments and non-governmental stakeholders to join forces and to respond to the challenges and needs of the Mediterranean region, promoting its much needed integration.

Angel Gurría

Secretary General, OECD

Foreword

25 years after the Barcelona Declaration, the importance of strengthening policy dialogue across the Mediterranean has not diminished. On the contrary, regional co-operation remains a strategic objective for the member countries of the Union for the Mediterranean (UfM), given the common challenges faced by countries in the region, many resulting from global trends. They also need to ensure that recovery from the COVID-19 crisis leads to greener, more prosperous and inclusive societies in the region. The shared long-term vision is one of stability and prosperity of the region, where people, especially women and youth, can meet their hopes for the future, enjoy their rights and live in a peaceful and secure environment.

The *Regional Integration in the Union for the Mediterranean: Progress Report* reviews the progress of integration in the Euro-Mediterranean region and provides evidence-based policy recommendations to enhance integration. The report is the first issue in a future series that will monitor progress at periodic intervals. The *Progress Report* focuses on five major areas of regional integration: trade, finance, infrastructure, movement of people, and research and higher education.

This report was produced in the Global Relations Secretariat (GRS) of the OECD, led by Andreas Schaal, Director, and benefitted from the financial support of the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH. It was prepared in the Middle East and Africa (MEA) Division under the strategic guidance of Carlos Conde, Head of MEA Division. The drafting team, led by Mariarosa Lunati, Senior Advisor, included Roger Forés Carrión, Alin Horj, Yasmeen Moreau, Salma Labyad and Peilin Lu. Mario Cervantes of the OECD Directorate for Science, Technology and Innovation prepared Chapter 5, with statistical support from Hiroyuki Shirato. Antonella Liberatore, Guannan Miao and Rodolfo Ostolaza of the OECD Statistics and Data Directorate developed the gravity model of trade presented in Chapter 1.

The OECD is grateful to Mohammed Elrazzaz and Hamed El Etreby from the Union for the Mediterranean (UfM) and Johannes Laepple (GIZ) for their valuable comments and guidance throughout the project. Thanks are likewise due to Said Charna, Salima Fazzani and Giuseppe Provenzano (UfM), Alicia Figueroa Romero and Andreas Garbade (GIZ) who provided useful comments to the draft report. Nevertheless, the report presents the views of the authors and does not necessarily reflect the opinions of the UfM Secretariat or the GIZ/BMZ or the authorities of the countries concerned. The names used in the report to designate any territory, city or area are without prejudice to the official terminology used by the UfM Secretariat.

During the early stage of the project, participants in the joint OECD GRS-STI Workshop on Regional Co-operation in Research, Higher Education and Innovation in the Euro-Mediterranean Region provided a useful exchange of views on the impact of the COVID-19 crisis on regional co-operation in the EU-Mediterranean region and the emerging policy priorities for co-operation in research and higher education; and participants in the 5th Conference of Mediterranean Central Banks “Financial Integration and Inclusive Development: a View from the Mediterranean Countries” organised by the Banco de España and the European Institute of the Mediterranean (IEMed), with the support of the OECD, provided useful advice on measures of financial integration relevant to the UfM region.

The OECD is grateful to participants at dedicated events and reviewers for their advice and comments on draft chapters: Karim Amellal, French Ministry for Europe and Foreign Affairs; Nizar Ata, Aylan Consulting,

Tunisia; Mohammed Benjelloun, Karim Srairi, Rachid Sarrakh and Saïd Maghraoui Hassani, Ministry of Industry, Trade and Green and Digital Economy, Morocco; Alessio Ciarlone and Alessandro Schiavone, Bank of Italy; Massimo de Andreis, SRM Economic Research Centre, Intesa Sanpaolo Group; Michaela Dodini, European Commission Directorate-General for Trade; Nico Frandi, Permanent Delegation to the OECD, Italy, and experts from the Ministry of Foreign Affairs and International Cooperation and the Ministry of Labour and Social Policies, Italy; Nassib Ghobril, Economic Research Byblos Bank Group, Lebanon; Khaled Momani, Jordan Investment Commission; Marcelo Masera, European Commission Joint Research Centre; Luis Óscar Moreno García-Cano and Francisco de Asis Aguilera Aranda, Ministry of Foreign Affairs of Spain; Wael Naeem, Ministry of Transportation, Egypt; Olivia Orozco de la Torre, Casa Árabe, Spain; Anna Terrón Cusí, FIIAPP; and Pinar Yalçın Bastırmac, Ministry of Trade of Turkey.

The MEA drafting team thanks Marzena Kisielewska, Head of South East Europe (SEE) Division in the Global Relations Secretariat, who acted as lead reviewer, and the SEE division team for the careful review of the draft chapters. Valuable comments were also received from numerous experts across the Organisation, notably: Alain Dupeyras, Jane Stacey and Laetitia Reille of the Centre for Entrepreneurship, SMEs, Regions and Cities; Winfrid Blaschke, Hélène Francois, Emilie Kothe, Etienne Lepers, Fernando Mistura, Andrea Marin Odio and Joachim Pohl of the Directorate for Financial and Enterprise Affairs; Jean-Christophe Dumont, Charlotte Levionnois, Sara Mouhoud and Gilles Speilvogel of the Directorate for Employment, Labour and Social Affairs; and Olaf Merk of the International Transport Forum. Ali Al-Saffar of the International Energy Agency, Javier Lopez Gonzales of the Trade and Agriculture Directorate and Kateryna Obvintseva of the Directorate for Education and Skills provided advice respectively on key trends in energy infrastructure, the use and interpretation of gravity models of trade, and higher education dynamics.

The report was copy-edited by Christopher Marquardt, and prepared for publication by Charity Kome (GRS/MEA). It has greatly benefited from statistical support from Léo Mineur and Sami Erchoff, administrative support from Nadia Kameleddine, and communications support from Robert Akam, Sophie Elliot and Sabrina Gasparrini, all of the OECD GRS.

Reader's Guide

The monitoring approach

Regional Integration in the Union for the Mediterranean: Progress Report monitors integration in the Euro-Mediterranean region, with the aim to provide evidence-based policy recommendations. The *Progress Report* features the analysis of key quantitative and qualitative indicators of integration in five areas, notably: trade, finance, infrastructure, movement of people, and research and higher education. The selection of indicators for each integration area built on the literature on economic integration and brainstorming on the pertinence of given measures for monitoring integration in the Union for the Mediterranean. Also, a fresh perspective was taken when necessary to ensure the choice of meaningful indicators in the context of the UfM. The final selection of indicators reflects considerations about geographical coverage and data quality, relevance and availability, and relative ease of interpretation of the results.

The five chapters of the *Progress Report* analyse respectively one of the five integration areas in the scope of the monitoring exercise. A table in each chapter introduces the key monitoring indicators that are used for the analysis of the progress of integration in the concerned area, i.e. trade, finance, infrastructure, movement of people, and research and higher education.

Table. Key monitoring indicators for integration area *X*

	Description	Coverage	Frequency
Indicator *X* (from X1 to Xn)	Main purpose and characteristics of the indicator, and the source(s) of data.	UfM countries covered by the database relevant for the indicator	The frequency of data, e.g. annual, bi-annual, etc.

Future editions of the *Progress Report* will possibly monitor additional dimensions of integration in the Union for the Mediterranean, and will deepen the analysis of economic integration as related to inclusive growth, gender equality and environmental sustainability.

Main sources and databases

Unless otherwise noted, the report uses data from the OECD and other international data agencies with the mandate, resources, and expertise to collect national data on specific indicators. The main databases are listed in the tables presenting the key monitoring indicators. When international databases do not cover one or more UfM countries but data exist in national databases, these are used as a complement to expand the country coverage, provided that the metadata indicate sufficient consistency with the reference international database.

Regional groupings

The report uses the following definitions of regions and sub-regions.

UfM countries Euro-Mediterranean region	42 countries: Albania, Algeria, Bosnia and Herzegovina, Egypt, Israel, Jordan, Lebanon, Mauritania, Monaco, Montenegro, Morocco, Palestinian Authority, Tunisia; Turkey; and the 27 member countries of the European Union (as of December 2020); Syria (suspended). Libya (observer).
MENA countries	MENA countries members of the UfM include: Algeria, Egypt, Jordan, Lebanon, Morocco, Palestinian Authority and Tunisia. The MENA region includes Algeria, Bahrain, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Palestinian Authority, Qatar, Saudi Arabia, Syria, Tunisia, United Arab Emirates and Yemen.
North Africa	Algeria, Egypt, Mauritania, Morocco and Tunisia.
Western Balkans	Western Balkan countries members of the UfM: Albania, Bosnia and Herzegovina, and Montenegro.
Levant countries	Lebanon, Palestinian Authority and Jordan.
Central, Eastern and South Eastern Europe (CESEE)	CESEE countries members of the UfM: Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovenia and the Slovak Republic; Albania, Bosnia and Herzegovina, and Montenegro.

Country codes

The figures in this publication use ISO codes (ISO3) for country names as listed below.

ALB	Albania	KWT	Kuwait
ARE	United Arab Emirates	LBN	Lebanon
BHR	Bahrain	LBY	Libya
BIH	Bosnia and Herzegovina	MAR	Morocco
BRA	Brazil	MCO	The Principality of Monaco
CAN	Canada	MKD	The Republic of North Macedonia
CHE	Switzerland	MNE	Montenegro
CHN	The Republic of China	MRT	Mauritania
DJI	Djibouti	OMN	Oman
DZA	Algeria	PSE	Palestinian Authority
EGY	Egypt	QAT	Qatar
GBR	United Kingdom	SAU	Saudi Arabia
HKG	Hong Kong	SRB	Serbia
IND	India	SYR	Syria
IRQ	Iraq	TUN	Tunisia
IRS	Israel	TUR	Turkey
JOR	Jordan	USA	United States of America
XXK	Kosovo	YEM	Yemen

Abbreviations and acronyms

AMU	Arab Maghreb Union
BRI	Belt and Road Initiative
CESEE	Central, Eastern and South Eastern Europe countries
EC	European Commission
EFTA	European Free Trade Association
FDI	foreign direct investment
GATS	General Agreement on Trade in Services
LAS	League of Arab States
MENA	Middle East and North Africa
OIC	Organisation of Islamic Countries
PAFTA	Pan-Arab Free Trade Area
PAM	Pan-Euro-Mediterranean
PCT	Patent Cooperation Treaty
PRIMA	Partnership for Research and Innovation in the Mediterranean Area
RTA	regional trade agreement
SDGs	Sustainable Development Goals (UN)
SMP	Skills Mobility Partnership
TFA	Trade Facilitation Agreement
UfM	Union for the Mediterranean
WTO	World Trade Organization

Executive summary

In 1995, countries from the Northern and Southern shores of the Mediterranean decided to reinforce links that had existed between them for centuries – to build a future of peace, stability and prosperity for the region. This was the beginning of the Barcelona Process, a Euro-Mediterranean partnership that in 2020 celebrated its 25th anniversary. A key milestone was the creation, in 2008, of the Union for the Mediterranean (UfM), with the mission of supporting regional integration and cohesion. Since then, the UfM has worked to promote regional cooperation, building on dialogue and the implementation of projects and initiatives with tangible impact on the region's citizens.

The study *Regional Integration in the Union for the Mediterranean: Progress Report* reviews the progress of integration in the Euro-Mediterranean region and identifies policy actions needed to foster continued integration. The COVID-19 pandemic has hindered integration efforts; notably, the containment measures implemented across the region to fight the spread of the virus have also severely affected many economies – especially in the Southern shore and in key sectors such as tourism – costing the jobs of millions of people. Regional integration can be instrumental in putting these economies on the road to recovery, by supporting green and digital transformation, boosting sustainable trade, investment and innovation; and creating decent jobs and social fairness.

The state of integration in the UfM: positive developments but progress is slow

The report's findings acknowledge advancements of integration in the UfM region, but at the same time show that progress has been slow and remains below the potential of the region in terms of capacities and resources. This is illustrated in the report by the analysis of missing trade opportunities in the region, where further trade expansion would require increasing industrial diversification in the Southern Mediterranean countries, with creation of jobs outside traditional manufacturing sectors.

Over time, ***trade integration*** within the Euro-Mediterranean region has progressed, in terms of both trade in final products and intermediate goods and integration in regional value chains. Many challenges remain, however, especially for countries on the Southern shore. These include the complexity of dealing with diverse trade agreements, continuing non-tariff obstacles to trade in goods and lack of an adequate regulatory framework for trade in services, inadequate transport and logistics infrastructure, and a business environment that is not supportive enough of firms' ambition to participate in international trade.

The UfM region remains diverse in terms of financial development across countries. ***Financial integration*** in the UfM region cannot overlook development priorities within the Western Balkans and MENA countries, which feature relatively low levels of financial development.

Infrastructure connectivity especially in the Southern and Eastern Mediterranean is insufficient or incomplete, thus reducing the speed of socio-economic integration. While in recent years countries in the region have built extensive transport and energy networks, the level of investment is not enough to meet the growing connectivity needs between countries.

Countries have taken significant steps to facilitate ***movement of people in the UfM region***, including easing visa requirements and signing bilateral and/or regional agreements on labour and education mobility. However, progress achieved in terms of mobility has been unequal across countries in the region, including South-South movements. The European Union continues to play a central role in migration patterns in the region, including labour migrations.

Integration in higher education and research in the region has increased unevenly in line with the growing but unequal capacity in education and research in Southern UfM countries and the Western Balkans. The intensity of scientific co-operation in the Euro-Mediterranean region is characterised more by North-South interactions than by South-South collaboration.

No time to waste: priorities to speed up the process of integration in the UfM

- **Address remaining obstacles hindering trade development**. Agreements on trade in services involving the many Southern Mediterranean countries currently not parties to such agreements should support the integration of important sectors of the UfM economies into regional value chains. In addition, political and administrative cooperation should be increased to reduce trade costs – for example, by increasing border cooperation with neighbouring countries, reducing administrative burdens for traders, enhancing regulatory transparency, and simplifying and digitalising procedures. Finally, policies that support industrial diversification are needed, including skills development, a digitalisation agenda and stronger integration in regional and global value chains – all aimed at promoting local jobs and sustainable economic models.
- **Develop financial markets across the region.** Governments should consider financial reforms to strengthen markets and institutions and modernise legislative frameworks in line with international best practice, notably in MENA countries and the Western Balkans. International frameworks like the OECD Code of Liberalisation of Capital Movements can provide guidance for raising the standards of financial systems to level the playing field. Governments should also enhance the investment climate and reduce regulatory restrictions to foreign direct investment (FDI), especially in the Southern and Eastern Mediterranean, in key sectors for regional integration such as transport and energy connectivity. Finally, international cooperation should facilitate the establishment of effective frameworks for transferring remittances through formal channels – thereby avoiding losses to informal channels and supporting greater financial literacy and financial inclusion.
- **Increase investments to develop high-quality transport and energy infrastructure**. Governments should focus on better planning, prioritisation and co-ordination of investment for connectivity infrastructure, between and within countries. This involves building truly multi-modal connectivity in transport and logistics infrastructure in the Southern and Eastern regions as well as improving the capacity and efficiency of ports in their role as national or regional gateways, linked with inland areas, special economic zones and research centres and universities. Governments should also promote reforms in the power sector to encourage competition and entry of private investors and the development of renewable energies. This includes creating conditions for investment in renewable electricity generation by unbundling generation, transmission, and distribution in the electricity sector, especially in the MENA region. When policies are necessary to address countries' national security concerns, governments should ensure that these statutory regulations are not more restrictive than needed. Lastly, governments should co-operate on international tools and instruments to ensure quality, compatibility and inter-operability of infrastructure networks across the region.
- **Promote a shared vision of mobility of people as a driver of economic and social development**. Governments could soften visa requirements to leverage the potential of different forms of mobility across the region, such as tourism, mobility of students and researchers, and

mobility related to trade in services. Governments should review the design of circular migration schemes to put migrants' rights at the centre and ensure the attractiveness of circularity for all parties – origin and host countries, employers and migrants. Finally, countries should invest in skills development and transferability to enable greater participation of Southern Mediterranean youth in mobility schemes between UfM countries. To that end, countries should move towards greater harmonisation of national qualifications frameworks in the region, develop cooperation between institutions working towards the socio-professional integration of youth across the region, and expand the reach of mobility schemes targeting new categories of migrants, including tertiary education students and young, highly skilled professionals.

- **Implement complementary policies in research, higher education and innovation**. Governments should promote investment in research infrastructure at the national level, to facilitate embedding technology in local economic production systems and attract international flows of research and development (R&D), human resources, and related high-value-added activities. By supporting infrastructures such as distributed research labs, governments can foster virtual mobility and "brain circulation" as an alternative to brain drain. Also, they should reinforce scientific co-operation in environmental sciences, given the impact of climate change on the region's water, food and agricultural systems, and should encourage student mobility as a vehicle for directing research towards common problems in the Mediterranean. Finally, governments should facilitate the diffusion and uptake of digital technologies for science and education, such as open science platforms, to enable countries to take advantage of new opportunities for regional co-operation – especially in the current context of the COVID-19 pandemic. As scientific research is increasingly data-driven, ensuring that research personnel are equipped with the digital skills necessary to engage with peers around the world will be important.
- **Build statistical capacity to properly monitor the progress of regional integration**. Governments in the MENA region in particular should sustain the development of sound and internationally comparable data to inform the design of effective integration policies and to monitor their implementation and impact in relevant policy areas where data gaps exist. They should also promote greater engagement between the national statistical systems of Southern Mediterranean countries, Eurostat and international bodies promoting the harmonisation of statistical methodology and data, such as the OECD.

Table of contents

Preface by the Union for the Mediterranean 3

Preface by the OECD 4

Foreword 5

Reader's Guide 7

Executive summary 10

1 Trade 17

2 Finance 70

3 Infrastructure 99

4 Movement of people 128

5 Research and Higher Education 166

Tables

Table 1.1. Key monitoring indicators of trade integration 21
Table 1.2. Main export destinations for UfM sub-regions, 2018 27
Table 1.3. Origin of value-added, by percentage of exports in 2015, all sectors 34
Table 1.4. Services share of gross exports for selected UfM countries, 2010-15 35
Table 1.5. Intra-UfM export performance, by exporter and importer 41
Table 2.1. Key indicators for monitoring financial integration 73
Table 2.2. Remittance flows and cost analysis in MENA and Western Balkan countries 92
Table 2.3. Remittances as percentage of GDP, 2019 94
Table 3.1. Key indicators of infrastructure integration in the UfM 105
Table 3.2. Getting electricity indicators in selected UfM economies, 2020 112
Table 3.3. Renewable energy targets in selected Southern Mediterranean economies 117
Table 4.1. Key monitoring indicators of movement of people 133
Table 4.2. Foreign-born labour force in UfM countries, by sex 142
Table 4.3. Visa requirements in the UfM: non-EU citizens travelling to EU countries 146
Table 4.4. Visa requirements in the UfM: EU citizens travelling to non-EU countries 147
Table 4.5. Visa requirements between Southern Mediterranean countries, 2020 148
Table 4.6. Bilateral agreements on human (labour) mobility signed between Southern Mediterranean countries since 2000 152
Table 5.1. Key Indicators for monitoring integration and co-operation in public research and higher education 173

Annex Table 1.A.1. Trade agreements in force within the Euro-Mediterranean region 52
Annex Table 1.A.2. UfM countries: Main export partners in 1997, 2006 and 2018 54
Annex Table 1.A.3. Evolution of the share in total exports by country since 2005, 2018 or latest year 56
Annex Table 1.B.1. Model selection for total merchandise exports – regression results 65
Annex Table 4.A.1. Size of migrants and migrant-to-population ratios by countries/sub-regions, 1995-2019 163

No table of figures entries found.

Figures

Figure 1.1. Trade intensity in the world 19
Figure 1.2. Evolution of world's regional trade agreements (RTAs) 20
Figure 1.3. Trade agreements between UfM countries, 2020 22
Figure 1.4. Average trade facilitation performance, UfM countries and sub-regions, 2017-19 24
Figure 1.5. The share of the UfM in the world's merchandise exports, 1996-2018 25
Figure 1.6.Total merchandise exports of the UfM area 26
Figure 1.7. The ratio of intra-regional to extra-regional exports in the UfM, 1996-2018 27
Figure 1.8. Share in total exports of reporting country, 2005-18 28
Figure 1.9. Composition of intra-UfM exports, by type of commodity, 2006-18 29
Figure 1.10. Foreign value-added content of exports, all sectors, 2005-16 31
Figure 1.11. Foreign value-added contribution of selected UfM countries to EU and UK exports, all sectors, 2005-15 32
Figure 1.12. Origin of value-added in exports of selected UfM countries, all sectors, 2005-15 33
Figure 1.13. Origin of value-added from services in gross exports of selected UfM economies 36
Figure 1.14. Export performance for the UfM members, total and by partner group 39
Figure 1.15. Intra- and extra-UfM export performance of UfM members 40
Figure 1.16. Export performance for the UfM members, by product group and by partner 41
Figure 1.17. Export performance by UfM member group, intra-UfM exports, manufacturing products 42
Figure 1.18. Export performance by manufacturing sector, intra-UfM exports of UfM members (excluding the former EU28) 43
Figure 1.19. Trade integration in the UfM region: Have export baskets diversified? 45
Figure 2.1. Financial market depth and economic development 76
Figure 2.2. Financial market access and economic development 77
Figure 2.3. FDI Restrictiveness Index in UfM economies 79
Figure 2.4. FDI regulatory restrictiveness sub-indices, 2019 80
Figure 2.5. Regulatory Restrictiveness Index, by industrial sector 81
Figure 2.6. Regulatory Restrictiveness Index for the banking sectors, 2019 82
Figure 2.7. Inward FDI stock in UfM countries, 2018 85
Figure 2.8. Inward and outward stock in UfM sub-regions, 2018 86
Figure 2.9. FDI outflows, world and EU27, 2007-19 86
Figure 2.10. FDI inflows to MENA countries 87
Figure 2.11. Restrictions on portfolio and bank capital inflows, selected UfM countries, 2017 88
Figure 2.12. Overall capital inflow restrictions index 88
Figure 2.13. Portfolio capital outflows, per country, 2005-19 89
Figure 2.14. Portfolio capital outflows, per country, 2005-19 90
Figure 2.15. Total portfolio capital inflows, UfM MENA and Western Balkan countries 90
Figure 2.16. Total portfolio capital outflows, MENA and Western Balkan countries, 2005-19 91
Figure 3.1. Annual infrastructure needs in selected economies in MENA region, up to 2025 102
Figure 3.2. Announced greenfield FDI in selected economies in the MENA region, 2003-19 103
Figure 3.3. Logistics performance, selected UfM economies 108
Figure 3.4. Liner shipping connectivity, 2010-20 110
Figure 3.5. Median time spent in ports, 2019 111
Figure 3.6. Electrical energy trade in the UfM 114
Figure 3.7. Electrical energy trade in North Africa 115
Figure 3.8. Electrical energy trade in the Levant 115
Figure 3.9. Electrical energy trade in the Western Balkans 116
Figure 3.10. FDI regulatory restrictiveness in selected infrastructure sectors, 2019 119
Figure 4.1. Migrants in the UfM, 1995-2019 134
Figure 4.2. Intra-UfM migrants excluding intra-EU migrants, 1995-2019 135

Figure 4.3. Migrant shares of populations, 1995-2019 135
Figure 4.4. Migrant stock in the UfM by region/country of origin and destination, 1995 and 2019 137
Figure 4.5. UfM immigrants to and emigrants from the EU, 1995-2019 138
Figure 4.6. UfM countries hosting the largest numbers of North African emigrants 139
Figure 4.7. UfM emigrants from and immigrants in non-EU sub-regions/countries, 1995 and 2019 140
Figure 4.8. The weight of tourism in UfM economies: contribution to GDP 150
Figure 4.9. The weight of tourism in UfM economies: contribution to employment 151
Figure 5.1. The Knowledge Triangle approach 169
Figure 5.2. Distribution and significance of STI flows to advanced and developing countries 170
Figure 5.3. Government expenditure on tertiary education as a percentage of GDP 174
Figure 5.4. Gross domestic expenditure on R&D (GERD) 175
Figure 5.5 Percentage of GERD financed by the rest of the world (2009 and 2017) 176
Figure 5.6. European Commission funding of government and higher education R&D in Europe, 2015 177
Figure 5.7. Total R&D personnel per million inhabitants, by sex, 2008 and 2018, in selected UfM economies 177
Figure 5.8. Top 10 overall collaborators among Southern Mediterranean UfM economies and European UfM countries 179
Figure 5.9. Main areas of co-publication of Southern UfM countries, by subject 179
Figure 5.10. Main areas of co-publication of Northern UfM countries, by subject 180
Figure 5.11. Co-inventions between European and Southern Mediterranean countries, PCT (2008-16) 181
Figure 5.12. International co-invention across industries, absolute numbers and intensity 182
Figure 5.13. International mobility of tertiary level students by country of destination, from Southern UfM to Northern UfM countries 182
Figure 5.14. International Mobility of Tertiary Students by origin from Southern UfM to North UfM countries 183
Figure 5.15. The ratio of students from five UfM countries in France or the United Kingdom to the total of Europe 184
Figure 5.16. Number of students enrolled in different education programmes of Europe, by country of origin 185
Figure 5.17. Share of foreign-born and foreign citizen doctorate holders in the population, selected OECD and partner countries, 2016 186
Figure 5.18. Research and Innovation Staff Mobility between Egypt and other countries in the Marie Curie Fellowship Programme in 2019 187
Figure 5.19. Participation of Southern UfM countries in EU funding programmes, 2014-20 188
Figure 5.20. Priority domains of policy action to strengthen links between economy, research and higher education in the context of integration in the Euro-Mediterranean region 191

Annex Figure 1.A.1. Intra-UfM exports, by type of goods (excluding intra-EU exports) 57
Annex Figure 1.B.1. Reported and predicted total merchandise exports of UfM members, 1995-2018 66

No table of figures entries found.

Boxes

Box 1.1. Harmonisation of rules of origin in the Euro-Mediterranean region 23
Box 1.2. Why TiVA is useful 30
Box 2.1. Islamic finance 75
Box 2.2. The OECD FDI Regulatory Restrictiveness Index 78
Box 2.3. Foreign bank penetration 83
Box 2.4. Intra-MENA investment flows 87
Box 2.5. World Bank Remittance prices worldwide database 93
Box 3.1. Belt and Road Initiative in MENA and Balkan countries 104
Box 3.2. Selected regional interconnection schemes in the UfM 113
Box 4.1. Migration: definition and measurement 131
Box 4.2. Motivation of working-age migrants 143
Box 4.3. Focus: Labour migrations between Morocco and France 144
Box 4.4. In-depth: bilateral cooperation between Egypt and Jordan on labour mobility 153
Box 4.5. Immigrant integration in Jordan in the context of a refugee crisis 158
Box 5.1. The Partnership for Research and Innovation in the Mediterranean Area (PRIMA) 170
Box 5.2. Increasing productivity and job benefits from collaboration in research, education and innovation 171
Box 5.3. Mobility of Highly Skilled Workers 187
Box 5.4. Synchrotron-light for Experimental Science and Applications in the Middle East (SESAME) 189

No table of figures entries found.

No table of figures entries found.

1 Trade

This chapter studies the dynamics of trade integration in the Euro-Mediterranean region since the launch of the Barcelona Process in 1995. It analyses the evolution of trade flows within the region and with the rest of the world, focusing on patterns at the sub-regional level to observe progress of trade integration besides trade between EU and non-EU countries. The chapter considers key dimensions of integration, from the regulatory approach to participation in regional value chains to the composition of export flows. The final section presents a set of policy recommendations to support further trade integration in the region, oriented towards more competitive, diversified and resilient economies.

Key takeaways

- Trade among countries of the Union for the Mediterranean (UfM's) has gained relevance over the last 20 years, in terms of both trade in final products and trade in intermediate goods, as well as integration into regional value chains. The analysis of export performance for the UfM countries confirms this trend: overall, merchandise trade among the UfM countries is in line with or above the levels predicted by a gravity model of trade, and that, albeit modestly, the integration within the group has accelerated since the start of the Barcelona Process.
- The biggest progress in regional trade in goods is observed among the UfM sub-regions of the Southern shore and the Western Balkans. However, despite the progress, considerable untapped potential exists for trade expansion between non-EU UfM countries, and also among specific sub-groups –notably the Western Balkans with Israel and Levant countries, and Israel with Levant and North Africa countries.
- The UfM countries' aspiration to reduce existing obstacles to trade and meet global standards in border procedures is reflected in the general improvement of indicators measuring trade facilitation. While the progress is general, the differences between the Northern and Southern shores of the Mediterranean are however still notable.
- The region lacks ambitious regulation on services trade, with the exception of the EU association agreements with the Western Balkan countries. Enhancing the collaboration on trade regulations, including the adoption of more ambitious trade-in-services agreements and the homogenisation of common procedures, such as the adoption of common rules of origin, would further advance the region's economic integration and strengthen its value chains.
- Exports within the UfM have become more diversified and sophisticated in recent decades. Manufactured goods have increased their share in exports, reducing the relevance of oil and mining products, while exports of agricultural products have remained stable over time. The analysis of relative export performance at the product level highlights nevertheless a heterogeneous evolution across the different countries, as some remain highly dependent on few products (e.g. hydrocarbon exports).
- Improving the general environment for trade, including regulatory cooperation, infrastructure and access to finance, creates the enabling conditions but could remain ineffective in the absence of industrial diversification. Therefore, UfM countries should continue to encourage and facilitate industrial diversification, as the untapped South-South trade potential seems to be a consequence of limited or inadequate product offer.
- Many UfM countries in the Southern shore lack the statistics needed to assess their capacity to leverage the megatrends of globalisation and digitalisation to improve their international competitiveness.

Introduction

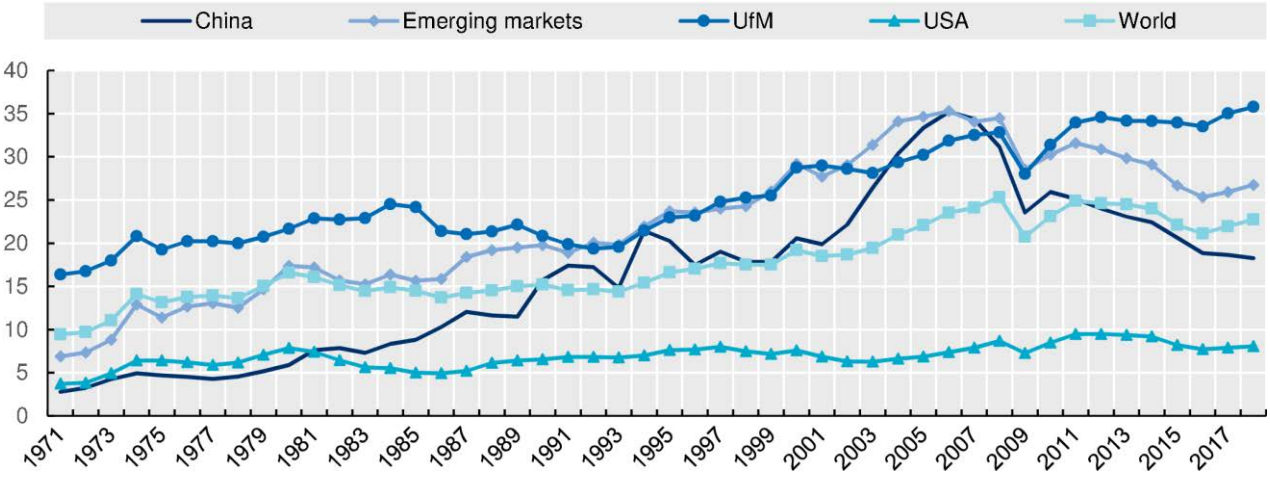
The pace of global trade integration in the second half of the 20th century reflected the increasing contribution of commerce to the global economy, positioning itself as a fundamental growth engine for most countries. Between 1990 and 2008, the share of total merchandise in the world's gross domestic product (GDP) increased more than 60%. The expansion of trade as an important dimension of economic integration was led mainly by the strong role of the emerging economies. If in 1990 merchandise trade represented 19% of the emerging economies' GDP, in 2008 this share amounted to more than one-third. In the Union for the Mediterranean (UfM) region, trade also experienced a significant increase; in 2018, it represented an important part of the region's economy, namely 35% of the GDP.

Trade in services, too, began accelerating in the last quarter of the 20th century – and more strongly in the beginning of the 21st century, with an increase of 125% between 2005 and 2018. Today, trade in services represents around 7% of global GDP[1].

While the expansion of trade suffered a deceleration after the global financial crisis and more recently the pandemic crisis, trade remains a crucial pillar of the world's economy (Figure 1.1).

Figure 1.1. Trade intensity in the world

Exports of goods as a percentage of GDP, 1972-2018



Source: UN Comtrade database, and OECD calculations. https://comtrade.un.org/.

StatLink https://stat.link/48ic1g

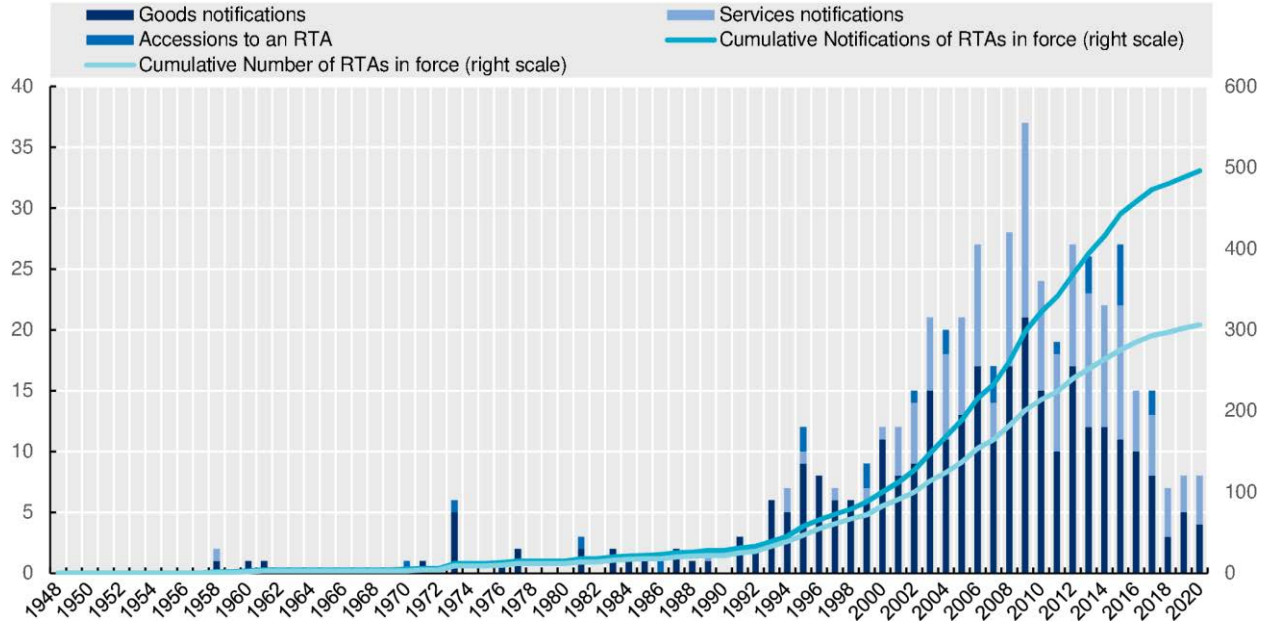
Indeed, international trade is widely recognised as an engine of economic growth for both developed and developing economies, notwithstanding the need for policies aimed at 'making trade work for all' (UN 2030 Agenda for Sustainable Development; (OECD, 2017[1]). In particular, international trade creates jobs: the share of employment sustained by foreign demand can be as high as 50% for small, highly integrated economies when both direct and indirect channels are considered (where the indirect channel includes not only employment linked to goods and services directly exported, but also labour used in the production of intermediate inputs employed in the production of exports).

To encourage and facilitate trade development, countries have over the years signed trade agreements that have traditionally targeted the reduction of tariff barriers. These type of agreements were the norm between World War II and the late 20th century, as a response to a scenario of overall protectionism, where high tariffs

were implemented to limit competition from foreign products in domestic markets. The implementation of trade agreements throughout the 20th century managed to significantly reduce the tariff levels worldwide (WTO, 2007[2]).

Today, import tariffs and quotas are one of the many topics covered by trade agreements (Rodrik, 2018[3]). States have progressively embarked on trade negotiations that tackle complex policy areas, including areas where the economic theory behind free trade lacks more consensual solutions. The new agreements attempt to address a diverse set of issues, such as patent rules, product standards, labour standards or environmental protection, and good governance. The complexity of such agreements illustrates how impactful a higher degree of trade integration for a local economy can be. Indeed, in recent years many countries have actively sought to establish new and often more modern bilateral and regional trade agreements that aim to increase trade and boost economic growth (Figure 1.2).

Figure 1.2. Evolution of world's regional trade agreements (RTAs)



Source: WTO, Regional Trade Agreements Information System, https://rtais.wto.org/, extracted on 28/09/2020.

StatLink https://stat.link/d87anc

Monitoring trade integration

The indicators selected to monitor trade integration in the UfM region provide a picture of the current level of integration through regional, sub-regional and national trade dynamics on different dimensions, including legislation, trade volumes and value-chain integration (Table 1.1). These indicators reflect a heterogeneous coverage of the UfM's countries, with a less complete coverage for the Southern Mediterranean countries, but nevertheless offer a comprehensive analysis of trade patterns in the region.

Table 1.1. Key monitoring indicators of trade integration

	Description	Coverage	Frequency
Indicator T1. Trade Agreements covering goods and services	The Regional Trade Agreements (RTAs) database contains information on the number, nature (goods and services) and selected provisions of RTAs notified to the WTO by its members. RTAs are reciprocal, preferential trade agreements between two or more partners. *Source*: WTO Regional Trade Agreements database	All UfM member states	Updated to March 2020
Indicator T2. OECD Trade Facilitation Indicators (TFIs)	These indicators cover the full spectrum of cross-border procedures. They measure the actual extent to which countries have introduced and implemented trade facilitation measures in absolute terms, as well as their performance relative to others. Each sub-indicator is composed of several precise and fact-based variables related to existing trade-related policies and regulations and their implementation in practice. *Source*: OECD Trade Facilitation Indicators database	All UfM member states except the Palestinian Authority	Biannual; last available year: 2019
Indicator T3. Intra-regional trade in goods	This quantitative indicator assesses the extent of regional integration through intra-regional and regional trade flows of goods. It measures the volume of traded goods of UfM member states within the region and outside the region (rest of the world): Intra-MENA, MENA-EU, MENA-Western Balkans, and MENA-Africa. *Source*: OECD International Trade and Balance of Payments; UN Comtrade Database, UNCTAD Intra-trade and extra-trade; IMF database; national statistics.	All UfM member states	Annual; last available year: 2019, 2018, 2017 (year of availability depends on the country)
Indicator T4. Trade in Value Added (TiVA)	These indicators measure the value added by each country in the production of goods and services consumed worldwide, providing insights on the extent of countries' participation in global production networks and value chains. They include measures of domestic and foreign value-added content of gross exports (by exporting industry); participation in regional value chains (RVCs) via intermediate imports embodied in exports (backward linkages) and domestic value-added in partners' exports (forward linkages); and inter-regional and intra-regional relationships. *Source*: OECD-WTO Trade in Value Added (TiVA) database: https://www.oecd.org/sti/ind/measuring-trade-in-value-added.htm#access, https://www.oecd.org/sdd/its/tiva-nowcast.htm	EU, Israel, Morocco, Tunisia, Turkey	Annual; last available year: 2015

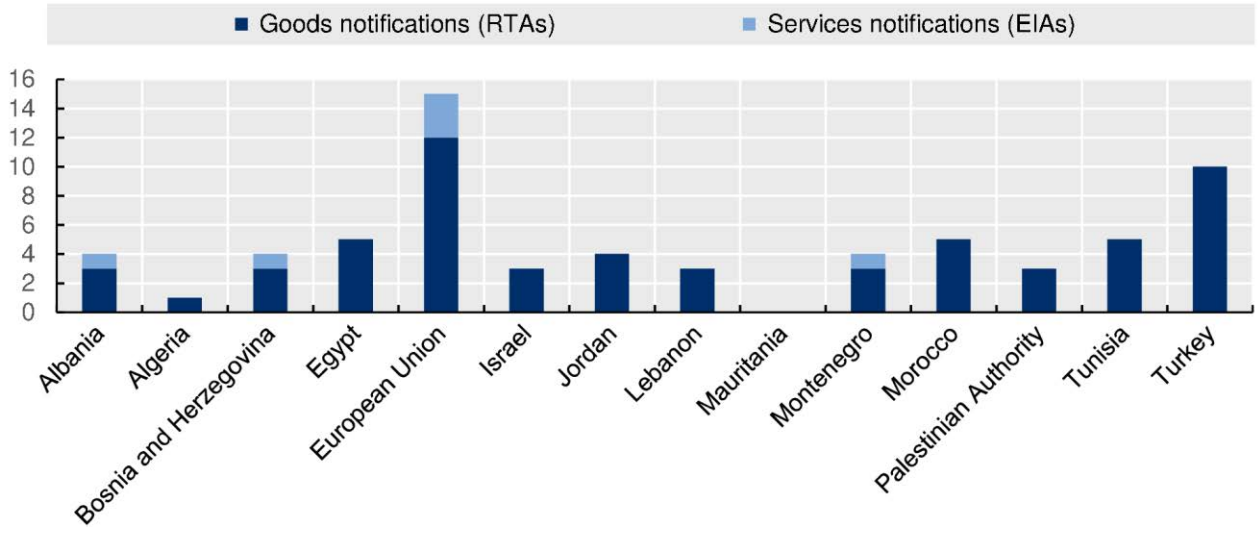
Indicator T1. Trade Agreements covering goods and services

Trade flows are highly dependent on a multitude of factors, from trade agreements to regulatory practices to geographical distance. In the 1990s and early 2000s, trade agreements within the Euro-Mediterranean region focused mostly on reducing existing tariffs in the trade of agricultural and manufactured goods, while not covering trade in services (Annex Table 1.A.1).

The two major South-South regional trade agreements – *the Pan-Arab Free Trade Area* (PAFTA), in force since 1998, and the *Agadir agreement*, in force since 2007 – both target tariff elimination on traded goods, but set goals and mechanisms with different degrees of complexity. The PAFTA aims at facilitating the exchange of goods across borders, but does not target essential elements linked to production and trade, such as investment, services or intellectual property. The *Agadir Agreement* too focuses on trade in goods, but also sets the basis for a future platform of economic integration by acknowledging the importance of services trade and addressing relevant issues on taxes, finance, customs coordination, industrial policies and foreign trade. By the time the Agadir Agreement entered into force, the signatory countries had realised the Agreement commitments concerning tariff elimination[2]. This is not the case for the PAFTA, which is considered to have been less successfully enforced (UNESCWA, 2019[4]).

Figure 1.3. Trade agreements between UfM countries, 2020

Number of trade agreements enforced



Note: RTAs refer to regional trade agreements; EIAs refer to economic integration agreements. WTO's "European Union" aggregate includes also the United Kingdom. The European Union and the United Kingdom notified WTO members that the United Kingdom was treated as a member state of the European Union for the purposes of relevant international agreements during the transition period that ended 31 December 2020. The number for Mauritania is zero.
Source: WTO (2020), *Regional Trade Agreements Information System*, https://rtais.wto.org/, extracted on 28/09/2020.

StatLink https://stat.link/sedk8w

The North-South trade agreements are reflected mainly in the European Union's Association Agreements and the European Free Trade Association (EFTA) agreements. In both cases, although the agreements with Southern Mediterranean countries are negotiated bilaterally and regulate tariff elimination for trade in goods, they do not address the facilitation of trade in services.

The relation between the European Union and Turkey is more complex, as the country held the status of eligible EU candidate since 1997 and set up a customs union with the EU in 1995. Turkey's accession negotiations (started in 2005) include a diverse set of policy areas[3], reflecting the goal of establishing an actual economic integration association, and not only a free trade area. Apart from the EU, Turkey is the UfM economy that has engaged in the largest number of bilateral trade agreements with other UfM countries, all related to liberalising trade in goods.[4]

As the region advances towards fewer tariffs, the ambition and nature of modern trade agreements involve the creation of new rules on the movement of goods and services. Non-tariff measures (NTMs) play a relevant role ensuring that countries engage in trade relations that, among other things, respect social, safety and environmental practices. These rules address important issues related to international trade, but represent a potential burden for enterprises, especially, Small and medium-sized enterprises (SMEs), that lack the capacities to process and meet such regulations.

A series of business surveys carried-out by the International Trade Centre (ITC)[5] during the 2010s highlighted that a relevant share of companies face NTM-related trade obstacles, in particular in developing economies. Approximately one-third of the EU's exporter businesses experienced NTM-related obstacles while the ITC estimates that half of developing economies' exporter businesses are affected. Among the surveyed[6] Middle East and North Africa (MENA) countries, Jordan's exporter businesses are the most affected by NTMs (64%), followed by the Palestinian Authority (56%), Tunisia (52%), Egypt (37%) and Morocco (23%). Also, agricultural businesses express more concerns about NTMs than manufacturing

businesses, in all surveyed countries. The three most common types of NTM-related obstacles reported by companies in the region are conformity assessment, export related measures (e.g. prohibition of exports of certain products due to internal shortages; sanitary inspections on processed food to be exported; etc.) and rules of origin[7]. The potential negative impact of NTMs can be minimised by promoting the harmonisation of rules and making them more transparent and easier to understand for businesses. An important development in the UfM region concerns the attempt to harmonise the rules of origin for products set in trade agreements, which could help boost regional trade (Box 1.1).

Box 1.1. Harmonisation of rules of origin in the Euro-Mediterranean region

In the context of trade agreements, rules of origin are fundamental tools for determining which goods should benefit from preferential treatment considering their national origin. The rules indicate the conditions products must meet in order to enjoy the preferential treatment, which usually include a minimum of local processing, contents or value added. Rules of origin are applied by customs authorities to assess the origin of a product that is being imported. If all the requirements are met, the product will be eligible to be imported with no or lower duty rates, depending on the trade agreement. In addition, rules of origin are necessary to implement instruments such as anti-dumping duties or safeguard measures, and to enable countries to properly collect trade statistics.

There is a broad variety of rules of origin applied in different trade agreements. According to the WTO, all countries recognise that the harmonisation of rules of origin will facilitate international trade.

The Pan-Euro-Mediterranean (PEM) convention on preferential rules of origin is an example of a harmonisation effort at the regional level to establish *common rules of origin and cumulation among the partner countries and the EU*. A new set of rules of origin is expected to come into force in countries of the region through 2021. These include revised provisions on cumulation, duty drawback and tolerance as well as a non-alteration rule. The objective is to help countries of the Southern and Eastern Mediterranean trade more easily with the European Union under existing trade agreements. The discussion acknowledges that more flexible cumulation rules will also facilitate economic integration and the consolidation and development of integrated supply chains within the countries of the region applying them. As a final step, the PEM convention will replace the network of about 60 bilateral protocols on rules of origin in force in the PEM zone.

Source: WTO, *Technical Information on Rules of Origin;* European Commission, The Pan-Euro-Mediterranean cumulation and the PEM Convention. https://www.wto.org/english/tratop_e/roi_e/roi_e.htm

Finally, agreements addressing the regulation of trade in services are covered by the EU's Stabilisation and Association Agreements[8] with the Western Balkan countries, including also Albania, Bosnia and Herzegovina and Montenegro. The nature of such agreements – they target a diverse set of areas besides trade, such as the rule of law, institutional stability, economic cooperation and closer political dialogue – reflects the status of EU accession candidates (Albania and Montenegro) and potential candidates (Bosnia and Herzegovina) of the countries concerned.

Indicator T2. Trade Facilitation Indicators (TFIs)

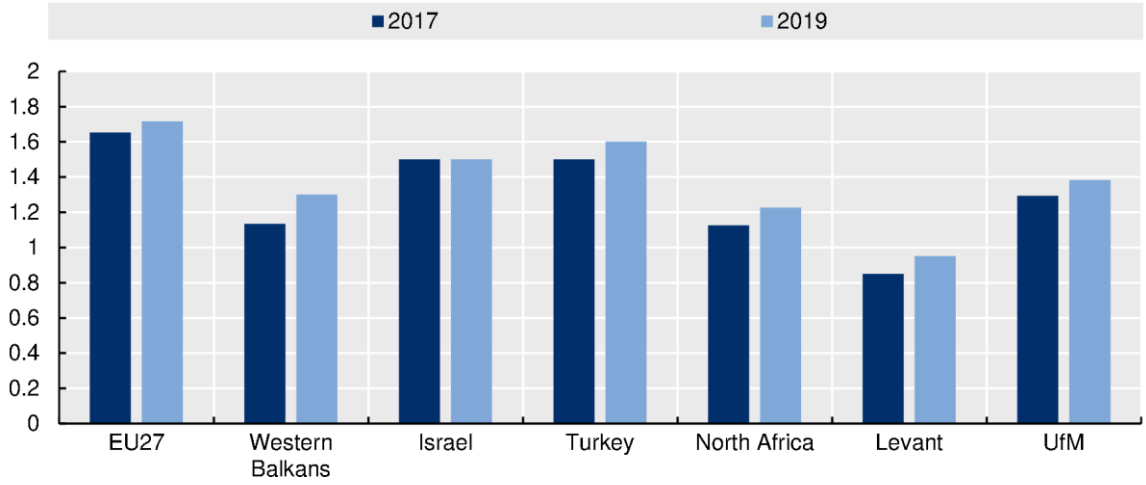
The WTO Trade Facilitation Agreement (TFA) entered into force in 2017. The agreement established multilateral rules to address specific obstacles in trade procedures, allowing countries to reap the economic benefits of improvements in the speed and efficiency of border procedures. The OECD has since developed a specific set of "Trade Facilitation Indicators" that mirror the substantive provisions of the WTO agreement, with a view to measuring the extent to which countries have introduced and implemented trade facilitation measures. These measures are designed to streamline and simplify the technical and legal procedures for

products entering or leaving a country to be traded internationally. Trade facilitation covers the full spectrum of border procedures, from the electronic exchange of data about a shipment, to the simplification and harmonisation of trade documents, to the option of appealing administrative decisions by border agencies.

In virtually all UfM sub-regions, recent years have witnessed improvements in trade facilitation (Figure 1.4). At the national level, on a scale from 0 to 2 (best performance), the values for Algeria (0.8), Jordan (1) and Lebanon (0.9) are relatively low, while Morocco (1.6) shows the highest average performance among the Middle East and North Africa (MENA) countries.

Figure 1.4. Average trade facilitation performance, UfM countries and sub-regions, 2017-19

From 0 to 2 (best performance)



Note: Average performance based on eleven trade facilitation indicators. Each indicator take values from 0 to 2 (best performance). Variables in the TFI dataset are coded with 0, 1, or 2. These seek to reflect not only the regulatory framework in the concerned countries but, to the extent possible, the state of implementation of various trade facilitation measures. Mauritania and the Palestinian Authority are not covered by the TFI dataset.
Source: OECD, *Trade Facilitation,* https://www.oecd.org/trade/topics/trade-facilitation/

StatLink https://stat.link/oxb7lw

Most of the UfM countries are relatively similar across the 11 indicators that determine their average trade facilitation performance. There are some exceptions, however. For instance, in Algeria results indicate that improvements are needed in the areas of formalities, mostly related to documentation requirements and lack of document harmonisation (0.3), cooperation with neighbouring and third countries (0.4), automation of necessary trade formalities (0.6) and governance and impartiality issues (0.6); while in other areas – such as fees and charges (1.25), advance rulings (1.25) and appeal procedures (1.56) – the performance is already high. The analysis of each of the eleven indicators helps countries to assess the state of their trade facilitation efforts and identify opportunities for progress. This is particularly important for the efforts of Southern UfM countries to maximise their trade potential regionally and at the global level.

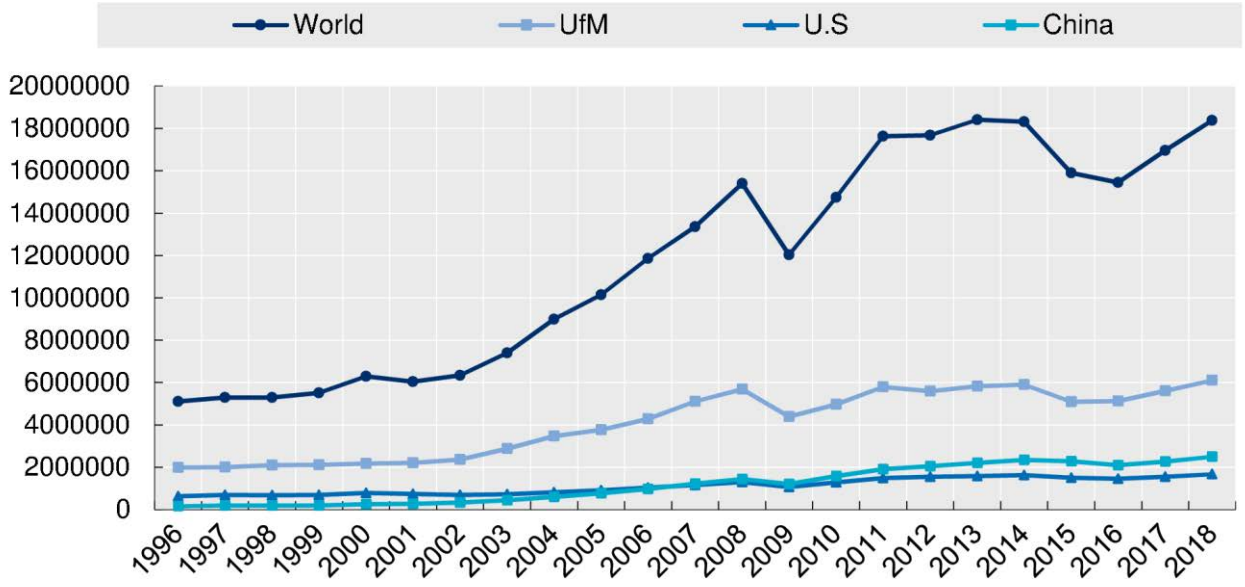
Indicator T3. Intra-regional trade in goods

In 2018 the UfM region exported more than USD 6 trillion in goods, representing 33% of the world's total merchandise exports (Figure 1.5). However, even as the total value of the region's merchandise exports has increased threefold since 1996, its relative global weight has decreased almost 6 percentage points (from 39% in 1996), as emerging economies, in particular the People's Republic of China, augmented considerably their participation in international trade in goods. In the past three decades, all major developed economies

lost relevance, in relative terms, in the global markets; on the other hand, China's global weight in goods exports experienced an average annual increase of 0.5 percentage points since 1996.

Figure 1.5. The share of the UfM in the world's merchandise exports, 1996-2018

Exports in goods, million USD



Note: Missing data for Albania, Jordan, Lebanon, Mauritania, Montenegro, the Palestinian Authority and Tunisia do not allow for the compilation of regional aggregates for 2019. Algeria and Mauritania are missing for 2018.
Source: UN Comtrade database, https://comtrade.un.org

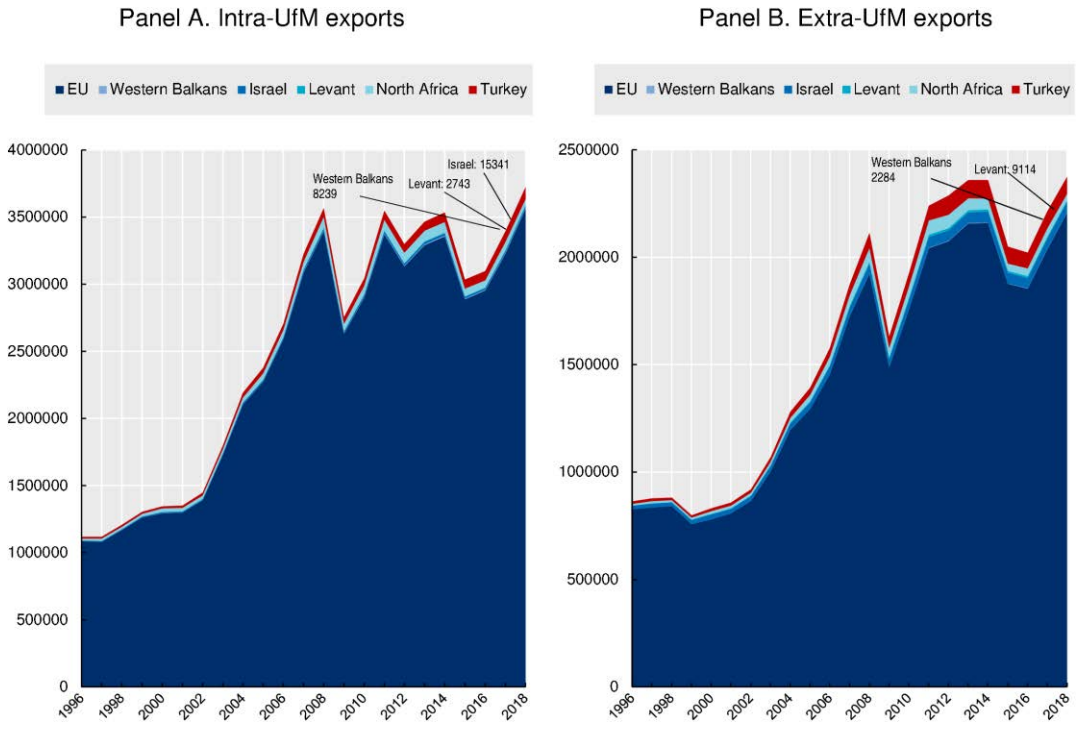
StatLink https://stat.link/6nayer

The UfM's intra-regional market is the main destination for the region's merchandise exports, representing over 61% (3.7 trillion USD) of the UfM's member countries' exports in 2018. The importance of the region's intra-regional market has remained relatively constant since 1996 (56% of total merchandise exports), after reaching a peak in 2007 (63%). With over 20% of the world's trade in goods in 2018, the intra-regional market of the UfM continues to be one of the most relevant global markets.

The distribution of this intra-regional market is, however, concentrated in the Northern shore of the Mediterranean. The European Union is responsible for over 95% of the region's internal merchandise exports (approximately USD 3.6 trillion in 2018), and 93% of the external merchandise exports (over USD 2.2 trillion) (Figure 1.6). Turkey is the region's third-largest exporter, accounting for 2.3% of the intra-UfM merchandise exports market. The sub-region of North Africa is the fourth main merchandise export partner (1.8% in 2017), notably due to the importance of Algeria's hydrocarbon sector and Morocco's growing manufacturing sector. Finally, Israel (0.41%), the Balkan countries (0.228%) and the Levant countries (0.07%) account for minor shares.

Figure 1.6.Total merchandise exports of the UfM area

Exports in goods by UfM sub-regions, million USD



Note: North Africa includes Algeria, Egypt, Mauritania, Morocco and Tunisia; the Levant countries include Jordan, Lebanon and the Palestinian Authority. The sub-regional aggregate for the Balkan region starts in 2006, the first year of data available for Montenegro.
Source: UN Comtrade database, https://comtrade.un.org/.

StatLink https://stat.link/nat45y

Apart from the European Union and Israel, the remaining countries and sub-regions of the UfM have increased their share in the intra-UfM regional merchandise exports market since 1996, as follows:

- The biggest increase is observed in Turkey, whose share of intra-UfM merchandise exports has more than doubled over the past two decades.
- The share of the Levant region, North Africa and the Western Balkans also increased, respectively by 78%, 30% and 56%. In the case of the Levant, the region started from very low initial intra-UfM merchandise export levels.
- Israel, which relies on the UfM's intra-regional market significantly less than most of the other partners, has seen its weight stay relatively stable, with a decrease of 5% since 1996, but with an average weight of 0.48% in the last two decades.
- Finally, the EU's share of the UfM's internal merchandise exports market has declined slightly (1.34%) since 1996. Nevertheless, as expected, the EU remains among the main trade partners for most UfM economies, including for countries of the Levant region that trade more intensively with the Gulf countries (Table 1.2).

Table 1.2. Main export destinations for UfM sub-regions, 2018

% of total exports

	1st	2nd	3rd	4th	5th
Western Balkans	EU (73%)	Serbia (12%)	Western Balkans (4%)	Turkey (2%)	Macedonia (1.5%)
EU	EU (59%)	USA (7%)	GBR (6%)	China (3.9%)	Switzerland (2.8%)
Israel	USA (29%)	EU (23%)	China (8%)	UK (7.5%)	Hong Kong (7.1%)
Levant	GCC (24%)	USA (17%)	Israel (10%)	India (6.5%)	EU (5%)
North Africa	EU (52%)	GCC (6%)	USA (4.9%)	Rest of Africa (4.9%)	Turkey (3.8%)
Turkey	EU (44%)	GBR (7%)	Iraq (5%)	USA (5%)	GCC (4.9%)

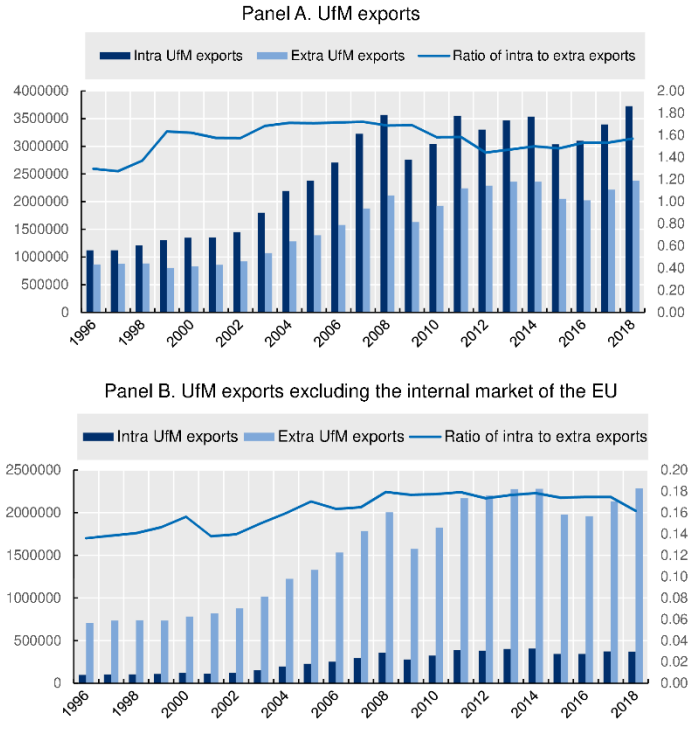
Note: GCC refers to the Gulf Cooperation Council countries; Rest of Africa includes all African countries not part of the UfM.
Source: UN Comtrade database, https://comtrade.un.org/.

In 2018, the UfM countries exported almost two times more merchandise to other UfM countries than to the rest of the world (Figure 1.7 Panel A).

However, the high level of intra-regional merchandise exports compared to extra-regional merchandise exports is largely explained by the exchanges within the European Union's internal market. Once the EU internal market is excluded, UfM countries export over 80% of their gross merchandise exports to other regions of the world (Figure 1.7 Panel B). UfM extra-regional merchandise exports amounted to USD 2.2 trillion as compared to USD 3.7 trillion exported within the region. Nonetheless, even when excluding the market of the EU, the ratio of intra- versus extra-regional merchandise exports shows a slightly positive trend, pointing to progress in regional integration.

Figure 1.7. The ratio of intra-regional to extra-regional exports in the UfM, 1996-2018

Amount (left scale, in million USD) and ratio (right scale) of intra-regional exports to extra regional exports, merchandise

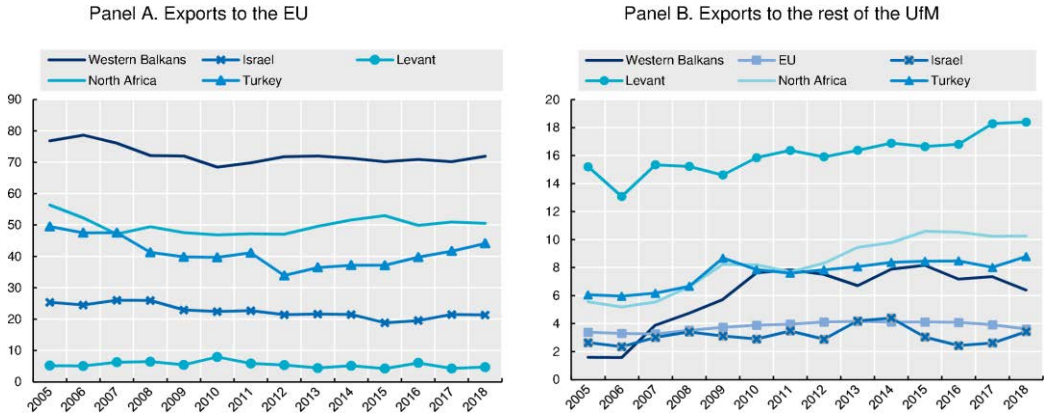


Note: A ratio value of more than one (1) indicates that intra-regional exports exceed the region's exports to the rest of the world. In Panel B, the internal market of the EU (e.g. exports from France to Germany) is excluded from the calculation, but exports from EU member countries to Tunisia (as part of intra-UfM exports) or from the Netherlands to China (as part of extra-UfM exports) are included.
Source: UN Comtrade database, https://comtrade.un.org

An in depth analysis of the evolution of main export partners of the different UfM economies since 2005 highlights a positive trend in regional integration of the Southern shore of the Mediterranean (Figure 1.8). Merchandise exports increased more intensively among economies of a same sub-region (Annex Table 1.A.2) but there is an overall improvement among bilateral trade among the non-EU economies (Table 1.3). This is particularly true for the Western Balkans and the Levant sub-regions. Egypt relies more on the economies of the Levant sub-region as trade partners, while Turkey has a more heterogeneous presence across the Southern shore.

Figure 1.8. Share in total exports of reporting country, 2005-18

As a percentage of total exports



Note: "Rest of the UfM" includes Israel, Turkey, and the Western Balkan, Levant and North African sub-regions.
Source: UN Comtrade database, https://comtrade.un.org/.

StatLink https://stat.link/7w2z5o

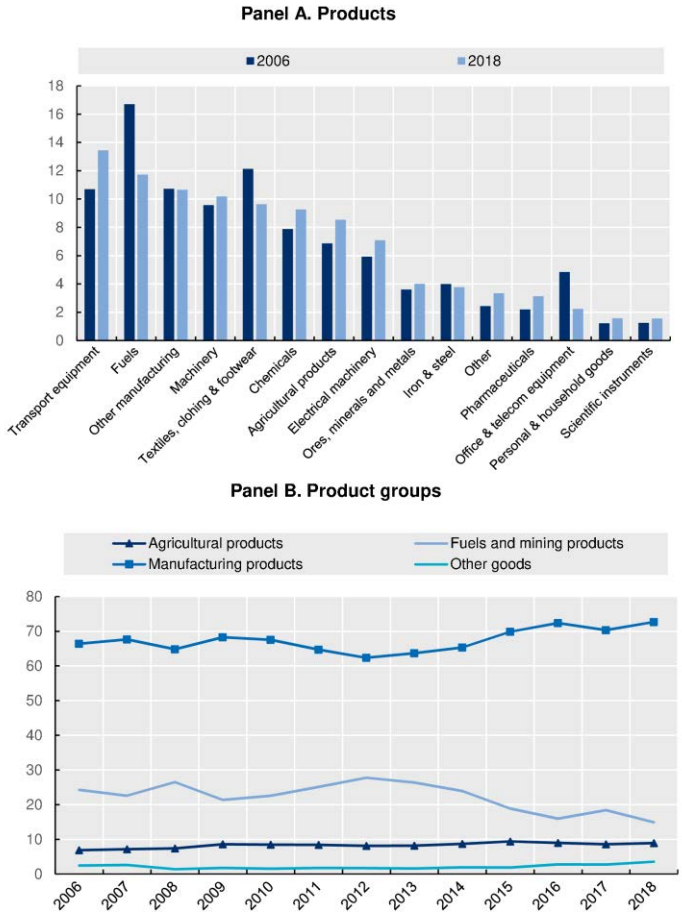
What types of goods are exchanged?

The analysis of the intra-UfM trade by type of goods reveals the increasing importance of the exchange of more sophisticated manufactured products (Figure 1.9). In 2006 fuel was the commodity with the highest share in the internal UfM market, representing over 16% of the region's total internal exports, 60% of which originating in Algeria. In 2018, the most relevant commodity was transport equipment, representing 13% of the region's internal exports. In general, manufactured goods, scientific instruments, pharmaceutical and chemical goods increased their relevance in the region's market, at the expense of exports of fuel, textiles, clothing and footwear, and iron and steel.

The evolution of the main product groups confirms the trend towards an intra-UfM exports basket with higher content of manufactured goods (Figure 1.9). The share of manufactured goods exports within the UfM has increased from 66% of the total volume of exports in 2006, to 73% in 2018, while the share of fuels and mining products exports, which represented 24% in 2006, has recently declined to less than 15%. Agricultural exports have also experienced a significant increase (almost 29% since 2006), although their share in the intra-UfM exports remains below 9%.

Figure 1.9. Composition of intra-UfM exports, by type of commodity, 2006-18

Share in total exports, by type of commodity (%)



Note: Internal trade of the EU is excluded. For Algeria and Mauritania, 2018 refers to 2017. In panels A and B, shares of exports of products and of product groups respectively add to 100%.
Source: UN Comtrade database, https://comtrade.un.org/.

StatLink ttps statLink

Indicator T4. Trade in Value Added (TiVA)

The traditional analysis of trade flows provides insights mostly on the final price of a given good, while the value of all the parts that compose the good – and, more importantly, its origins – are not captured by the data. As global and regional value chains gained complexity and relevancy in the flows of traded goods during the last century, data on the trade of intermediate goods that are used to produce new components and final goods are critical to understanding the deeper relations among interlinked economies, as they not only share goods and services, but also add value to each other.

For instance, the automobile industry requires a complex set of components and materials that originate from dozens of locations across the globe. Morocco's emerging automobile industry has significantly increased the weight of the domestic manufacturing sector in its exports. The rise in Moroccan exports occurred in a context of higher flows of manufactured goods to and from EU member countries, showing an increase in the integration of Morocco with countries in the Northern shore of the Mediterranean.

Data on trade in value-added (TiVA) can describe how different economies and sub-regions of the UfM connect with each other, in particular as concerns the creation and origin of value along the different stages of production (Box 1.2). Data on trade in value added allow to appreciate the actual integration of the UfM economies in the regional and global value chains (GVCs).

Box 1.2. Why TiVA is useful

The OECD's Trade in Value-Added (TiVA) describes a statistical approach used to estimate the sources (broken down by country and industry) of the value that is added in producing goods and services for export (and import). Data presented in the OECD TiVA database provide insights into:

- Domestic and foreign value-added content of gross exports, by exporting industry
- Services content of gross exports, by exporting industry, type of service and value-added origin
- Participation in global value chains (GVCs) via intermediate imports embodied in exports (backward linkages) and domestic value added in partners' exports and final demand (forward linkages)
  a. *Backward integration* in GVCs is the use of foreign inputs to produce final and intermediate goods exported by a country's firms. It facilitates the diffusion of knowledge either indirectly through learning from suppliers or directly via knowledge spillovers from foreign direct investment (FDI).
  b. *Forward integration* in GVCs is the production of intermediate inputs used in other countries' exports. Increased production for foreign markets requires convergence of product standards toward international best practices and triggers virtuous feedback loops between productivity, innovation, human capital endowment and living standards.
- 'Global orientation' of industrial activity, i.e. share of industry value added that meets foreign final demand
- Country and industry origins of value added in final demand, including the origin of value added in final consumption (by households and government) and in gross fixed capital formation (GFCF)
- Bilateral trade relationships based on flows of value added embodied in domestic final demand
- Inter-regional and intra-regional relationships
- Domestic value added content of imports

Source: OECD (2018), *Trade in Value Added (TiVA) database*, http://www.oecd.org/sti/ind/measuring-trade-in-value-added.htm.

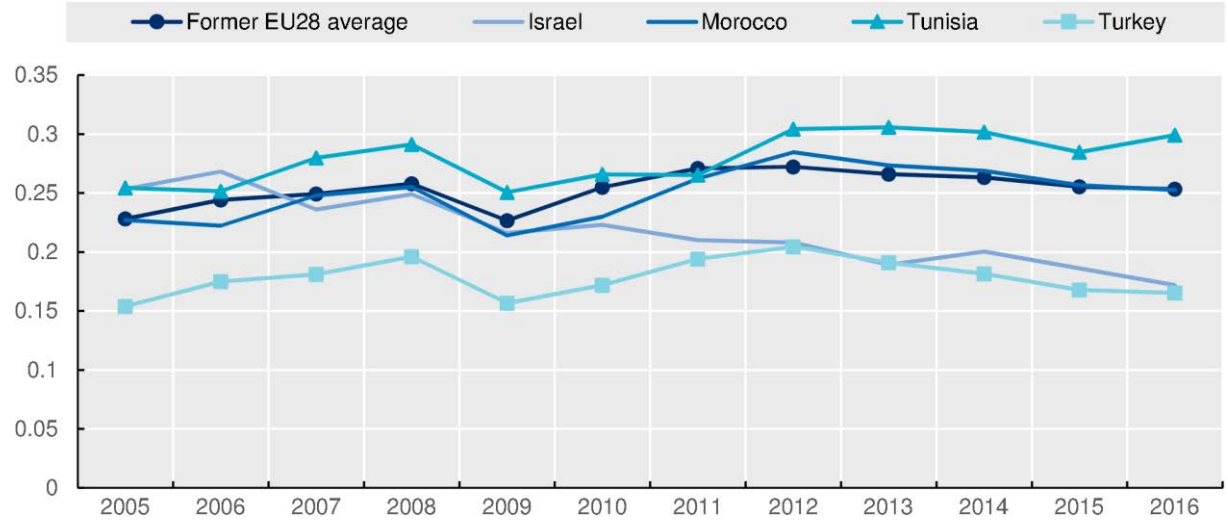
All EU27 countries, as well as Israel, Turkey, Morocco and Tunisia, are included in the OECD TiVA database. While a number of countries are missing, the overall size of the set of UfM economies covered by TiVA data allows for an insightful analysis of the trade and production connections of an important share of the UfM economy.

At the global level, the pace of GVC integration has slowed since 2011, despite a modest recovery after the global financial crisis[9]. The integration of a given economy into GVCs can in part be observed through the analysis of the foreign component of its production. Countries with relatively liberal trade policies that are open to trade and foreign investment will tend to have high levels of foreign value-added in the goods they produce and export. More specifically, service-intensive economies and economies specialised in the final stages of the manufacturing process will have high levels of foreign value-added in their production and exports, while economies specialised in activities at the beginning of the production chain (e.g. extractive industries) will have high shares of domestic value-added in their exports.

Figure 1.10 shows the percentage of foreign value-added in a country's exports basket, which include exports of manufacturing, agriculture, extractive industries and services. Following the global trend, the UfM economies' integration into the global value chains has decelerated. In 2016, Tunisia was the country with the highest percentage of foreign content in its exports (30%), in part reflecting tourism, and was the only country where this share remained stable after 2012. Foreign content in Morocco's gross exports accounted for 25%, a rate similar to that of the EU countries and the United Kingdom, where the share of foreign value added slightly dropped after 2012. Israel and Turkey present lower levels of backward integration in GVCs, as 17% of their gross exports' value originated in other countries. Also, Israel shows an important decline in the share of foreign value-added in its exports, i.e. 8 percentage points since 2005.

Figure 1.10. Foreign value-added content of exports, all sectors, 2005-16

As a percentage of total gross exports



Note: The sectors of agriculture, manufacturing, extractive industries and services are covered by both the data on exports and on foreign value-added content. OECD TiVA's aggregate for the European Union includes on its last version (2018) the United Kingdom.
Source: OECD, (2018) *Trade in Value Added (TiVA) database*, http://www.oecd.org/sti/ind/measuring-trade-in-value-added.htm.

StatLink https://stat.link/pkfont

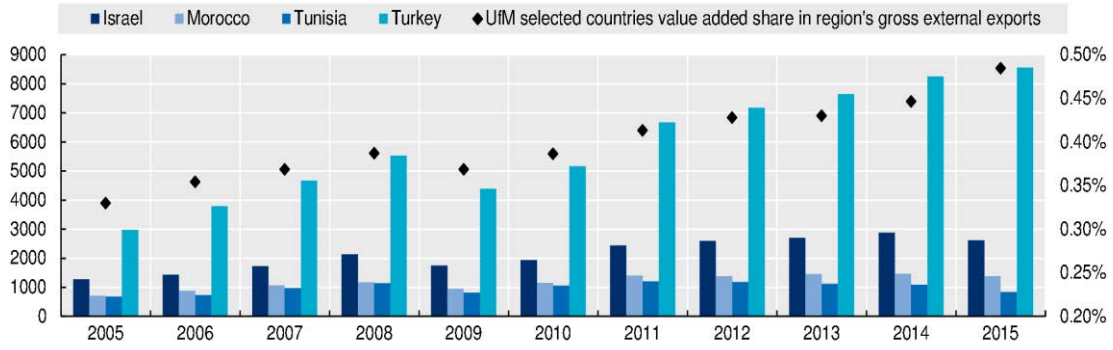
At the regional level, forward integration of Israel, Morocco, Tunisia and Turkey into the production chains of the EU and the United Kingdom increased significantly since 2005, although the contribution of the four economies to the EU and the United Kingdom external exports remains modest, i.e. 0.48% of the value of the gross external exports originates from the four countries (Figure 1.11).

Forward integration, that is the production of intermediate inputs used in other countries' exports, increases the potential market, leverages the use of Turkey's human, capital and natural resources, and, as a result, contributes to rebalancing the Turkish economy. Increased production for foreign markets requires convergence of product standards toward international best practices and triggers virtuous feedback loops between productivity, innovation, human capital endowment and living standards.

Turkey is the country that experienced the highest growth of the share of value-added contributed to the EU and the United Kingdom external exports. Israel and Morocco also increased their relative contribution since 2005.

Figure 1.11. Foreign value-added contribution of selected UfM countries to EU and UK exports, all sectors, 2005-15

Amount (left scale, in million USD) and percentage (right scale) of total gross exports



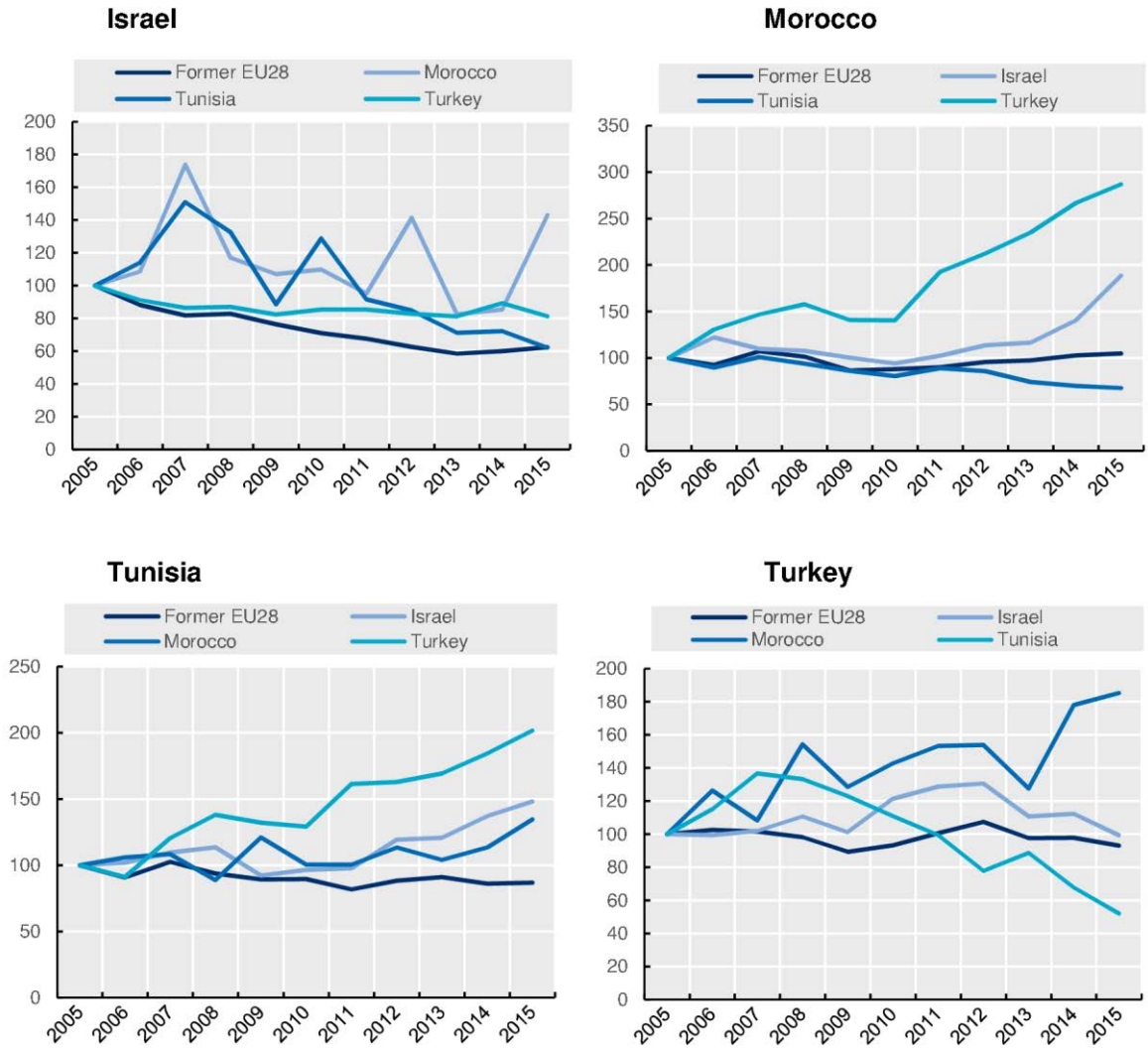
Note: Data refer to exports of the EU 27 and the United Kingdom to the rest of the world (including UfM countries but excluding exports within EU member countries and the United Kingdom). The graph shows the foreign value added from agriculture, manufacturing, extractive industries and services of Israel, Morocco, Tunisia and Turkey to total exports of the EU27 and United Kingdom. OECD TiVA's aggregate for the European Union includes on its last version (2018) the United Kingdom.
Source: OECD, (2018) *Trade in Value Added (TiVA) database*, http://www.oecd.org/sti/ind/measuring-trade-in-value-added.htm.

StatLink https://stat.link/z4ob91

Figure 1.12 shows the contribution of selected UfM economies to the total gross exports value of Israel, Morocco, Tunisia and Turkey from 2005 to 2015. The share of EU and the United Kingdom in the gross exports of the other UfM economies declined in every case, with the exception of Morocco. This decline was particularly strong in the case of Israel, where the EU and the United Kingdom content in Israeli exports dropped by over 37% after 2005. In Tunisia, the EU and the United Kingdom content decreased by 13% and by 0.7% in Turkey. By contrast, the EU and the United Kingdom value added to the Morocco's exports increased by 4.5% during the period.

Figure 1.12. Origin of value-added in exports of selected UfM countries, all sectors, 2005-15

Evolution of value-added to total gross exports, Index 2005 = 100



Note: The index shows the evolution of foreign value-added content from agriculture, manufacturing, extractive industries and services in total exports of Israel, Morocco, Tunisia and Turkey respectively. OECD TiVA's aggregate for the European Union includes the United Kingdom in the latest available version of TiVA, 2018.

Source: OECD, (2018) *Trade in Value Added (TiVA) database*, http://www.oecd.org/sti/ind/measuring-trade-in-value-added.htm

StatLink https://stat.link/rxn4cf

While the EU and the United Kingdom contribution to the gross exports of the other UfM countries has generally declined, this is not the case for the other countries. Morocco has seen a significant increase in Israel's and Turkey's share of value added to its gross exports since 2005. Tunisia has seen an increase of Turkey's value-added content in its exports of over 100%, and of Israel and Morocco by 48% and 34%, respectively. Turkey has seen a decline of the value-added content from Tunisia and Israel (slightly), but Morocco's value-added share in Turkey's gross exports has increased by 85%. Israel is the only economy that has experienced a general decline of the value-added contributed by other UfM economies to its gross exports; this is consistent with the general trend in foreign value-added content of Israeli gross exports (Figure 1.10). The peak of Morocco's value-added share in Israel's gross exports is mostly due to the country's very low relative weight in Israel's gross exports value-added.

Table 1.3. Origin of value-added, by percentage of exports in 2015, all sectors

	Recipient				
Origin					
	EU & UK	Israel	Morocco	Tunisia	Turkey
EU & UK		6.02%	11.97%	14.59%	5.74%
Israel	0.09%		0.04%	0.03%	0.10%
Morocco	0.05%	0.02%		0.16%	0.06%
Tunisia	0.03%	0.003%	0.11%		0.02%
Turkey	0.31%	0.65%	1.20%	1.32%	

Note: Origin = economy of origin of the value-added in recipient economy's gross exports; Recipient = economy reporting exports. The sectors of agriculture, manufacturing, extractive industries and services are covered by the data on both exports and foreign value-added content. OECD TiVA's aggregate for the European Union includes the United Kingdom in the latest available version of TiVA, 2018.
Source: OECD, (2018) *Trade in Value Added (TiVA) database*, http://www.oecd.org/sti/ind/measuring-trade-in-value-added.htm

In 2015, the EU and the United Kingdom together contributed to 14.5% of the value of Tunisia's gross exports, 12% of Morocco's, 6% of Israel's, and 5.7% of Turkey's. Turkey was the second greatest contributor to other UfM partners' gross-exports value, in particular for Morocco and Tunisia. Relative to its economic size, Israel's value-added share in exports of the other UfM economies seems to be below its potential. This will be further analysed in the section that discusses the cost of non-integration in the UfM region.

Trade in services and economic integration

The importance of services in the global economy was acknowledged by the General Agreement on Trade in Services (GATS) adopted by the WTO in 1995. Since then, the notifications and enforcement of agreements on trade in services have increased greatly, even if they remain limited to certain regions. As observed earlier in this chapter, the only trade agreements currently enforced within the UfM that address trade in services are the EU's Association Agreements with Albania, Bosnia and Herzegovina and Montenegro.

Trade in services represents only 25% of global trade flows[10]. However, the service sector employs one out of two workers globally[11] and represents approximately two-thirds of the world's total production[12], revealing its importance as a key engine for economic development and integration.

Despite the importance of trade in services, however, the data necessary for a thorough analysis are missing for many UfM countries. For instance, the OECD Services Trade Restrictiveness Index (STRI) database, an important tool for the analysis of trade in services, currently covers only part of the UfM members, notably the EU member states, Israel, Turkey. Ongoing work should allow to include Albania and Bosnia and Herzegovina in the near future.

The OECD TiVA database provides trade data disaggregated by economic sectors[13] and sub-sectors for the following UfM members: the EU27, Israel, Turkey, Morocco and Tunisia. These UfM countries are relatively aligned to the global trend regarding the importance of services in their economies. Among them, Israel has the highest share of services in national value added (79%), followed by the former EU28[14] (78%) and Turkey (69%). Tunisia (61%) and Morocco (59%) are both slightly below the global average[15]. The share of services in the total exports of these selected UfM countries is above the global mean, with the exception of Tunisia, but still under-represented compared to the weight of services in the economy (Table 1.4). The United Kingdom (UK), covered by the OECD TiVA database, is considered in the analysis when relevant, as former member of the European Union.

Table 1.4. Services share of gross exports for selected UfM countries, 2010-15

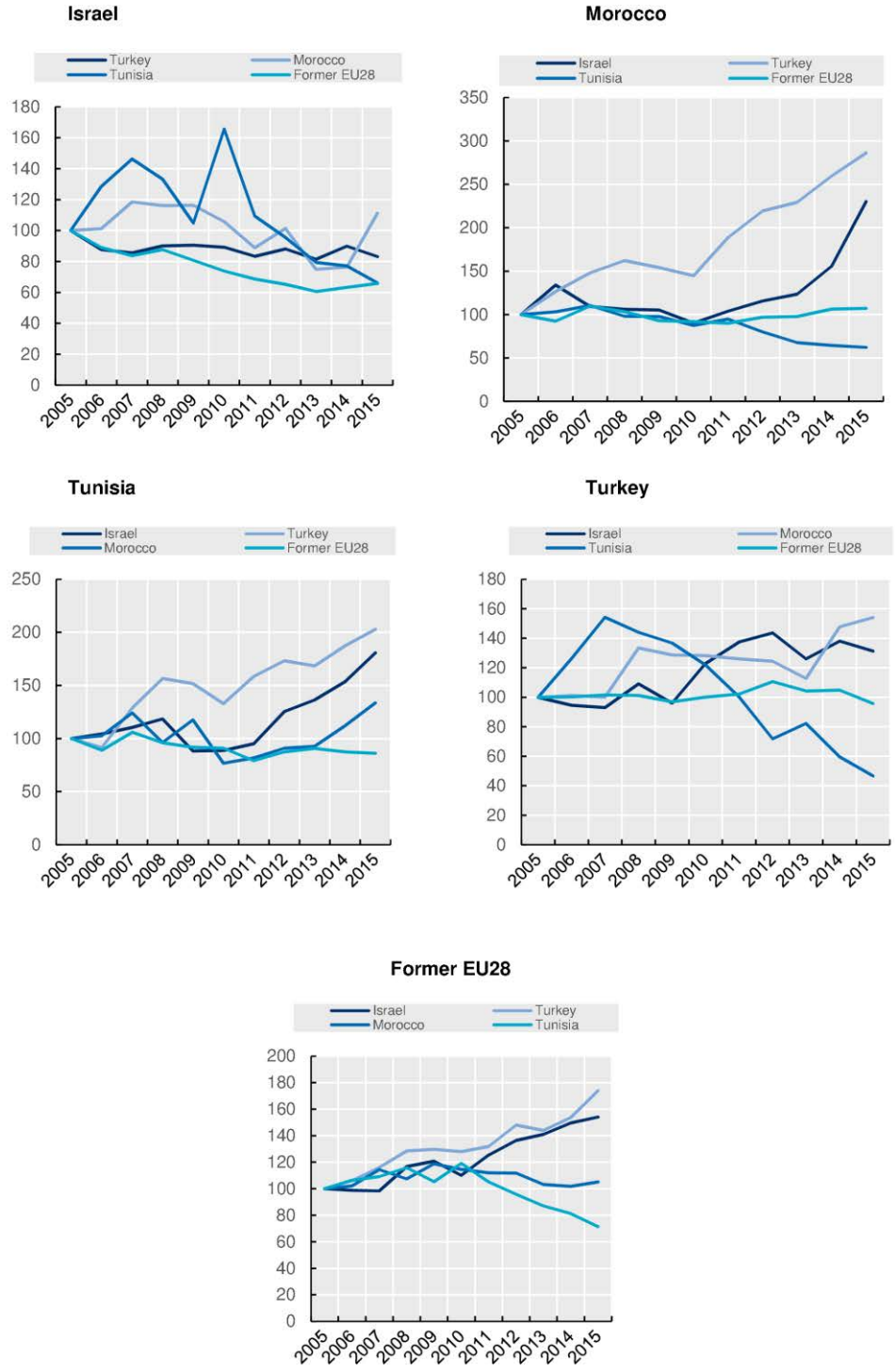
	2010	2011	2012	2013	2014	2015
EU & UK	39.2%	38.1%	38.2%	38.8%	40.0%	40.9%
Israel	41.3%	45.2%	46.6%	48.7%	47.1%	50.2%
Morocco	42.4%	39.0%	38.0%	35.7%	37.7%	38.4%
Tunisia	26.1%	25.0%	23.4%	22.4%	21.9%	22.0%
Turkey	33.4%	32.3%	32.3%	33.0%	33.4%	33.6%

Note: EU covers the 27 member countries of the European Union. OECD TiVA's aggregate for the European Union includes the United Kingdom in the latest available version of TiVA, 2018.
Source: OECD, (2018), *Trade in Value Added (TiVA) database*, http://www.oecd.org/sti/ind/measuring-trade-in-value-added.htm

Figure 1.13 shows the evolution of the contribution of foreign services to the gross exports value of Israel, Morocco, Tunisia, Turkey and the former EU28 in 2005-15. It deepens the analysis of Figure 1.12 that considered the contribution from all agriculture, manufacturing, extractive industries, and services altogether.

Figure 1.13. Origin of value-added from services in gross exports of selected UfM economies

Evolution of value-added originating from foreign services to gross exports, Index 2005 = 100



Note: OECD TiVA's aggregate for the European Union includes the United Kingdom in the latest available version of TiVA, 2018.
Source: OECD, (2018) *Trade in Value Added (TiVA) database*, http://www.oecd.org/sti/ind/measuring-trade-in-value-added.htm.

StatLink https://stat.link/c2qpfl

Although with different intensities, the trends show the same evolution (i.e. increase or decrease) of integration observed for aggregate contribution. The only exception is the case of Israel's services sector: while Israel's total value-added in Turkey's gross exports decreased almost 1% after 2005, Israel's services value-added to Turkey's gross exports increased by over 30%.

Another important note is that, for the former EU28, the share of the other analysed UfM economies' services industries value-added in its gross exports has been lower, or showed a higher decline than when considering the value-added of all the economic sectors. The only exception is once again Israel, whose services industry value-added experienced a higher increase in its share of gross exports of the former EU28 (54%) (Figure 1.13), as compared to Israel's total value added (26%) to the former EU28 gross exports (Figure 1.12). Morocco's services industry value added to Israel and Turkey's gross exports experienced also an important increase since 2005 (11% and 54% respectively). For the remaining economies, their services industries' value-added share of the other UfM countries' gross exports has either increased more strongly, or behaved similarly, when considering the value-added of all the productive sectors.

The cost of non-integration: Assessing the trade potential of the UfM region

This section examines the trade potential among UfM member countries, focusing on exports, with the objective of assessing the scope for improved trade integration in the region. The key metric used in this analysis is an indicator of *relative export performance,* which provides a measure of a country's export performance relative to the level of exports predicted by a conventional gravity model of trade. This *relative export performance indicator* is expressed as the ratio of actual exports to theoretical exports[16] and can provide insights into both the pace of intra- and extra-UfM integration and the potential scope for increasing exports.

The theoretical exports serving as benchmark in this exercise are derived using a gravity model of trade which takes into account the relative sizes of the trading pair, the trade costs between them, and other observable and unobservable country-specific characteristics that affect bilateral trade[17].

Before describing the results, it is important to set out a couple of caveats that will help with interpretation. The chief limitation concerns the use of gravity models in a world increasingly defined by global production processes. While it is widely accepted that the gravity framework applies for intermediate as well as final goods, the models used here do not discriminate between exports that are entirely consumed in the destination economy and those that are used as intermediate inputs to be further processed and exported, meaning that the same elasticities are computed with respect to the explanatory variables. It is likely, however, that the relationship between, say, exports and bilateral distance is different for final products and intermediate goods[18]. In this sense, the theoretical (benchmark) exports derived from the gravity model will only capture part of these fragmentation aspects. This analysis therefore aims at giving an indication of performance in regional trade integration, rather than a precise quantification of the gap between the reported and the predicted level of exports.

A second important warning concerns the impact of data limitations, meaning that the focus of the analysis in this section is specifically on goods, and not services, where the available evidence (i.e. services exports as a share of GDP) points to under-performance (excluding tourism) in many UfM economies.

It is also important to note that the gravity model computes the trade flows of the United Kingdom in the intra-UfM trade. Integrated in the EU single market and included in the EU's bilateral trade agreements with other UfM member countries until the end of 2020, the United Kingdom has been an important trade partner for the region in the analysed period, i.e. 1995-2018.

Notwithstanding the caveats above concerning the interpretation of theoretical exports, the results provide strong evidence that overall intra-UfM exports are in line with or above the benchmark levels specified by the gravity model, and more so now than at the beginning of the Barcelona Process. The result holds true

for all broad sectors: agricultural, mining and manufacturing products. However, the results also indicate a sizeable potential to expand exports to fellow UfM members through the South-South trade corridor and to extra-UfM economies.

Further work will be needed to expand the analysis to services trade and indeed to take into account the value-added dimension in the observed trade flows. This, however, would require investment in underlying statistics in many of the UfM economies.

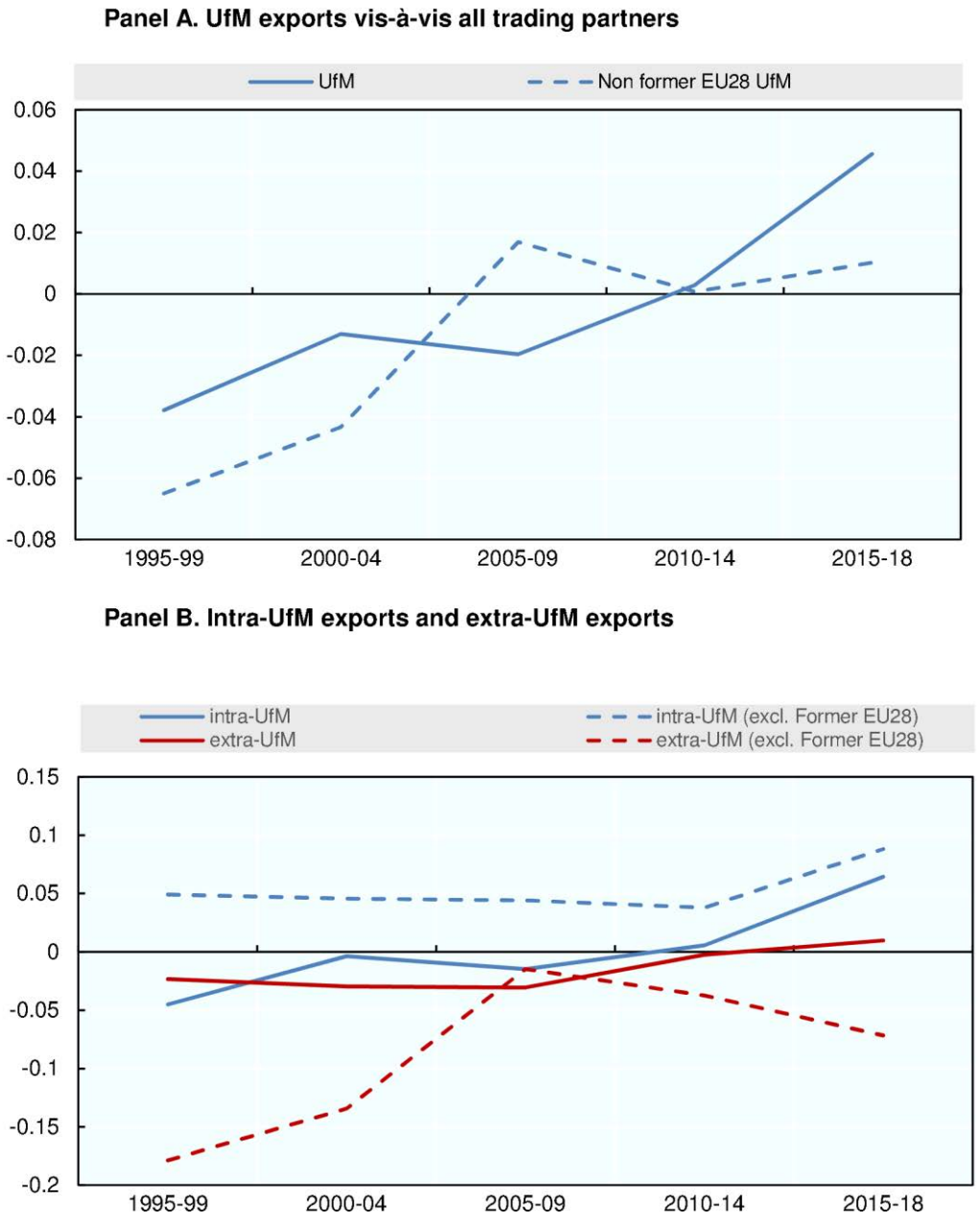
Intra-UfM relative export performance has picked up strongly in recent years

Figure 1.14, Panel A shows the standardised relative export performance (SREP) indicator[19] for the UfM members vis-à-vis all their trading partners. While the group's exports were about 7% lower than the theoretical benchmark at the beginning of the period, they exceeded the expectations of the gravity model by almost 10% in 2015-18. A similar trend is also observed if the EU and the United Kingdom are excluded.

Breaking down total merchandise trade into intra- and extra-UfM exports (Figure 1.14) reveals that the primary engine of improvement has been intra-UfM exports, especially in recent years (2015-18). Moreover, the measure of relative performance (REP) is even higher if the EU members and the United Kingdom are excluded, with intra-UfM exports outperforming the theoretical model by almost 20% (compared to 14% for the overall group).

On the other hand, the closer integration of these economies within European value chains (serving markets within Europe) appears to have resulted in a gravitational shift away from other markets, as the SREP began to deteriorate again following a gradual improvement up until the 2008/9 financial crisis.

Figure 1.14. Export performance for the UfM members, total and by partner group



Note: The graphs present the standardised relative export performance (SREP). Values above 0 represent exports above the model's predictions.
Source: Authors' calculations.

StatLink https://stat.link/6gmydi

The Western Balkans, North Africa and Turkey have been integrating more closely with the rest of the UfM but trends in the Levant and Israel have moved in opposite directions

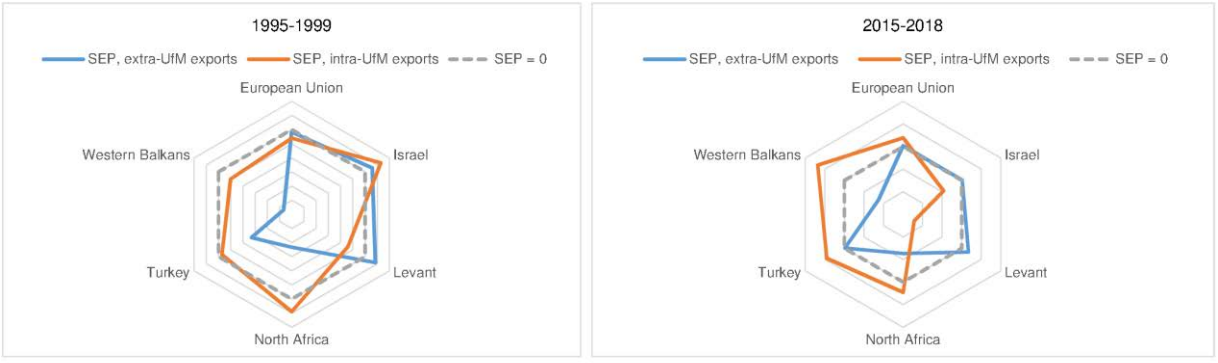
A further breakdown of the results by UfM sub-group reveals the potential for improved trade among some of the sub-groups of countries, in particular in the South-South dimension (Figure 1.15 and Table 1.5).

- In the late 1990s the exports of the European Union and the United Kingdom were close to the theoretical expectations both with fellow UfM members and with the rest of the world. While the

European Union saw closer integration in recent years (2015-18), the United Kingdom saw its relative position deteriorate, with extra-UfM exports picking up instead.

- The Western Balkans, already highly integrated with the EU in the late 1990s, saw a significant improvement in their SREP in recent years but their extra-UfM trade performance remained weak.
- North African economies and Turkey saw a similar pattern to the Western Balkans. However, whilst extra-UfM exports remain low compared to theoretical expectations, the relative position of intra-UfM exports has improved in recent years compared to the late 1990s.
- The Levant group and Israel appear to be more integrated with the rest of the world than with the UfM throughout the period, with the SREP indicating a significant degree of untapped export potential for intra-UfM exports in recent years.

Figure 1.15. Intra- and extra-UfM export performance of UfM members



Note: The graphs present the standardised relative export performance (SREP) indicator. Values inside the dotted line represent exports below the model's predictions and values outside the dotted line represent exports above the model's predictions.
Source: Authors' calculations.

StatLink https://stat.link/o4xc6p

Table 1.5. Intra-UfM export performance, by exporter and importer

Panel A 1995-1999

	Western Balkans	EU27	Israel	Levant	North Africa	Turkey	other
Western Balkans	-0.5	0.0	-0.7	-0.9	-0.1	-0.6	-0.5
EU27	0.2	-0.1	0.4	0.4	0.2	0.0	0.0
Israel	-0.8	0.2		-0.8	-0.9	-0.3	0.1
Levant	-0.6	-0.2	-0.2	0.6	0.1	0.1	0.1
North Africa	-0.8	0.1	-0.6	-0.1	-0.3	0.3	-0.4
Turkey	0.3	-0.1	0.0	0.5	0.3		-0.3

Panel B 2015-2019

	Western Balkans	EU27	Israel	Levant	North Africa	Turkey	other
Western Balkans	0.8	0.3	-0.9	-0.7	-0.2	-0.1	-0.3
EU27	0.2	0.1	0.0	0.0	0.2	0.1	0.0
Israel	-0.7	-0.2		-0.8	-0.9	-0.1	0.0
Levant	-0.6	-0.7	-0.6	0.4	0.1	-0.2	0.1
North Africa	-0.5	0.1	-0.8	0.4	0.3	0.3	-0.3
Turkey	0.2	0.1	0.3	0.4	0.4		0.0

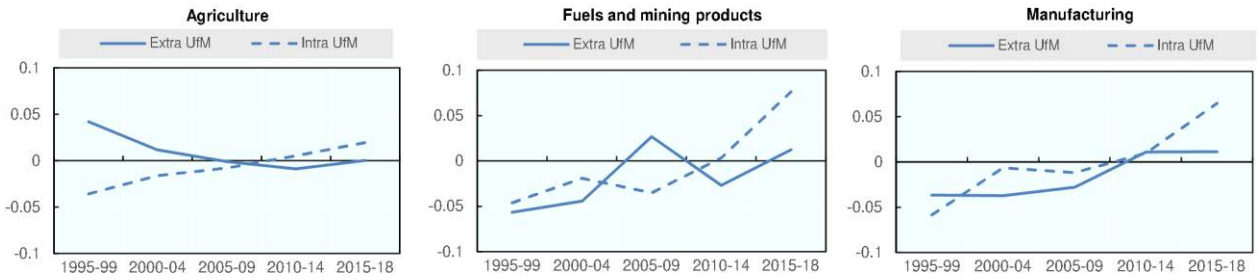
Note: Rows correspond to exporters and columns to importers. The table presents the standardised relative export performance (SREP) indicator. In panel A, the observations refer to 1995-99 or earliest available. In panel B, the observations refer to 2015-18 or latest available.
Source: Author's calculations.

High integration in intra-UfM exports across all categories of merchandise trade

The preferred model specification (Model 4 in Annex Table 1.B.1) was also used at the product level, firstly at a more aggregated level – agriculture, fuels and mining products, and manufacturing – and secondly by detailed manufacturing group (see (Annex 1.C for the definition of the product groups).

The general tendency towards closer trade integration among UfM member countries is confirmed across all product groups, with the relative export performance of intra-UfM trade outperforming extra-UfM trade across all product groups. In 2015-18, intra-UfM exports of *agriculture*, *fuels and mining*, and *manufacturing* are 4%, 17% and 14% above the theoretical model, respectively (Figure 1.16).

Figure 1.16. Export performance for the UfM members, by product group and by partner



Note: The graphs present the standardised relative export performance (SREP) indicator. The label n_ufm indicates extra-UfM exports, while the label ufm indicates intra-UfM exports. T1, t2, t3, t4 and t5 correspond to the periods 1995-99, 2000-04, 2005-09, 2010-14 and 2015-18, respectively.
Source: Author's calculations.

StatLink https://stat.link/g2ipnq

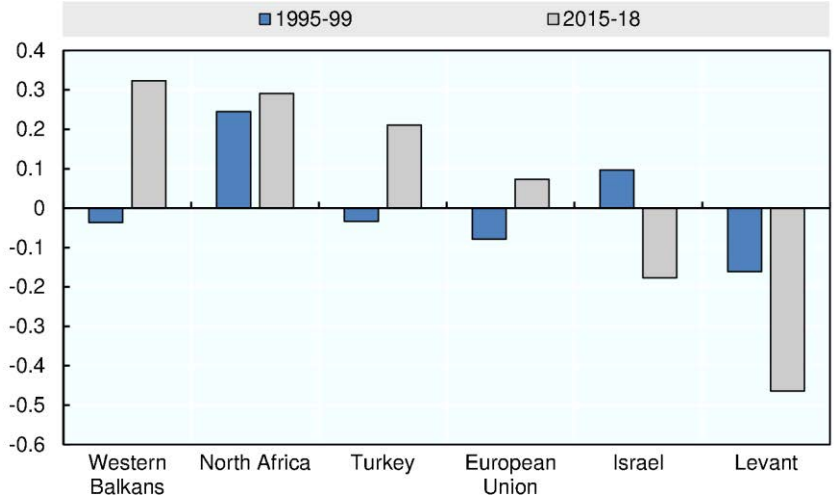
The Western Balkans, Turkey and North Africa have seen their intra-UfM exports of manufacturing products increase the most

Zooming in on manufacturing products, the Western Balkans, Turkey and North Africa saw a significantly improved performance in intra-UfM exports over the past 25 years (Figure 1.17).

- The intra-UfM exports of the Western Balkans and Turkey, below the theoretical benchmark at the beginning of the period, were 95% and 53% higher, respectively, at the end of the period, with the strong integration in EU value chains driving growth.
- North African UfM member countries were already above the theoretical benchmark in the late 1990s, through good integration in EU value chains, and recent years have also seen higher integration with Turkey, Levant, and fellow North African UfM countries, in part reflecting more complex (fragmented parts of) European value chains.
- Israel, which is heavily reliant in services exports, saw a gradual deterioration in its measures of SREP for manufacturing.
- The Levant group, already under-performing relative to the benchmark in the 1990s, saw a significant deterioration in its performance in recent years.

Figure 1.17. Export performance by UfM member group, intra-UfM exports, manufacturing products

Standardised relative export performance indicator (SREP)



Note: The graphs present the standardised relative export performance (SREP) indicator.
Source: Authors' calculations.

StatLink https://stat.link/9vy6hx

For UfM members (excluding the former EU28), signs of upgrading have appeared through integration into higher-value manufacturing

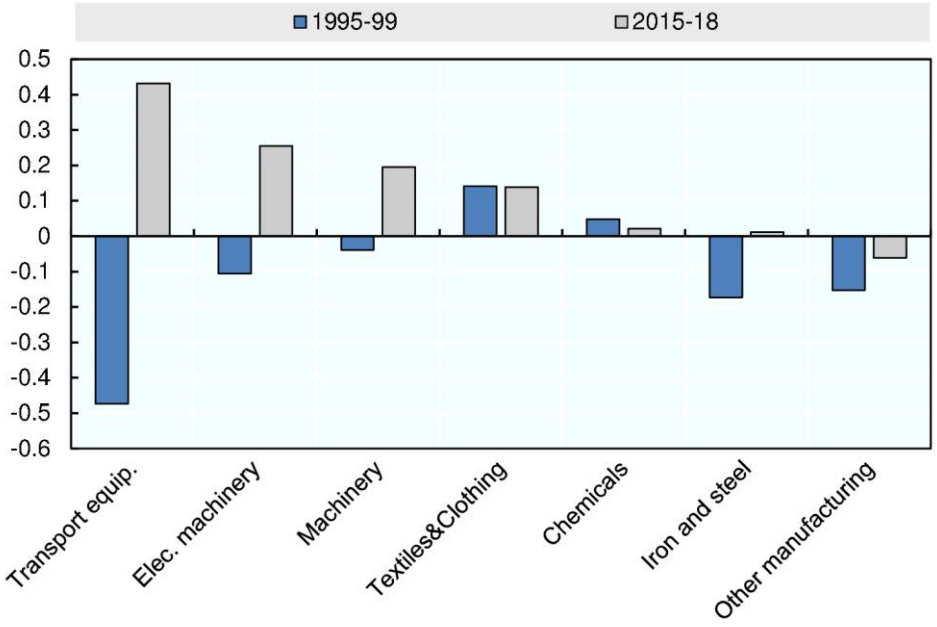
In the late 1990s, textile products accounted for about one-half of UfM members' (excluding the former EU28) manufacturing exports to other UfM members. However, the most recent data show that textile products as a share of total manufacturing exports have declined significantly to about one-quarter, even though textiles remain the largest exported product in value terms. Other, more sophisticated manufactured products have

been growing faster than textiles, namely *transport equipment*, *electrical machinery* and *machinery* (see also Annex Figure 1.A.1).

The evolution over time of the SREP at the detailed manufacturing-product level is shown in Figure 1.18. While textile products recorded the highest indicator score at the beginning of the period, over time they have been overtaken by transport, electronic machinery and machinery, for which reported exports exceed the theoretical model by 250%, 168% and 148%, respectively.

Figure 1.18. Export performance by manufacturing sector, intra-UfM exports of UfM members (excluding the former EU28)

Standardised relative export performance indicator (SREP)



Note: The graphs present the standardised relative export performance (SREP) indicator.
Source: Authors' calculations.

StatLink https://stat.link/gb9o61

Intra-UfM exports of transport equipment showed the largest improvement over time. Montenegro, Morocco, Tunisia and Turkey performed particularly well in this sector: transport equipment, which used to represent less than 5% of these countries' merchandise exports, increased to over 20% by the end of the period. Morocco in particular appears to have greatly capitalised on foreign investment by European multinational enterprises (MNEs) to integrate into EU transport equipment value chains, whilst also expanding into Turkey and Egypt. The automotive groups Renault and PSA, among others, established important production sites in Morocco; see, for instance (Hahn and Auktor, 2017[5]). Similarly, intra-UfM exports of electronic machinery and machinery grew sevenfold since 1995 in value terms, led by Morocco, Turkey and Tunisia. Bosnia and Herzegovina, Turkey and Tunisia showed the highest improvement in their export performance for a wide range of products.

The SREP for individual UfM members (excluding the former EU28), evaluated across a range of manufacturing products, shows a considerable degree of variation. Figure 1.19 shows, for agricultural and mining products as well as for six subsets of manufacturing products, the SREP indicator for 1995-99 on the x-axis and the corresponding indicator for 2015-18 on the y-axis. Countries above the 45-degree line have

improved their intra-UfM export performance over time compared to the theoretical benchmark, whilst countries below the line have seen their exports lag behind the predictions of the gravity model.

Bosnia and Herzegovina, Egypt, Morocco, Tunisia and Turkey dramatically improved their scores, while Jordan and Lebanon, in contrast, were under expectations.

- Bosnia and Herzegovina has been the leading force behind the Western Balkans' rapid integration with fellow UfM members over the past two decades. The SREP indicator for Bosnia and Herzegovina often saw the largest increase over the time period considered notably for *electronic machinery*.
- At the same time, Tunisia – and, to a lesser extent, Egypt and Morocco – have widely contributed to North Africa's higher integration with UfM member countries, although specialising in different products. While Morocco and Tunisia saw higher integration in the *transport equipment*, *machinery* and *electronic machinery* sectors, Egypt saw significant improvement in *chemical products*.
- Turkey's export performance with other UfM members also improved significantly across all manufacturing sectors and notably for *transport equipment*, *electronic machinery* and *machinery*.

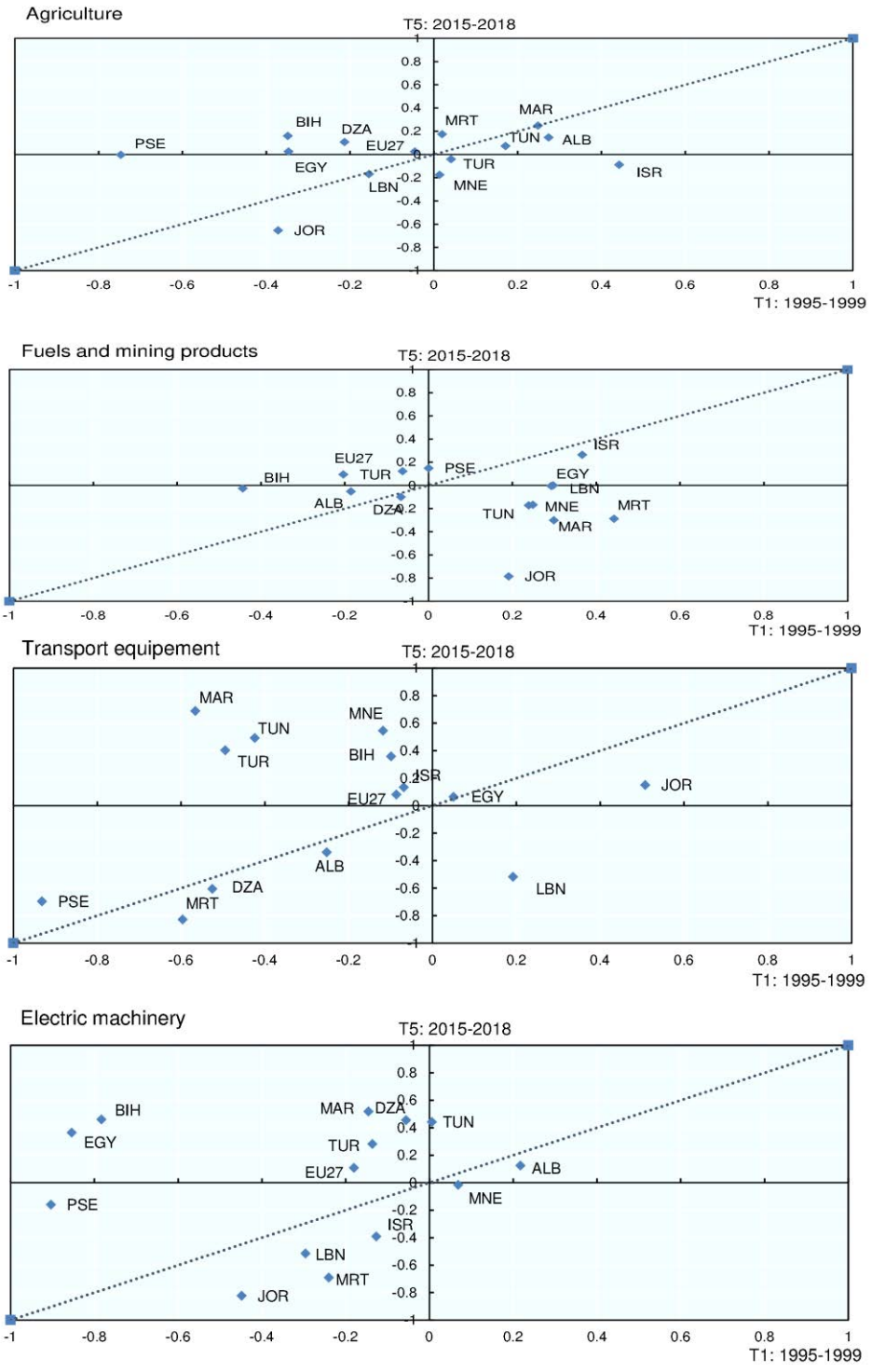
Jordan and Lebanon have lost ground across many manufacturing products, while Algeria and Albania have struggled to diversify their exports

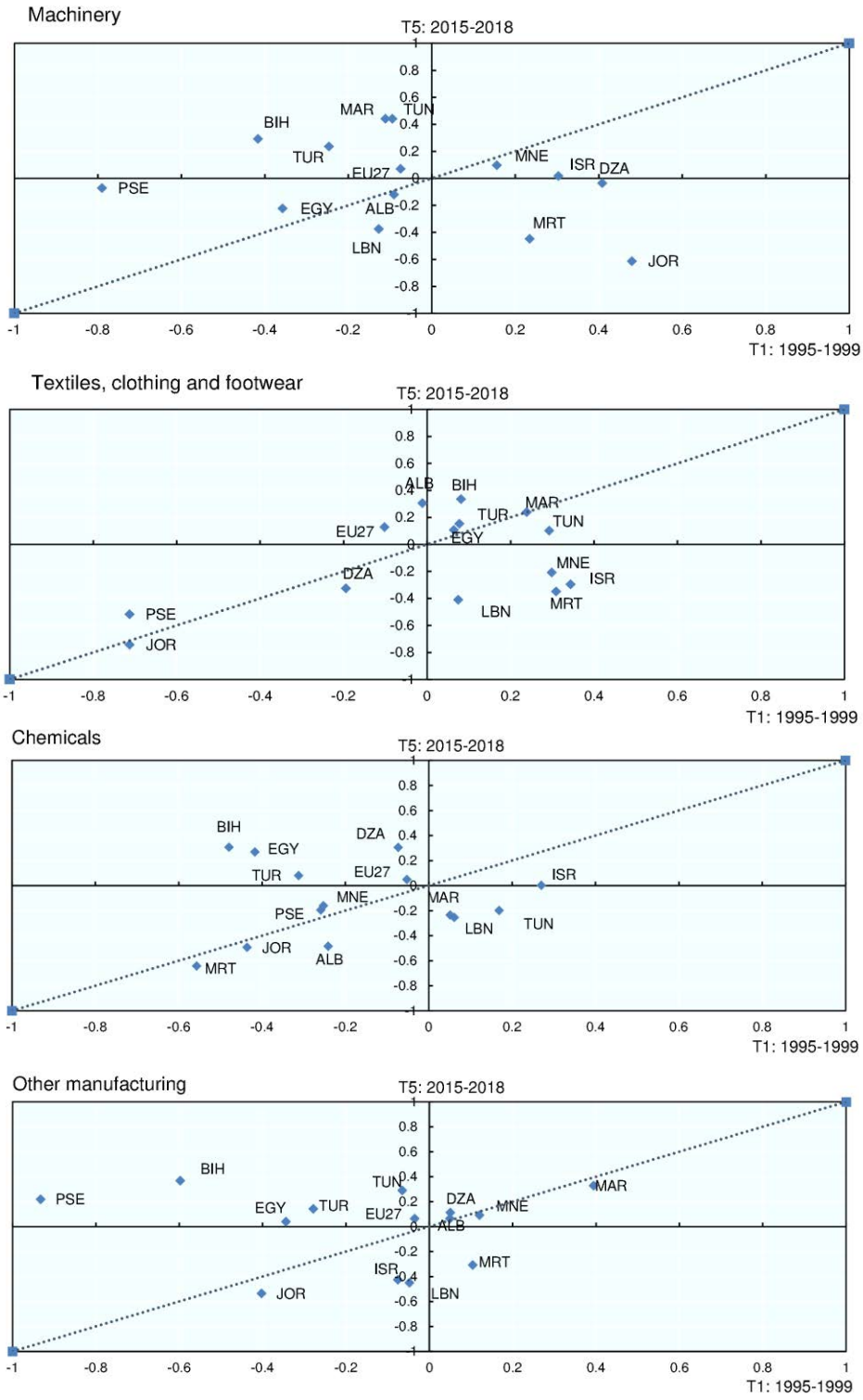
Jordan's and Lebanon's intra-UfM exports of manufacturing were below the benchmark at the beginning of the period, and they remained substantially below the benchmark in recent years. Jordan's main manufacturing export, *chemical products*, stood at half the predicted level in 2015-18, with most other products also scoring badly (with the exception of *transport equipment*) (Figure 1.19). Similarly, Lebanon saw its SREP deteriorate across all manufacturing products.

Algeria's exports of *fuels and mining products*, accounting for over 90% of the total merchandise exports, remained slightly below benchmark over the years, with the country barely changing its export basket. However, Algerian exports of *chemical products* and *electronic machinery* improved over the years thanks to its stronger connections with Turkey, although the levels of exports in these products remain very low.

Since the late 1990s, Albania's exports of textiles, clothing and footwear as a share of total merchandise exports has remained largely stable (from 58% to 60%), while the majority of the other UfM members shifted towards more 'advanced' manufacturing. In fact, the textile sector is the only one where Albania improved its intra-UfM export performance over time, beating the benchmark by more than 30% in the latest period.

Figure 1.19. Trade integration in the UfM region: Have export baskets diversified?





Note: The graphs present the standardised relative export performance (SREP). The first observation for Montenegro refers to t3: 2005-09.
Source: Authors' calculations.

StatLink https://stat.link/jl57ce

Conclusions and policy considerations

The UfM countries represented 33% of the world's exports in 2018, which accounted for over USD 6 trillion in traded goods, three times higher than the value they had in 1996. Nevertheless, the region's global weight has declined in the recent decades, as a consequence of the increasing relevance of emerging economies in global trade.

In the UfM region, North-South trade and South-South trade are regulated by trade in goods agreements. While the importance of trade in services is acknowledged by the parties and reflected in specific regional agreements such as the Agadir trade agreement (and ongoing-but-not-yet-enforced bilateral negotiations, e.g. EU-Morocco and EU-Tunisia), only the EU-Western Balkans association agreements regulate trade in services.

The UfM countries' aspiration to reduce existing obstacles to trade and meet global standards in border procedures is reflected in the general improvement of indicators measuring trade facilitation. But while the progress is general, the differences between the Northern and Southern shores of the Mediterranean are still notable.

Although modest, over time the UfM's intra-regional market has gained relevance for most of the UfM economies, in terms of both trade in final products and trade in intermediate goods, as well as integration into regional value chains. The examination of export performance for the UfM countries (by comparing their reported exports to a benchmark generated through a gravity model of trade) confirms this trend. Results indicate that, overall, merchandise trade among the UfM countries is in line with or above the levels predicted by the model, and that the integration within the group has accelerated since the start of the Barcelona Process.

The biggest progress in regional trade in goods, as measured by the ratio of intra-UfM to extra-UfM regional exports, is observed among the UfM sub-regions of the Southern shore and the Western Balkans. The assessment of the export potential also confirms this:

- The Western Balkans, the North Africa sub-region and Turkey have been integrating more closely with the rest of the UfM.
- In contrast, exports from the Levant countries and Israel to the rest of the UfM remained nearly 50% and 20% below theoretical expectations, respectively.
- Although the UfM countries are in general well integrated in their own sub-region (e.g. intra-Western Balkans, intra-North Africa) and with the European Union, untapped potential exists for trade expansion among specific sub-groups – most notably the Western Balkans with Israel and Levant, and Israel with Levant countries and North Africa countries.

Intra-UfM exports have become more diversified and sophisticated in recent decades. Manufactured goods have increased their share, reducing the relevance of exports of oil and mining products, while exports of agricultural products have remained stable over time. The analysis of relative export performance at the product level confirms the general pattern but also highlights interesting heterogeneity across the different countries and product groups:

- Tunisia, Turkey, and Bosnia and Herzegovina have been able to shift away from their traditional exports (agriculture, textiles) and are now beating the benchmark levels of exports for a wide range of products, including transport equipment and electronic machinery.
- Jordan and Lebanon seem instead to under-export to the rest of the UfM countries across many products.
- Because the exports of Algeria and Albania are highly concentrated in two sectors (mining and textiles, respectively), the two countries perform worse than the benchmark export potential for most other products.

The analysis of integration via participation in regional value chains also discloses positive developments. The contribution of UfM economies to the EU's exports has steadily increased since 2005. At the same time, the integration of the Southern Mediterranean economies in the Southern value chains is heterogeneous, but particularly positive for Morocco. Israel and Turkey have increased their share of value added in exports of both Morocco and Tunisia. Also, despite the lack of economic integration agreements targeting services, the services sector of UfM countries (excluding the former EU28) has overall contributed more intensively to integration in regional value chains than the other sectors. The contribution of services from UfM countries to the value-added of the EU and UK's exports has been modest, however.

The findings point to several policy initiatives that UfM countries in the Southern shore and the Western Balkans could implement to unleash the untapped trade potential in the region and seize the benefits of regional integration:

- Enhance border cooperation with neighbouring countries, as reflected by the OECD Trade Facilitation Indicators, and advance the automation of trade formalities to further reduce existing trade costs. Improved transport infrastructure, discussed in Chapter 3 of this report, is also critical to reducing trade costs, as currently the transport time and costs to trade with neighbouring countries in the MENA and Levant sub-regions can be dissuasive for businesses that envisage starting or expanding their exporting activities. Better transport infrastructure also allows businesses in rural and remote areas to connect to national and international production networks.
- Promote access to finance to support the internationalisation of enterprises. The development of the financial sector in the Southern and Eastern Mediterranean countries should improve access to finance especially for small and medium-sized enterprises (see Chapter 2).
- Improving the general environment for trade, including access to transport and finance, creates the enabling conditions but could remain ineffective in the absence of industrial diversification. Therefore, continue to encourage and facilitate industrial diversification, as the untapped South-South trade potential seems to be a consequence of limited or inadequate product offer.
- Enhance the collaboration on trade regulations, including the adoption of more ambitious trade-in-services agreements and the homogenisation of common procedures, such as the adoption of common rules of origin. Facilitating trade in goods and services across the Euro-Mediterranean region should be accompanied by a committed action plan to tackle the socio-economic effects on wages, employment and regional imbalances within countries.

Finally, sound and reliable statistics are critical for informing the design of effective trade policies and for monitoring their implementation and impact, which can in turn ensure effective and targeted use of valuable strategic resources. Today, many UfM countries in the Southern shore lack the statistics needed to assess their capacity to leverage the megatrends of globalisation and digitalisation to improve their international competitiveness. In particular, apart from the OECD member countries of the UfM, only Morocco and Tunisia are currently included in the OECD's Trade in Value-Added (TiVA) database, which is an essential statistical tool for supporting policies that help countries capitalise on global value chains. This highlights the importance of accelerating the UfM countries' efforts to develop and align their data with international standards.

References

Dadakas et al (2020), "Examining the trade potential of the UAE using a gravity model and a Poisson pseudo maximum likelihood estimator", Vol. Journal of International Trade & Economic Development 29 (5): 619-646,, https://doi.org/10.1080/09638199.2019.1710551. [7]

Hahn and Auktor (2017), *The effectiveness of Morocco's industrial policy in promoting a national automotive industry*, German Development Institute, https://ideas.repec.org/p/zbw/diedps/272017.html. [5]

OECD (2017), "Making trade work for all"*, OECD Trade Policy Papers*, No. 202, OECD Publishing, Paris, https://dx.doi.org/10.1787/6e27effd-en. [1]

Rodrik (2018), *What Do Trade Agreements Really Do?, Journal of Economic Perspectives 23 (2):73-90*, https://drodrik.scholar.harvard.edu/publications/what-do-trade-agreements-really-do. [3]

Santos and Tenreyro, (2006), *"The Log of Gravity," Review of Economics and Statistics 88 (4):641–658,*, https://www.jstor.org/stable/40043025?seq=1#metadata_info_tab_contents. [6]

UNESCWA (2019), *Towards modernisation of the Pan-Arab Free Trade Area Agreement*, United Nations Organization, Economic and Social Commission for Western Asia,, https://www.unescwa.org/sites/www.unescwa.org/files/events/files/1901034.pdf. [4]

WTO (2007), *World Trade Report: Six Decades of Multilateral Cooperation, What Have we Learnt?*, WTO, https://www.wto.org/english/res_e/publications_e/wtr07_e.htm. [2]

Annex 1.A. Additional figures and tables

[1] Over USD 6 trillion in 2018 (Comtrade database).

[2] WTO (2018), *Factual Presentation: Arab Mediterranean Free Trade Agreement ("Agadir Agreement") between Egypt, Jordan, Morocco and Tunisia* [the signatories]*: Report by the Secretariat*, https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/WT/COMTD/RTA11-1.pdf&Open=True.

[3] https://ec.europa.eu/neighbourhood-enlargement/countries/detailed-country-information/turkey_en

[4] Turkey has bilateral trade agreements with Albania, Bosnia and Herzegovina, Egypt, Israel, Montenegro, Morocco, the Palestinian Authority and Tunisia (See Annex 1.A, Table 1.A.1).

[5] ITC Programme on Non-Tariff Measures https://ntmsurvey.intracen.org/ntm-survey-data/country-analysis/

[6] ITC Programme on Non-Tariff Measures country coverage and date of survey's publication: Egypt (2016), Jordan (2018), Morocco (2012), Palestinian Authority (2015); Tunisia (2014).

[7]More information on NTMs: International Classification of Non-Tariff Measures

[8] https://ec.europa.eu/neighbourhood-enlargement/policy/glossary/terms/sap_en

[9] https://www.oecd.org/industry/ind/tiva-2018-flyer.pdf

[10] The General Agreement on Trade in Services (GATS): objectives, coverage and disciplines: https://www.wto.org/english/tratop_E/serv_e/gatsqa_e.htm.

[11] ILOSTAT database, https://ilostat.ilo.org.

[12] National accounts of OECD countries and World Bank national accounts data.

[13] TiVA covers 36 unique industrial sectors

[14] The "former EU28" refers to the 27 current EU member countries plus the United Kingdom.

[15] Value added at basic prices. Source: OECD, Trade in Value Added (TiVA) database, December 2018.

[16] This indicator is also known as *export potential* in the empirical trade literature.

[17] Reporter and partner dummies are also included to account for other observable and unobservable country-specific characteristics that can affect bilateral trade. Annex 1.B describes the gravity model specification used in this exercise as well as the indicators used in the analysis.

[18] Antràs and de Gortari (2020) "On the Geography of Global Value chains" found that the elasticity of trade flows to distance is significantly larger for final goods than for intermediate inputs.

[19] The SREP can be calculated as (export performance indicator -1) / (export performance indicator +1). The index varies between (−1, 1). A positive SREP implies higher reported bilateral trade than what the model predicted, while a negative index implies the opposite. See Annex 1.B for further details.

Annex Table 1.A.1. Trade agreements in force within the Euro-Mediterranean region

Agreement	Target	Type of agreement	Date of entry into force	Members
South-South RTAs				
Agadir Agreement	Goods	Free Trade Agreement	2007	Egypt; Jordan; Morocco; Tunisia
Pan-Arab Free Trade Area (PAFTA) / Greater-Arab Free Trade Area (GAFTA)	Goods	Free Trade Agreement	1998	Algeria*, Bahrain, Kingdom of; Egypt; Iraq; Jordan; Kuwait, the State of; Lebanese Republic; Libya; Morocco; Oman; Palestinian Authority*; Qatar; Saudi Arabia, Kingdom of; Sudan; Syrian Arab Republic; Tunisia; United Arab Emirates; Yemen
North-South bilateral agreements				
EU-Algeria	Goods	Free Trade Agreement	2005	
EU-Egypt	Goods	Free Trade Agreement	2004	
EFTA-Egypt	Goods	Free Trade Agreement	2007	
EU-Israel	Goods	Free Trade Agreement	2000	
EFTA-Israel	Goods	Free Trade Agreement	1993	
EU-Jordan	Goods	Free Trade Agreement	2002	
EFTA-Jordan	Goods	Free Trade Agreement	1993	
EU-Lebanon	Goods	Free Trade Agreement	2003	
EFTA-Lebanon	Goods	Free Trade Agreement	2007	
EU-Morocco	Goods	Free Trade Agreement	2000	
EFTA-Morocco	Goods	Free Trade Agreement	1999	
EU-Palestinian Authority	Goods	Free Trade Agreement	1997	
EFTA-Palestinian Authority	Goods	Free Trade Agreement	1999	
EU-Tunisia	Goods	Free Trade Agreement	1998	

Agreement	Target	Type of agreement	Date of entry into force	Members
EFTA-Tunisia	Goods	Free Trade Agreement	2005	
EU-Turkey	Goods	Customs Union	1996	
EFTA-Turkey	Goods	Free Trade Agreement	1992	
Albania-Turkey	Goods	Free Trade Agreement	2008	
Bosnia and Herzegovina-Turkey	Goods	Free Trade Agreement	2003	
Montenegro-Turkey	Goods	Free Trade Agreement	2010	
South-South bilateral agreements				
Egypt-Turkey	Goods	Free Trade Agreement	2007	
Israel-Turkey	Goods	Free Trade Agreement	1997	
Morocco-Turkey	Goods	Free Trade Agreement	2006	
Palestinian Authority – Turkey	Goods	Free Trade Agreement	2005	
Tunisia-Turkey	Goods	Free Trade Agreement	2005	
Western Balkans RTAs and bilateral agreements				
Central European Free Trade Agreement (CEFTA) 2006	Goods	Free Trade Agreements	2007	Albania; Bosnia and Herzegovina; Moldova, Republic of; Montenegro; Kosovo**; North Macedonia; Serbia.
EU-Albania	Goods & Services	Free Trade & Economic Integration Agreement	2006 (goods) 2009 (services)	
EU-Bosnia and Herzegovina	Goods & Services	Free Trade & Economic Integration Agreement	2008 (goods) 2015 (services)	
EU-Montenegro	Goods & Services	Free Trade & Economic Integration Agreement	2008 (goods) 2010 (services)	

*Algeria and the Palestinian Authority are also parties to the PAFTA; however, a formal notification by the Parties to the WTO is still missing. ** This designation is without prejudice to positions on status, and is in line with United Nations Security Council Resolution 1244/99 and the Advisory Opinion of the International Court of Justice on Kosovo's declaration of independence.
Source: WTO Regional Trade Agreements Database, https://www.wto.org/english/tratop_e/region_e/region_e.htm.

Annex Table 1.A.2. UfM countries: Main export partners in 1997, 2006 and 2018

Four main trade partners (exports), million USD. Global = any partner in the world; UfM = only UfM partners.

	1997				2006				2018			
	Global		UfM		Global		UfM		Global		UfM	
Albania	TUR	1.27	EGY	0.01	CHN	9.03	ISR	0.87	CHN	52.74	BIH	12.98
	USA	2.01	JOR	0.01	TUR	10.04	BIH	4.32	MKD	79.14	TUR	19.94
	MKD	3.63	TUR	1.27	MKD	12.65	TUR	10.04	SRB	325.43	MNE	52.71
	EU & UK	128.72	EU & UK	128.72	EU & UK	704.4	EU & UK	704.4	EU & UK	2194.9	EU & UK	2194.9
Algeria	BRA	746.62	TUN	59.51	BRA	1892.29	MAR	387.8	TUR	1837.06	EGY	456.83
	TUR	810.92	MAR	94.27	CAN	3579.05	EGY	451.41	BRA	2127.96	TUN	753.42
	USA	2221.85	TUR	810.92	USA	14856.77	TUR	1864.36	USA	3467.91	TUR	1837.06
	EU & UK	8384.27	EU & UK	8384.27	EU & UK	28686.86	EU & UK	28686.86	EU & UK	20366.14	EU & UK	20366.14
Bosnia and Herzegovina	n/a		n/a		CHE	64.57	ALB	7.13	TUR	195.81	EGY	36.76
					USA	122.85	TUR	7.71	MNE	242.02	TUR	195.81
					SRB	452.52	EGY	9.33	SRB	834.58	MNE	242.02
					EU & UK	2686.95	EU & UK	2686.95	EU & UK	5241.52	EU & UK	5241.52
Egypt	SGP	152.67	LBY	69.59	TUR	362.74	JOR	249.22	SAU	1551.38	JOR	506.38
	ISR	327.85	TUR	96.64	USA	1195.31	SYR	255.56	TUR	1866.52	LBN	668.1
	USA	447.23	ISR	327.85	IND	1392.3	TUR	362.74	ARE	2740.61	TUR	1866.52
	EU & UK	1660.63	EU & UK	1660.63	EU & UK	4657.09	EU & UK	4657.09	EU & UK	7622.87	EU & UK	7622.87
Israel	JPN	1029.85	JOR	20.05	IND	1289.33	EGY	126.31	HKG	4190	JOR	71.54
	HKG	1183.24	EGY	54.88	HKG	2776.11	JOR	136.65	CHN	4794.38	EGY	112.18
	EU & UK	6237.38	TUR	256.84	EU & UK	13061.36	TUR	821.05	USA	16781.29	TUR	1916.51
	USA	7215.08	EU & UK	6237.38	USA	17956.97	EU & UK	13061.36	EU & UK	17628.2	EU & UK	17628.2
Jordan	EU	131.06	TUR	29.54	SAU	366.95	LBN	75.09	IND	686.68	LBN	118.1
	IND	139.5	LBN	41.81	IND	396.68	ISR	132.24	IRQ	707.48	EGY	143.73
	IRQ	156.79	SYR	47.56	IRQ	633.37	EU & UK	170.03	SAU	764.67	PSE	194.29

	SAU	167.65	EU & UK	131.06	USA	1298.88	SYR	268.81	USA	1768.38	EU & UK	253.09
Lebanon	USA	38.56	JOR	24.82	SYR	175.74	JOR	84.23	SYR	205.38	JOR	85.69
	ARE	57.68	TUR	26.62	ARE	176.21	TUR	102.35	SAU	212.45	TUR	127.15
	SAU	96.89	SYR	37.61	EU & UK	276.84	SYR	175.74	EU & UK	385.38	SYR	205.38
	EU & UK	156.75	EU & UK	156.75	CHE	450.99	EU & UK	276.84	ARE	457.39	EU & UK	385.38
Palestinian Authority	EU & UK	1.68	TUR	0.28	EU & UK	2.64	EU & UK	2.64	SAU	21.01	TUR	7.76
	JOR	8.18	EU & UK	1.68	DZA	3.48	DZA	3.48	ARE	26.41	EU & UK	13.03
	SAU	19.6	JOR	8.18	JOR	22.97	JOR	22.97	JOR	73.95	JOR	73.95
	ISR	369.68	ISR	369.68	ISR	326.57	ISR	326.57	ISR	967.46	ISR	967.46
Mauritania	RUS	9.8	DZA	0.31	JPN	13.18	EGY	0.04	JPN	142.53	EGY	1.01
	NGA	25.79	EGY	0.41	CHN	64.76	TUN	0.06	CHE	306.4	TUN	1.79
	JPN	36.3	MAR	1.27	CIV	186.38	DZA	3.77	EU & UK	506.1	TUR	35.87
	EU & UK	233.02	EU & UK	233.02	EU & UK	525.55	EU & UK	525.55	CHN	698.32	EU & UK	506.1
Montenegro	n/a		n/a		ALB	5.23	EGY	1.77	CHN	16.57	TUR	15.27
					BIH	23.22	ALB	5.23	BIH	36.55	ALB	15.29
					SRB	138.61	BIH	23.22	SRB	110.09	BIH	36.55
					EU & UK	379.7	EU & UK	379.7	EU & UK	205.17	EU & UK	205.17
Morocco	USA	164.71	TUN	39.93	USA	243.92	DZA	54.96	BRA	767.91	DZA	173.72
	JPN	259.12	TUR	40.43	BRA	286.56	TUN	92.04	IND	1102.25	MRT	189.25
	IND	386.13	LBY	130.32	IND	540.05	TUR	121.06	USA	1379.69	TUR	591.58
	EU & UK	2777.36	EU & UK	2777.36	EU & UK	9175.75	EU & UK	9175.75	EU & UK	19494.13	EU & UK	19494.13
Tunisia	TUR	59.27	DZA	37.75	CHE	258.4	TUR	121.32	USA	424.13	MAR	184.89
	IND	152.96	TUR	59.28	USA	262.67	DZA	188.05	DZA	424.77	LBY	393.62
	LBY	257.1	LBY	257.1	LBY	620.7	LBY	620.7	LBY	497.32	DZA	466.53
	EU & UK	4044.12	EU & UK	4044.12	EU & UK	9032.63	EU & UK	9032.63	EU & UK	11392.01	EU & UK	10553.41
Turkey	SAU	534.99	EGY	304.46	IRQ	2589.35	EGY	709.35	ISR	3900.32	DZA	2031.74
	USA	2027.13	DZA	315.95	RUS	3237.61	DZA	1020.7	USA	8306.52	EGY	3055.56
	RUS	2056.55	ISR	391.51	USA	5061.33	ISR	1529.16	IRQ	8350.7	ISR	3900.32

	EU & UK	13135.38	EU & UK	13135.38	EU & UK	49035	EU & UK	49035	EU & UK	85253.89	EU & UK	85253.89
European Union	RUS	33592.78	EGY	7272.94	RUS	86404.78	MAR	12657.4	CHE	159948.14	ISR	22235.63
	CHE	54752.58	ISR	11238.4	CHE	104428.29	ISR	15137.87	CHN	217846.08	MAR	26363.7
	USA	124235.48	TUR	22483.54	USA	280855	TUR	57709.54	USA	407022.58	TUR	80710.97
	EU & UK	1185122.1	EU & UK	1185122.1	EU & UK	2751057.9	EU & UK	2751057.9	EU & UK	3740502.9	EU & UK	3740502.9

Note: Algeria data for 2018 are from 2017; Palestinian Authority data for 1997 are from 2000; Mauritania data for 1997 are from 2000, data for 2006 are from 2007, data for 2018 are from 2017.
Source: UN Comtrade Database, https://comtrade.un.org/.

Annex Table 1.A.3. Evolution of the share in total exports by country since 2005, 2018 or latest year

↓ Indicates decline in the share in total exports since 2005.

↗ Indicates positive increase in the share in total exports since 2005.

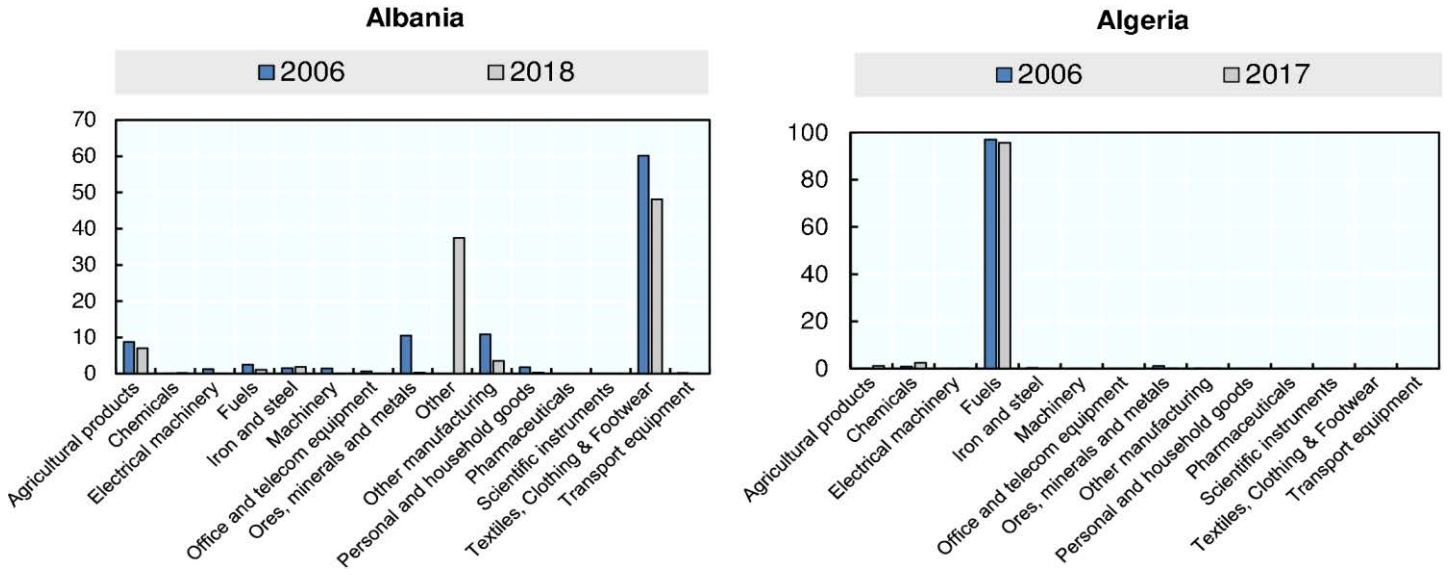
↑ Indicates strong positive increase in the share in total exports since 2005.

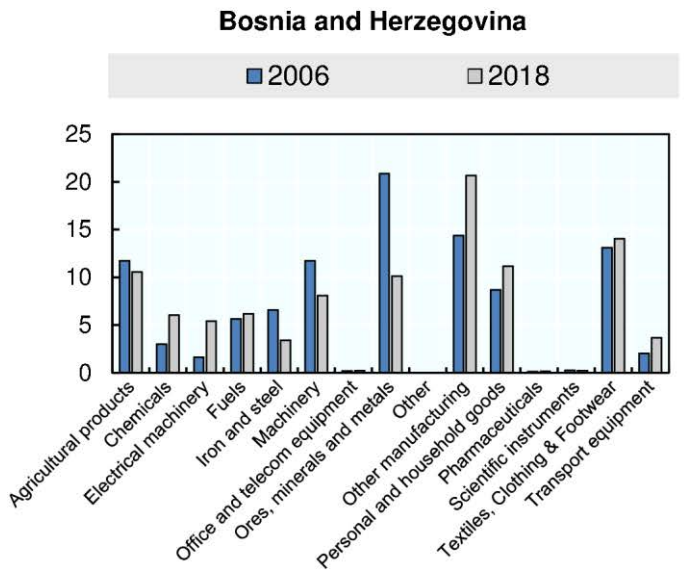
Importers \ Exporters	Morocco	Albania	BiH	Algeria	Egypt	Israel	Jordan	Lebanon	Montenegro	Mauritania	P.A	Tunisia	Turkey
Morocco		↗	↗	↗	↗	↗	↗	↗	↓	↓	↗	↗	↗
Albania	↓		↗	↗	↓	↗	↓	↗	↑	↓	*n/a*	↓	↓
BiH	↗	↓		↓	↗	↗	↓	↗	↑	↓	*n/a*	↗	↗
Algeria	↗	↓	↗		↑	↗	↓	↗	↓	↓	↓	↗	↗
Egypt	↓	↗	↗	↗		↓	↗	↗	↓	↓	↓	↓	↗
Israel	*n/a*	↓	↓	*n/a*	↗		↓	*n/a*	↓	↗	↓	*n/a*	↗
Jordania	↓	↓	↗	↗	↗	↓		↓	↓	↗	↗	↗	↗
Lebanon	↗	↗	↗	↗	↗	↓	↗		↓	↓	↗	↗	↗
Montenegro	↗	↗	↗		↗	↗	*n/a*	↓		*n/a*	*n/a*	↗	↗
Mauritania	↗	↗	↗	↗	↗	↓	↗	↗	*n/a*		↗	↗	↗
P.A	↗	*n/a*	↗	*n/a*	↓	*n/a*	↗	*n/a*	*n/a*	*n/a*		↗	↗
Tunisia	↓	↗	↓	↑	↗	↓	↓	↗	↓	↗	↓		↗
Turkey	↗	↓	↑	↗	↑	↗	↗	↓	↑	↗	↗	↗	

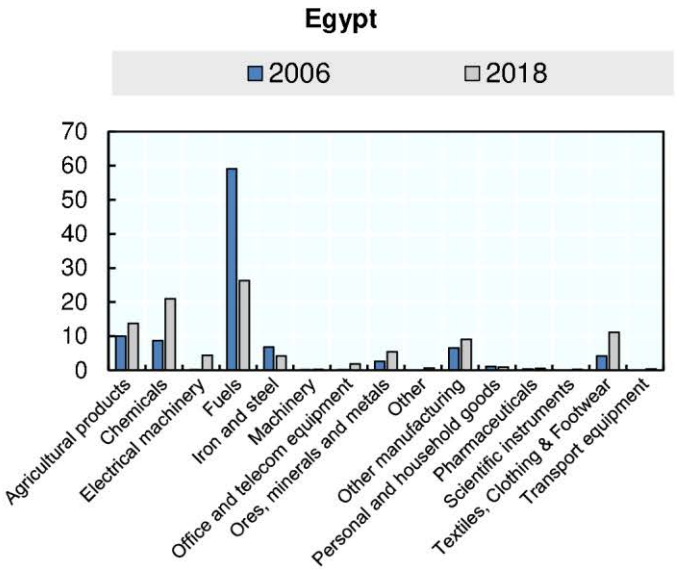
Note: Latest year for Algeria is 2017.
Source: UN Comtrade Database, https://comtrade.un.org/

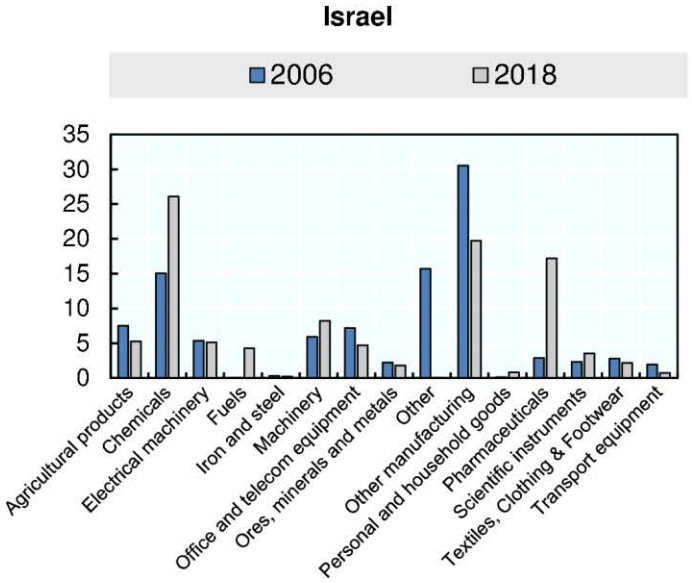
Annex Figure 1.A.1. Intra-UfM exports, by type of goods (excluding intra-EU exports)

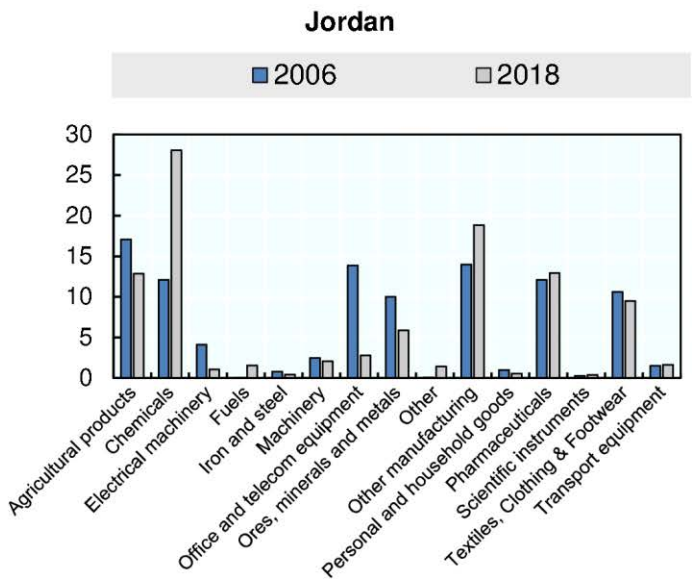
Share in total trade, by type of commodity (%)

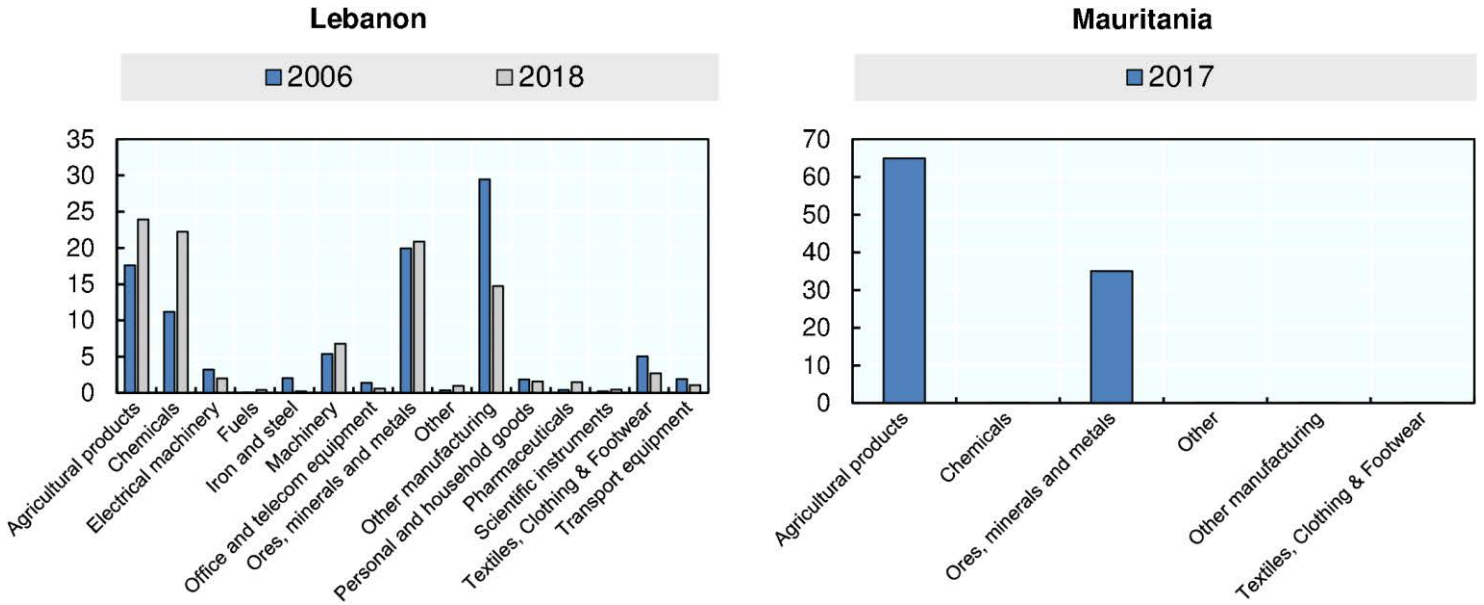


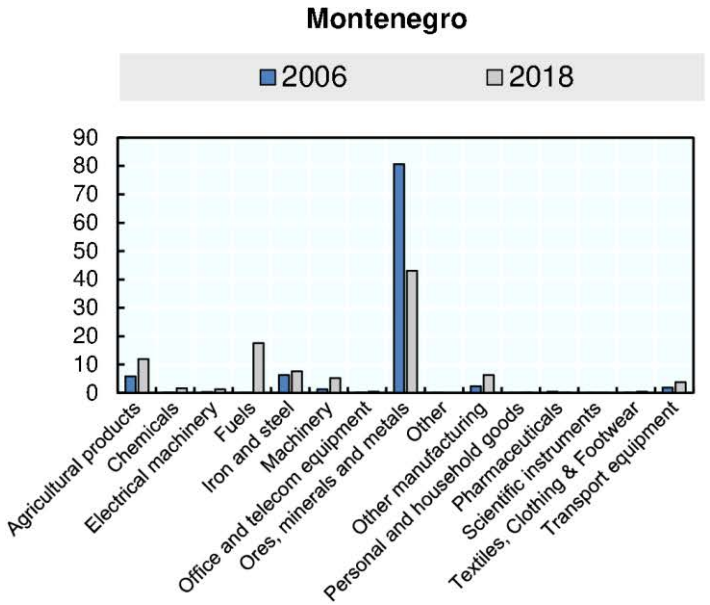

Bosnia and Herzegovina
2006
2018
25
20
15
10
5
0
Agricultural products
Chemicals
Electrical machinery
Fuels
Iron and steel
Machinery
Office and telecom equipment
Ores, minerals and metals
Other
Other manufacturing
Personal and household goods
Pharmaceuticals
Scientific instruments
Textiles, Clothing & Footwear
Transport equipment

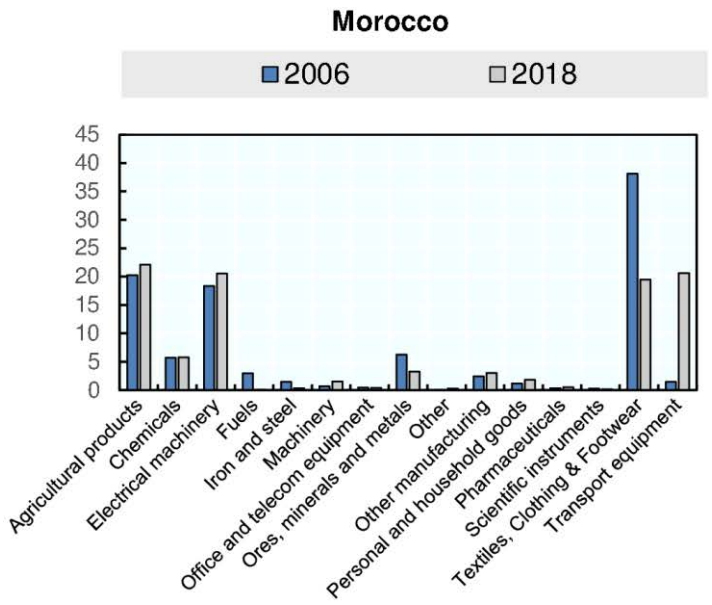

Egypt
2006
2018
70
60
50
40
30
20
10
0
Agricultural products
Chemicals
Electrical machinery
Fuels
Iron and steel
Machinery
Office and telecom equipment
Ores, minerals and metals
Other
Other manufacturing
Personal and household goods
Pharmaceuticals
Scientific instruments
Textiles, Clothing & Footwear
Transport equipment

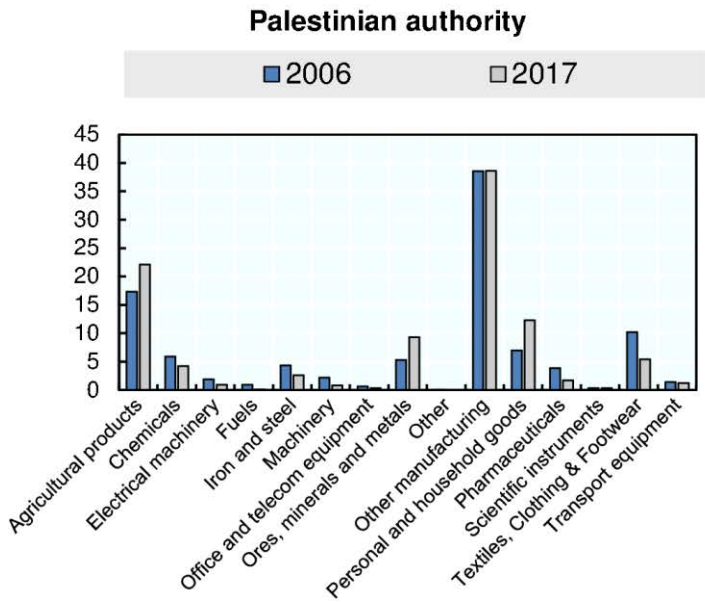

Israel
2006
2018
35
30
25
20
15
10
5
0
Agricultural products
Chemicals
Electrical machinery
Fuels
Iron and steel
Machinery
Office and telecom equipment
Ores, minerals and metals
Other
Other manufacturing
Personal and household goods
Pharmaceuticals
Scientific instruments
Textiles, Clothing & Footwear
Transport equipment

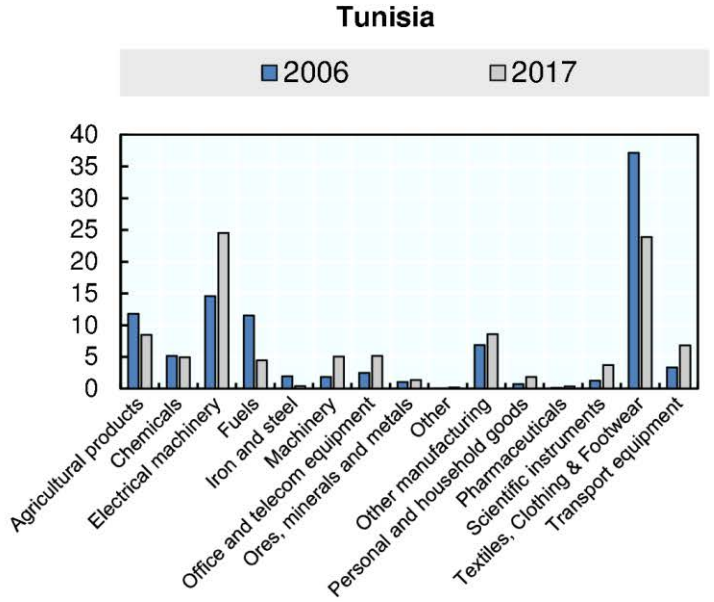

Jordan
2006
2018
30
25
20
15
10
5
0
Agricultural products
Chemicals
Electrical machinery
Fuels
Iron and steel
Machinery
Office and telecom equipment
Ores, minerals and metals
Other
Other manufacturing
Personal and household goods
Pharmaceuticals
Scientific instruments
Textiles, Clothing & Footwear
Transport equipment

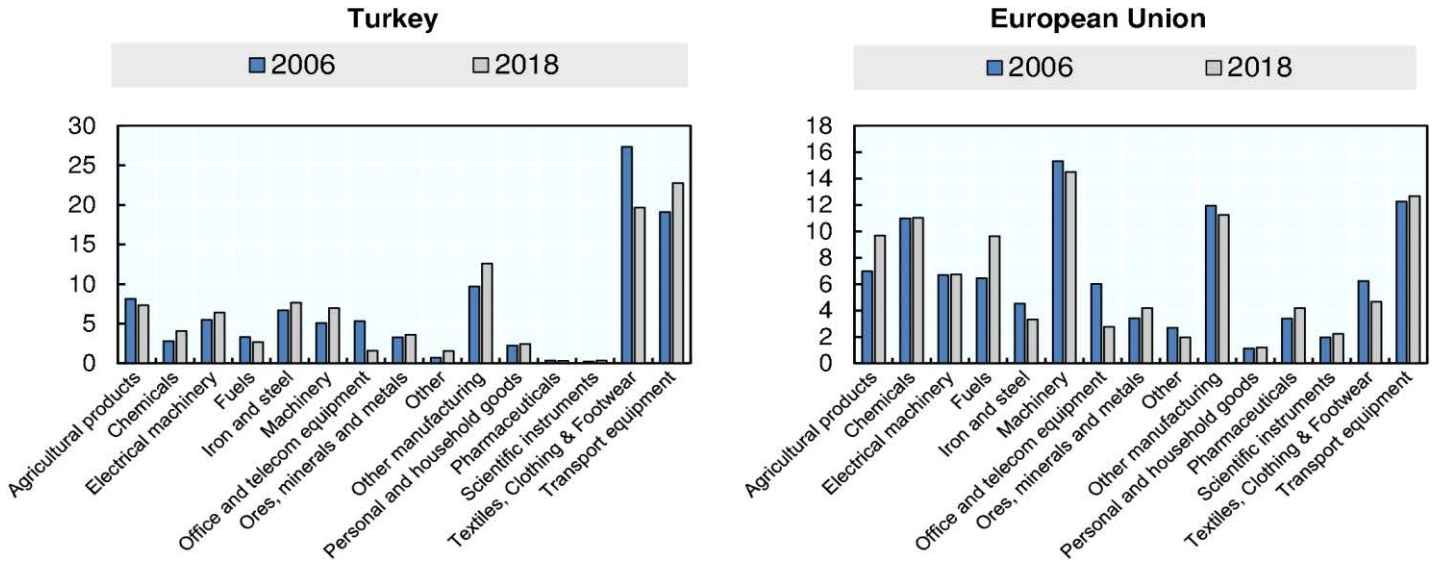

Lebanon
2006
2018
35
30
25
20
15
10
5
0
Agricultural products
Chemicals
Electrical machinery
Fuels
Iron and steel
Machinery
Office and telecom equipment
Ores, minerals and metals
Other
Other manufacturing
Personal and household goods
Pharmaceuticals
Scientific instruments
Textiles, Clothing & Footwear
Transport equipment
Mauritania
2017
70
60
50
40
30
20
10
0
Agricultural products
Chemicals
Ores, minerals and metals
Other
Other manufacturing
Textiles, Clothing & Footwear


Montenegro
2006
2018
90
80
70
60
50
40
30
20
10
0
Agricultural products
Chemicals
Electrical machinery
Fuels
Iron and steel
Machinery
Office and telecom equipment
Ores, minerals and metals
Other
Other manufacturing
Personal and household goods
Pharmaceuticals
Scientific instruments
Textiles, Clothing & Footwear
Transport equipment


Morocco
2006
2018
45
40
35
30
25
20
15
10
5
0
Agricultural products
Chemicals
Electrical machinery
Fuels
Iron and steel
Machinery
Office and telecom equipment
Ores, minerals and metals
Other
Other manufacturing
Personal and household goods
Pharmaceuticals
Scientific instruments
Textiles, Clothing & Footwear
Transport equipment


Palestinian authority
2006
2017
45
40
35
30
25
20
15
10
5
0
Agricultural products
Chemicals
Electrical machinery
Fuels
Iron and steel
Machinery
Office and telecom equipment
Ores, minerals and metals
Other
Other manufacturing
Personal and household goods
Pharmaceuticals
Scientific instruments
Textiles, Clothing & Footwear
Transport equipment


Tunisia
2006
2017
40
35
30
25
20
15
10
5
0
Agricultural products
Chemicals
Electrical machinery
Fuels
Iron and steel
Machinery
Office and telecom equipment
Ores, minerals and metals
Other
Other manufacturing
Personal and household goods
Pharmaceuticals
Scientific instruments
Textiles, Clothing & Footwear
Transport equipment



Note: Data on Mauritania unavailable or negligible for most sectors and for 2006
Source: UN Comtrade Database, https://comtrade.un.org/

StatLink https://stat.link/womvr2

Annex 1.B. Gravity model of trade: Empirical strategy

The export performance analysis conducted for the chapter is based on the comparison between the reported trade levels and the predictions of a structural gravity model, which serve as benchmark levels. The intuition of the gravity model of trade is that international trade between two countries is directly proportional to the product of their sizes and inversely proportional to the trade frictions between them. The basic theoretical foundation of 'structural gravity' is established in Anderson and Van Wincoop's (2003) seminal paper, which extends the basic or 'naïve' gravity framework to account not only for market sizes and bilateral trade costs, but also, crucially, for the trade costs across all possible trading partners (referred to as 'multilateral resistance').

It should be emphasised that the aim of the exercise for the chapter was to find the model with the highest predictive power for the trade flows, not to investigate the causal determinants of trade. For the purposes of this exercise, the exports of country *i* to country *j* are deemed to depend on:

- their respective sizes, proxied by their nominal GDPs (sourced from the World Bank's World Development Indicators and national authorities);
- a set of trade cost variables, including the bilateral distance, contiguity, common language, common currency and the presence, at any point in time, of a colonial relationship (all sourced from the CEPII Gravity database);
- additional trade policy controls, including the WTO membership (for both exporter and importer), the EU membership and the presence of a Regional Trade Agreement, sourced from the CEPII Gravity database for the years 1995-2015 and complemented with information from the WTO and from the DESTA dataset (World Trade Institute) for the years 2016-18.

In addition, reporter and partner dummies are included to account for other observable and unobservable country-specific characteristics that can affect bilateral trade, as a proxy for the outward and inward multilateral resistance terms, respectively[1].

A set of four models, estimated either via Ordinary Least Squares (OLS) or via the Poisson Pseudo-Maximum Likelihood (PPML) estimator, were tested in order to find the optimal benchmarking model:

$$log(X_{ijt}) = \beta_0 + \beta_1\, size_{it} + \beta_2\, size_{jt} + \beta_3 trade\ costs_{ij} + trade\ agreements_{ijt} + \varepsilon_{ijt} \quad \text{[1] OLS}$$

$$log(X_{ijt}) = \beta_0 + \beta_1\, size_{it} + \beta_2\, size_{jt} + \beta_3 trade\ costs_{ij} + trade\ agreements_{ijt} + d_i + d_j + d_t + \varepsilon_{ijt} \quad \text{[2] OLS}$$

$$X_{ijt} = \exp(\beta_0 + \beta_1\, size_{it} + \beta_2\, size_{jt} + \beta_3 trade\ costs_{ij} + trade\ agreements_{ijt}) * \varepsilon_{ijt} \quad \text{[3] PPML}$$

$$X_{ijt} = \exp(\beta_0 + \beta_1\, size_{it} + \beta_2\, size_{jt} + \beta_3 trade\ costs_{ij} + trade\ agreements_{ijt} + d_i + d_j + d_t) * \varepsilon_{ijt} \quad \text{[4] PPML}$$

where X_{ijt} denotes the exports of country *i* to country *j* in year *t*.

A panel dataset covering about 200 exporting countries and all their trading partners for the years 1995 to 2018 is used to estimate the coefficients of the gravity model. The bilateral exports, reported in nominal US dollars, are sourced from the United Nations Comtrade database. The full dataset sample was employed to estimate the regression's coefficients (rather than the UfM members only), using five-year averages for both the reported and predicted flows to minimize measurement and prediction errors.

Annex Table 1.B.1, presents the results of the regressions performed to inform the choice of the benchmark model. presents the results of the regressions performed to inform the choice of the benchmark model.

Annex Table 1.B.1. Model selection for total merchandise exports – regression results

	OLS		PPML	
	(1)	(2)	(3)	(4)
Distance	-1.267***	-1.584***	-0.549***	-0.600***
	(0.005)	(0.005)	(0.003)	(0.002)
GDP reporter	1.176***	0.405***	0.784***	0.576***
	(0.002)	(0.012)	(0.001)	(0.006)
GDP partner	0.830***	0.676***	0.776***	0.537***
	(0.002)	(0.012)	(0.001)	(0.007)
Contiguity	1.074***	0.791***	0.589***	0.512***
	(0.026)	(0.023)	(0.008)	(0.006)
common language	0.814***	0.783***	0.392***	0.172***
	(0.010)	(0.011)	(0.006)	(0.005)
colonial link	1.311***	1.018***	-0.023**	0.317***
	(0.029)	(0.027)	(0.010)	(0.007)
	(0.026)			
common currency	0.720***	0.577***	0.023**	-0.146***
	(0.032)	(0.028)	(0.010)	(0.008)
Free Trade Agreement	0.644***	0.641***	0.280***	0.525***
	(0.012)	(0.011)	(0.007)	(0.005)
WTO membership (both)	0.406***	0.314***	0.142***	0.174***
	(0.008)	(0.013)	(0.009)	(0.009)
EU membership (both)	-0.140***	-0.764***	-0.079***	0.366***
	(0.028	(0.026)	(0.010)	(0.009)
Observations	582,310	582,310	582,327	582,327
R2	0.611	0.719	0.855	0.924
RMSE	42,867	183,184	3,291	1,967
Reporter, partner and year FE	No	Yes	No	Yes

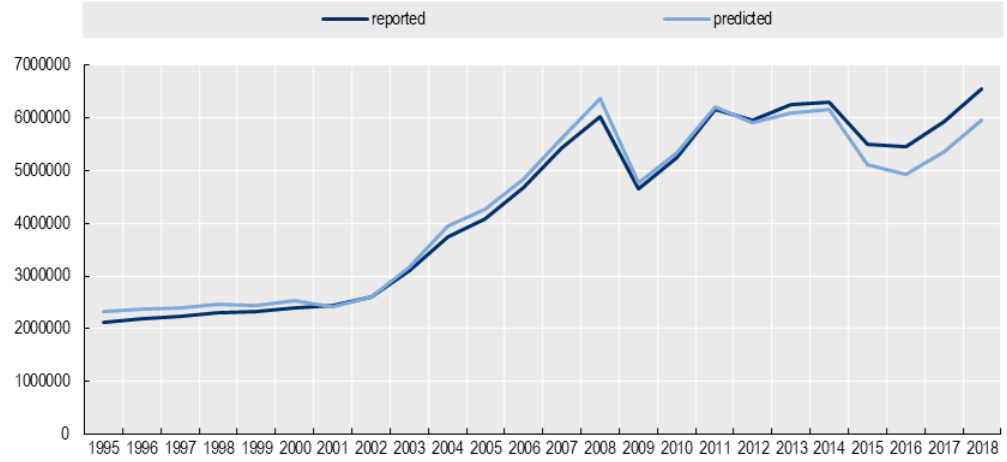
Note: Note: Significance levels indicated as * for 10%, ** for 5% and *** for 1%. McFadden pseudo R2 reported for the Poisson Pseudo-Maximum Likelihood (PPML) specifications.

Model 1, fitted through a log-linearized OLS, represents the 'naïve' gravity specification (as it does not take into account the multilateral resistance terms) and provides the baseline estimates for the coefficients, which are mostly in line with the empirical trade literature. Model 2 replicates Model 1 but includes reporter and partner fixed effects (FE) as a proxy for the outward and inward multilateral resistance terms,

respectively. Year fixed effects are also included in Model 2. Model 3 and 4 are equivalent to Model 1 and 2, but are estimated via the Poisson Pseudo-Maximum Likelihood (PPML) estimator. PPML is widely considered as superior to OLS in this gravity-model setting, as it delivers unbiased coefficient estimates in presence of heteroscedasticity and allows for the presence of zero trade flows (Santos and Tenreyro,, 2006[6]). Consistently with the related literature, the size of the coefficients is much smaller in PPML than in the OLS version for any given model (see (Santos and Tenreyro,, 2006[6]), (Dadakas et al, 2020[7])Model 4, which is estimated via PPML and includes the complete set of fixed effects, appears to be the preferred model, both for its superior predictive power (it delivers the lowest root mean squared error, or RMSE) and for its theory-consistent and economically plausible parameters. Under this specification, the presence of a free trade agreement increases exports by 69% (exp(0.525)-1), while belonging to the EU adds a further 44% increase[2]. Sharing a currency, however, does not seem to have a positive effect on bilateral exports[3].

Annex Figure 1.B.1 As a robustness check, the preferred model was also estimated on imports, which are normally considered better reported due to the collection of custom duties. The changes in the estimated coefficients were negligible. With the objective of minimising data gaps, mirror imports are used to fill in missing reported exports in this benchmarking exercise.shows the reported exports of the UfM members (vis-à-vis all their trading partners) together with the predictions of the preferred gravity specification (Model 4). Overall, the model fits the data quite well. Interestingly, the reported exports consistently exceeded the model predictions for the latest seven years. This result is mainly driven by the intra-EU trade, which significantly outperformed the benchmark in the last period. Intra-EU exports were 15% below predicted levels in 1995, reached full potential around 2006-07 and were around 20% above predicted levels in 2018. UfM countries not members of the former EU28 also exceeded their model predictions in the latest years, but as their exports only represent 5% of total UfM flows, their weight on the aggregate is limited.

Annex Figure 1.B.1. Reported and predicted total merchandise exports of UfM members, 1995-2018



Source: Authors' calculations.

StatLink https://stat.link/ie3cmy

Relative export performance and standardised relative export performance

Once the optimal gravity model has been chosen, the *relative export performance* is computed as the ratio between country *i*'s actual and predicted exports to country *j*:

Relative export performance ij = actual exports ij / predicted exports ij

Then, to facilitate the interpretation of the results, a *standardised relative export performance* (SREP)[4] index is calculated as:

Standardised relative export performance =

(relative export performance ij -1) / (relative export performance ij +1)

The SREP index varies between (−1, 1). A positive SREP implies higher reported bilateral trade than what the model predicted, meaning that exports have already achieved (or exceeded) the expected performance. A negative SREP indicates that, according to the model, the exporting country can potentially expand its trade with a given partner.

In order to minimize both measurement errors in the reported data and prediction errors, five-year averages of the reported and predicted values are used to compute the indicators of relative export performance.

Annex 1.C. Commodity groupings

The analysis of merchandise trade flows in the chapter is based on commodity groupings consistent with the Standard International Trade Classification, Revision 3 (SITC rev. 3), a product-based statistical classification broadly used for economic analysis.

The *total merchandise* aggregate is broken down into four main product groups, namely *agricultural products*, *fuels and mining products*, *manufacturing products* and *other*. These are further categorised into more detailed products, according to the following hierarchical structure:

Level	Description>	SITC rev.3
0	Total merchandise	All SITC rev. 3 products
1	Agricultural products	SITC sections 0, 1, 2 and 4 minus divisions 26, 27 and 28
1	Fuels and mining products	SITC section 3 and divisions 27, 28, 68
2	- Ores, minerals and metals	SITC divisions 27, 28, 68
2	- Fuels	SITC section 3
1	Manufacturing products	SITC sections 5,6,7,8 excluding division 68
2	- Iron and steel	SITC division 67
2	- Chemicals	SITC sections 5 excluding division 54
2	- Pharmaceuticals	SITC division 54
2	- Machinery	SITC divisions 71, 72, 73, 74
2	- Office and telecom equipment	SITC divisions 75,76
2	- Electrical machinery	SITC division 77
2	- Transport equipment	SITC divisions 78,79
2	- Textiles, Clothing & Footwear	SITC divisions 26, 65, 84, 85
2	- Personal and household goods	SITC divisions 81, 82, 83
2	- Scientific instruments	SITC division 87
2	- Other manufacturing	SITC divisions 61, 62, 63, 64, 66, 69, 88, 89
1	Other	SITC divisions 91, 93, 96, 97
0	Agricultural products	SITC sections 0, 1, 2 and 4 minus divisions 26, 27 and 28

Notes

[1] The *outward multilateral resistance* captures the fact that a country's exports depend on the trade frictions across all possible destinations, not just on the costs it is facing when targeting a specific importer. Likewise, inward multilateral resistance captures the fact that a country's imports depend on trade costs across all possible suppliers.

[2] As the dummies are not exclusive, FTA is always 1 when EU is 1 and therefore the latter measures the marginal effect of belonging to the EU given that there is already a trade agreement in force.

[3] The direction and significance of the effect of a common currency on trade is known to be very sensitive to the set of fixed effects used. See, among others, Mayer et al. (2018).

[4] Following the notation of standardised export potential index, as documented in Benedictis and Vicarelli (2005).

2 Finance

Regional financial integration can bring long-term growth benefits, notably through greater capital flows, technological transfer and risk diversification. This chapter discusses financial integration in the Union for the Mediterranean region. The analysis acknowledges that full benefits from financial openness are possible only in the presence of policies that strengthen local financial markets and regulatory and prudential frameworks. This is a priority for Middle East and North Africa (MENA) and Western Balkan sub-regions, which feature relatively low levels of financial development. These regions can reap the benefits of a more effective implementation of the regulatory frameworks for investment, with a deepening of South-South and other sub-regional investment flows. Remittances represent a significant inflow in the Southern and Eastern Mediterranean that would greatly benefit from the establishment of practical formal frameworks for money transfer.

Key takeaways

- Financial development in the Union for the Mediterranean (UfM) region varies significantly across countries as well as within sub-regions. Strengthening of local financial markets in MENA and Western Balkans countries is a necessary step to fully benefit from the gains of financial integration with other countries in the region.
- Restrictions on foreign direct investment remain high in several MENA countries, in particular in certain service activities. In terms of cross-border restrictions, MENA markets show significantly higher degrees of impediments than other Union for the Mediterranean (UfM) sub-regions. Restrictions in the manufacturing and services sectors, notably concerning foreign ownership of equities strongly account for these gaps.
- Within the UfM region, EU countries are the main senders and receivers of foreign direct investment. There is significant untapped potential within the MENA and Western Balkans regions, and between the two sub-regions, which share limited Foreign Direct Investment (FDI) flows.
- Foreign bank penetration is relatively nascent in Southern and Eastern UfM member states. MENA countries like Morocco and Jordan have pursued banking integration policies to promote cross-border bank penetration. Under an appropriate macro-prudential framework designed to counter spillovers, bank integration can increase efficiency and stability of domestic bank and enhance capital transfer.
- Remittances represent a significant financial flow in the MENA and Western Balkans countries and an important source of income. However, the cost of sending remittances remains high, and it is estimated that a significant portion of remittances is sent through informal channels. International cooperation should facilitate establishing practical frameworks for the transfer of remittances through formal channels that are recommended to avoid losses to informal channels. Encouraging the use of formal channels for sending remittances contributes to greater financial literacy.
- Monitoring of financial flows at the UfM level requires reliable and harmonised data collection. Data on FDI flows and stocks in international databases is lacking for a number of countries in the region, notably in the MENA and Western Balkans regions. A greater engagement with international specialised bodies, such as the OECD Investment Committee's Working Group on International Investment Statistics, could enhance data availability and comparability.

Introduction

Financial integration is the process through which economic agents gain equal access to financial markets regionally or globally. Integrated financial markets provide participants with a single set of rules, equal access to financial instruments, and equal treatment within the market (Baele et al, 2004[1]). Features of financial integration include an increase in international financial flows, convergence of asset prices across countries and foreign penetration in the banking sector. International financial flows can take various forms. Capital flows typically refer to equity and debt flows for investment purposes, such as foreign direct investment (FDI), foreign portfolio investment and bank lending. Other types of international financial flows include remittances and official development assistance (ODA).

The process of financial integration is formally driven by the lifting of cross-border restrictions, such as restrictions on foreign investments, and by the harmonisation of financial regulations. The impact of financial integration has been extensively discussed in the economic literature. Empirical research suggests that integration has a positive impact on long-term growth – notably through larger, more efficient capital flows – but the relationship is not linear, and these benefits have been disputed to some degree (OECD, 2011[2]). Integration can increase the size of financial markets, allowing for economies of scale to develop; these are associated with lower costs, higher liquidity and risk-sharing through portfolio diversification (European Commission, 2018[3]). The reduction of costs and risks and the improved access to capital is beneficial for both investors and borrowers, and can facilitate a more productive allocation of investment capital by increasing investment opportunities. Lifting barriers to foreign investments allows both companies and investors to choose the most productive platforms and placements, and may lead to capital inflows to new markets. Recent evidence has highlighted the productivity benefits of FDI through technology transfers (Fons-Rosen et al, 2018[4]).

Financial institutions can benefit from integration by increasing the scale of their operations, leading to greater efficiency and profitability (African Development Bank, 2010[5]). In the banking sector, foreign penetration can improve the efficiency and quality of domestic banking-sector services through increased competition and knowledge transfer (Agénor, 2001[6]).

Since the 1990s, capital inflows to emerging economies, notably in East Asia and Latin America, have increased significantly both in volume and as a share of gross domestic product (GDP) (OECD, 2018[7]) (World Bank, 2014[8]). Through capital deepening and technological transfer, the rise in foreign capital has contributed to the growth potential of receiving countries. Greater access to affordable finance is especially beneficial in the case of small and medium-sized enterprises, which struggle the most in accessing capital.

The challenges of financial integration

The growing interconnectedness of financial markets can amplify the cross-border transmission of instability (OECD, 2012[9]). Research showed an association between capital flows, mainly portfolio and bank flows, and financial crises, in particular if liberalisation takes place before policy-related distortions have been removed and before domestic markets, institutions, and the administrative capacity of the prudential authorities have developed enough to generate confidence that foreign finance will be channelled in productive directions (Eichengreen, 2001[10]). Cases in point are the 1994 Mexican banking crisis, which followed the bank privatisation and financial liberalisation of the country (Graf, 1999[11]) and the 1990s banking crisis in Finland and other Nordic countries, where capital account liberalisation was accused of being one of its determinant factors (Herrala, 2020[12]). However, some cross-country empirical studies and studies that use measures of *de facto* integration or finer measures of *de jure* integration, were unable to find robust evidence that capital account liberalisation by itself increases vulnerability to financial crises (Kose et al, 2006[13]).

Political risks also challenge financial integration. For instance, North African economies saw an abrupt reversal of FDI flows as the 2008 financial crisis spread, and suffered additional pressures from the Arab Spring and the political uncertainty that ensued.

Large capital inflows resulting from financial integration can also affect a country's current account balance. In Central Europe, in the years prior to the 2008 financial crisis, the surge of bank flows prompted a credit and asset price bubble that led to worsening deficits and debt (World Bank, 2014[8]). Large capital inflows do not automatically entail a worsening of the current account deficit, as this can be counteracted by other variables in the balance of payments, such as capital outflows (in the form of investments abroad by residents) or changes in foreign currency reserves. Countercyclical macroeconomic and prudential policies, when adequately conducted, can also help an economy avoid growing deficits or debts. This emphasises the necessity to carefully prepare and monitor financial openness policies.

Other concerns are specific to the integration of the financial markets of emerging and developing economies with those of more-developed financial markets. As mentioned earlier, countries with less-developed capital markets can reap new investment opportunities from integrated markets (European Commission, 2018[14]). In studying the impact of financial development on investment capital allocation in countries with different levels of development from 1980 to 2014, Marconi and Upper (2017) found that less-developed financial systems allocate capital flows with less efficiency than developed ones. Furthermore, in contexts of low financial development, fast accumulation of capital (in other words, rapidly growing capital inflows) was found to worsen the allocative efficiency of the concerned systems.

In brief, liberalising financial markets in the absence of sound macro, prudential and regulatory policies may not evolve towards an optimal or efficient outcome (Baele et al, 2004[1]). Currently, financial integration and globalisation are moving at a much faster pace than global financial regulation and harmonisation. As national legislators remain the main actors in the crafting of domestic financial regulations, it is key that economies engage in the adoption of internationally set standards designed to foster the convergence of frameworks and to facilitate transparency.

Monitoring financial integration

There is no standard measure of financial integration across countries, although literature in this field often examines FDI flows. In the context of the UfM, the analysis focuses on three areas: i) indicators of financial development; ii) investment-related indicators; and iii) data on remittances, which constitute an important financial inflow in developing economies (their volume and frequency shed light on the availability and quality of infrastructures allowing remittances flows). Table 2.1 shows the six indicators examined in this chapter.

Official development assistance flows represent significant capital flows between UfM member states, notably from the European Union to Southern Mediterranean and Western Balkan countries. ODA flows can contribute to financial integration through the promotion of economic development (see Indicator F1 below), but they are not per se an indicator of financial development or integration, and were therefore not considered for the monitoring exercise.

Table 2.1. Key indicators for monitoring financial integration

Indicator	Description	Coverage	Frequency
Indicator F1. Financial market development	It measures the depth, access and efficiency of financial institutions and financial markets. It is based on the Financial Institutions index and Financial Markets index, which summarise how developed financial institutions and financial markets are in terms of their depth, access and efficiency.	All UfM member states except Montenegro and the Palestinian Authority	Annual (last available year: 2017)

Indicator	Description	Coverage	Frequency
	Source: IMF Financial Development IndexDatabase		
Indicator F2. FDI Regulatory Restrictiveness Index	It measures the restrictiveness of a country's foreign direct investment rules in four areas: foreign equity restrictions, discriminatory screening or approval mechanisms, restrictions on key foreign personnel, and operational restrictions. Source: OECD FDI Regulatory Restrictiveness Index	Available for OECD, EU and G20 countries	Annual (last available year: 2019)
Indicator F3. FDI positions and flows	It assesses the extent of regional financial integration by examining regional and intra-regional direct investment positions. It estimates the amount of inward FDI stock by investors from countries within the region and outside the region (rest of the world). The Central Bank of Egypt provides data on FDI inflows and outflows concerning the country. Source: IMF Coordinated Direct Investment Survey (CDIS) database and Egypt Central Bank	IMF database covers all UfM member states except Egypt, Mauritania, Tunisia. North Africa, Europe, Near and Middle East	IMF CDIS: Annual (last available year: 2018) Egypt: Last available year 2013/14
Indicator F4. Restrictions on portfolio and bank capital inflows	It measures the restrictiveness of capital controls on both inflows and outflows. It considers administrative restrictions (outright prohibitions, licensing requirements) and market-based restrictions (taxes) with regard to inflows of three assets: money market, bonds and equities. Source: Schindler et al. (2015), Capital Control Measures dataset, http://www.columbia.edu/~mu2166/fkrsu/	Algeria, Egypt, Israel, Lebanon, Morocco, Tunisia, Turkey, and EU member states except Croatia, Estonia, Lithuania, Luxembourg, Slovak Republic	Annual (last available year: 2017
Indicator F5. Portfolio investment flows	It measures portfolio flows to and from UfM Member states. Portfolio investments refer to ownership of financial assets that do not entail active management role, contrary to foreign direct investment. Stocks, government bonds and corporate bonds are example of assets included in portfolio investments. Source: IMF Balance of Payments and International Investment Positions statistics	All UfM member states, although data for Mauritania are not complete/consistent	Annual and quarterly (last available year: 2019)
Indicator F6. Intra-regional remittance flows and costs	It measures inflows and outflows of annual remittances using host country and origin country incomes. Where data is available, remittances are measured as the sum of: i) personal transfers, ii) compensation of employees, and iii) migrants' transfers (i.e., capital transfers between resident and non-resident households). For some countries, data is obtained from the respective country's Central Bank and other relevant official sources. Source: World Bank Bilateral Remittances Matrices	Data on remittance flows available for all UfM member states. Data on remittance costs missing for Albania, Algeria, Bosnia and Herzegovina, Israel, Montenegro, PA, Turkey	Annual (last available year: 2017)

Indicator F1. Financial market development

In the 2018 European Financial Stability and Integration Review (European Commission, 2018[15]) the European Commission discussed the state of financial integration within the European Union, noting that developed markets may benefit more from a capital market union than less developed ones, typically in Central, Eastern and South Eastern Europe (CESEE) countries. The review underlined the importance of developing lagging local markets prior to the push for integration in a region with different levels of financial development.

Financial market development can be defined as the capacity of markets to perform efficiently as intermediators and stimulate growth through reduced information and transaction costs (Alomari et al, 2019[16]) (Creane et al, 2003[17]). It is driven by an increase in the demand of capital by companies and households and the supply of capital by investors, (European Commission, 2018[14]) as well as by macroeconomic stability through appropriate policies (Creane et al, 2003[17]).

In the UfM region, economies feature highly differing levels of economic and financial

development. The MENA countries, the Western Balkans and the CESEE countries have lower levels of financial market depth and access than the other UfM member states, as measured by the Financial Development Index (IMF, 2020[18])

There is considerable heterogeneity within sub-regions as well. Among the MENA countries, Egypt, Jordan and Morocco perform better in terms of financial access than other countries with similar (or higher, in the case of CESEE countries) income levels see also(Box 2.1).

In general, lagging countries perform better in access than in depth, reflecting their lower degree of integration into foreign, more developed markets, and their reliance on local markets.

Box 2.1. Islamic finance

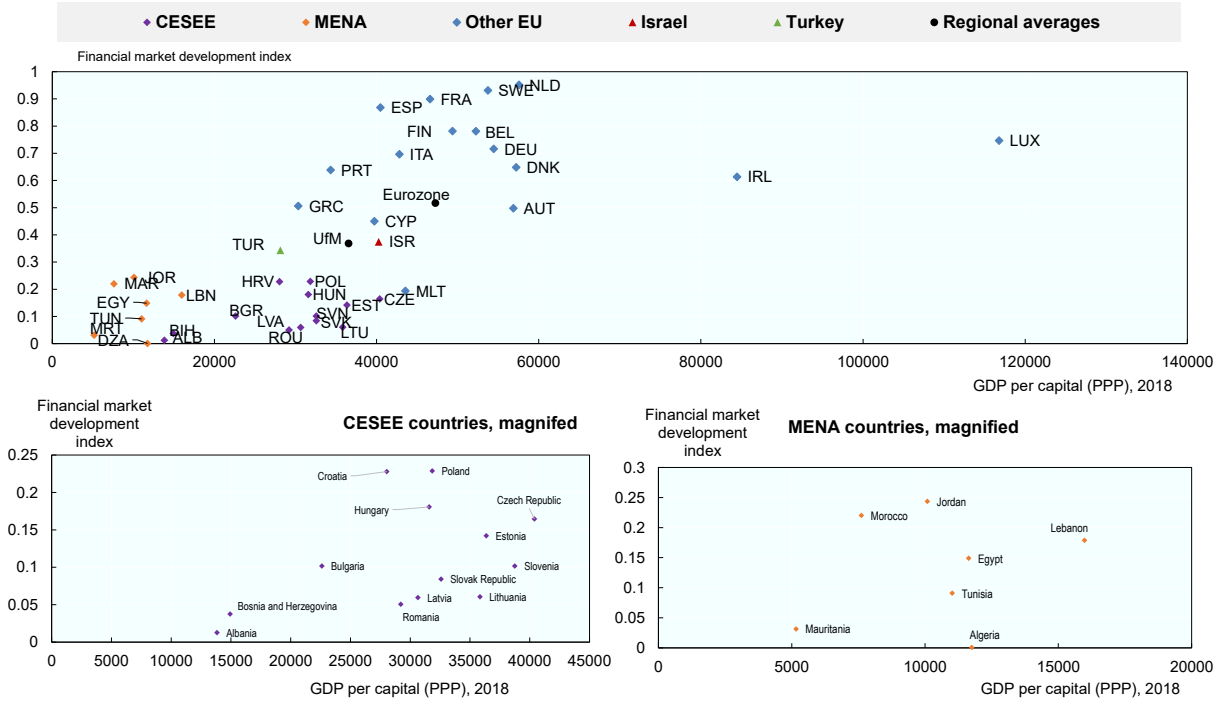
Islamic financial institutions can be seen as a complement or an alternative to the conventional financial sectors. Although they provide similar services and products to savers, borrowers and investors, they respond to different rules: Islamic banks follow the precepts of Islamic law, known as sharia law. This includes a ban on interest, games of chance and other activities considered illicit. It also includes a duty to benefit the greater society, for instance through redistribution of profit.

Islamic finance is most commonly present in the MENA (especially in the Gulf) and Southeast Asia regions, but enjoys a growing presence in Sub-Saharan Africa, Western Europe and Central Asia, notably in countries with significant Muslim populations. In 2006, Islamic banks represented around 50% of banking institutions in the West Bank and Gaza Strip. Other UfM member states also have a sizable share of Islamic banks, such as Jordan (around 20%) and Egypt and Mauritania (over 10%). However, when assessed in terms of credit and asset shares, Islamic banking institutions are less important.

Islamic finance can bring interesting opportunities to countries with developing financial systems. Islamic finance has been growing in importance in the last two decades. The diffusion and deepening of Islamic banks, notably in Muslim-majority countries and countries that trade with Muslim-majority countries, could be beneficial for economies with limited financial development, notably in the MENA and Western Balkan regions. (Imam and Kpoda, 2010[19]) (Imam and Kpodar, 2015[20]) found that, unlike for conventional banks, the quality of institution in a certain country does not affect the development of Islamic banks. Additionally, despite their lower presence in the overall financial sectors, Islamic banks have been positively associated with overall economic growth, notably through improved financial inclusion. As such, the development of Islamic banking represents significant opportunities for emerging and development markets, notably in the UfM area.

Source: (Imam and Kpoda, 2010[19]), (Imam and Kpodar, 2015[20]).

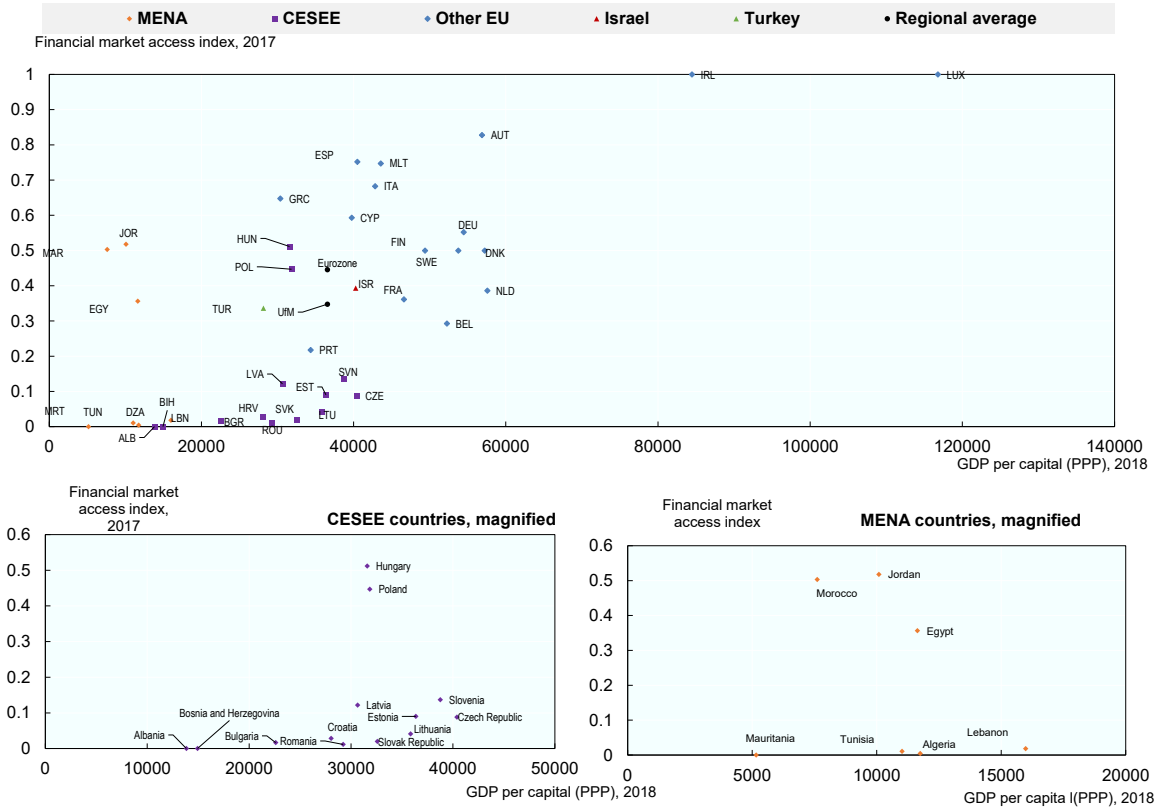
Figure 2.1. Financial market depth and economic development



Note: Depth refers to the size and liquidity of markets (IMF, 2020).
Source: Authors based on IMF Financial Development Index database and World Bank data. https://data.imf.org/?sk=F8032E80-B36C-43B1-AC26-493C5B1CD33B

StatLink https://stat.link/jq6348

Figure 2.2. Financial market access and economic development



Note: Access measures the ability of individuals and companies to access financial services (IMF,2020).
Source: Authors based on IMF Financial Development Index database and World Bank data. https://data.imf.org/?sk=F8032E80-B36C-43B1-AC26-493C5B1CD33B

StatLink https://stat.link/6ougz3

Indicator F2. FDI Regulatory Restrictiveness Index

The attractiveness of UfM economies to foreign investors depends on several factors, including market size and geography, but also the policies and institutions that support a coherent and predictable investment environment. For foreign investors, the rules governing their entry and operations in the host country are also important. Some legal or regulatory restrictions on FDI in general exist in most countries, either to protect specific domestic industries or for national security interests (OECD, 2021[21]).

The level of a country's openness to foreign investment is reflected in the OECD FDI Regulatory Restrictiveness Index, which measures the restrictiveness of an economy's rules on FDI (see Box 2.2). The Index provides an indication of a country's investment climate, noting that a range of other factors come into play, including how FDI rules are implemented, the existence of state ownership in key sectors, the size of a country's market and the extent of its integration with neighbours, and even geography. Used in combination with measures of other aspects relevant for the investment climate (e.g. good governance), the Index can help to explain variations among economies in attracting FDI.

For UfM countries that are members of the OECD, the source of information for measures to be scored under the FDI Index is the list of countries' reservations under the OECD Code of Liberalisation of Capital Movements (Capital Movements Code) and its lists of exceptions and other measures reported for

transparency under the National Treatment instrument[1], as well as regular monitoring conducted by the OECD[2]. For non-OECD members, additional sources include information gathered through a review of relevant legislation, either in the context of OECD Investment Policy Reviews or specific projects (Kalinova et al., 2010[22]) (OECD, 2020[23]).

The Capital Movements Code provides a framework to ensure a country's policy is not more restrictive than necessary, and remains to date the only multilateral instrument with the primary function of promoting transparency and openness of capital accounts. It covers a variety of transactions including direct investment, financial credits and loans, and operations in foreign exchange. It comprises a set of mutual rights and obligations established by governments (OECD, 2020[23]). Since 2012, it has been open for adherence by non-OECD member states. Countries that are not ready to undertake high openness commitments in a formal adherence process can still benefit from the Code's framework and OECD's expertise to improve their financial reform agenda (Blaschke, 2019[24]).

Box 2.2. The OECD FDI Regulatory Restrictiveness Index

The OECD FDI Regulatory Restrictiveness Index (FDI index) measures statutory restrictions on FDI across 84 economies (as of 2019), including all OECD countries and non-OECD countries that are UfM member states: Albania, Bosnia and Herzegovina, Croatia, Egypt, Jordan, Montenegro, Morocco and Tunisia.

The Index covers 22 sectors, including *primary* (agriculture, forestry, fishing, mining and quarrying), *secondary* (various manufacturing, electricity and construction) and *tertiary* (distribution, transport, hotels and restaurants, media, telecommunication and financial services). For each sector, the scoring is based on four main types of FDI restrictions:

- Foreign equity limits on start-ups and acquisitions, in both cases considering whether foreign equity is allowed at all, and the existence and level of an upper limit to the share of foreign equity.
- Screening and approval mechanisms applicable only to foreign investors fulfil many functions and vary widely in their scope. In the most restrictive case, a screening and approval mechanism is applied to both start-ups and acquisitions in economic sectors that are considered of national interest. In other cases, they are automatic and require only a pre-notification requirement for investors.
- Restrictions on key foreign personnel/directors: foreign key personnel not permitted; economic needs test for employment of foreign key personnel; nationality for board of directors, e.g. majority must be nationals or at least one must be a national.
- Other types of restrictions: establishment of branches not allowed/local incorporation required; reciprocity requirement; restrictions on profit/capital repatriation; access to local finance; acquisition of land for business purposes; land ownership not permitted but leases possible.

The index does not measure the following: the degree of implementation or circumvention; state monopoly or participation in a sector; special treatment accorded to a group of investors; restrictions based on national security or prudential measures.

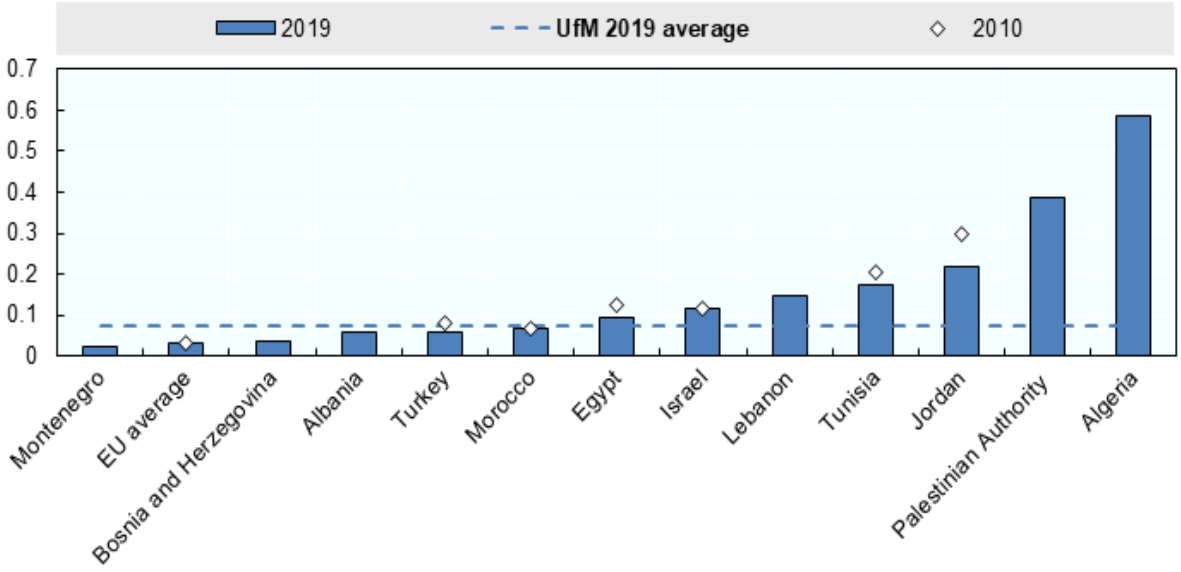
Source: OECD's FDI *Restrictiveness Index* - 2010 Update, www.oecd-ilibrary.org/finance-and-investment/oecd-s-fdi-restrictiveness-index_5km91p02zj7g-en.

FDI regulatory restrictiveness varies greatly among UfM member states (Figure 2.3). Restrictiveness scores for 2019 show greater levels of openness in the Western Balkans and EU countries than among MENA countries. Virtually all MENA countries (except Morocco) are above the UfM average (0.075, on a

scale from 0, open, to 1, closed), but the region converged towards the UfM average between 2010 and 2019, notably due to increased openness in Tunisia, Jordan and Egypt. Algeria and the Palestinian Authority are the two economies showing the highest levels of restrictions, with respective scores of 0.587 and 0.388, and in a specular way, they are the MENA economies with the lowest inflows of FDI (see in the following section (Figure 2.11). Morocco and Egypt, the two most open MENA economies, receive the largest inflows of FDI in the region.

Figure 2.3. FDI Restrictiveness Index in UfM economies

From 0 (open) to 1 (closed)



Note: 2010 data is missing for Albania, Algeria, Bosnia and Herzegovina, Jordan, Lebanon and the Palestinian Authority. Base-year data for Jordan are from 2012. EU average does not include Cyprus and Malta. UfM average does not include Cyprus, Malta and Mauritania.
Source: Authors, from the OECD FDI Restrictiveness Index database, https://stats.oecd.org/Index.aspx?datasetcode=FDIINDEX.

StatLink https://stat.link/a4tbzq

The high scores of the most restrictive economies in the UfM are largely driven by restrictions applied on foreign equity ownership to all or most foreign investors, notably in MENA economies (Figure 2.4). MENA countries display an extensive list of restricted sectors, notably in non-oil manufacturing sectors and servicesFor instance, the Palestinian Authority prohibits majority foreign ownership across sectors with few exceptions (e.g. manufacturing, banking, hotels and restaurants). Similarly, until recently, Algeria restricted foreign ownership to less than 50% of a firm's equity in all sectors; however, with the 2020 Finance Law the government lifted the cap on foreign ownership (OECD, 2021[25]).

Some countries have, indeed, made notable improvements. Jordan and Tunisia have recently carried out significant structural reforms concerning investment regulation, and show the greatest degrees of improvement between the base year and 2019.

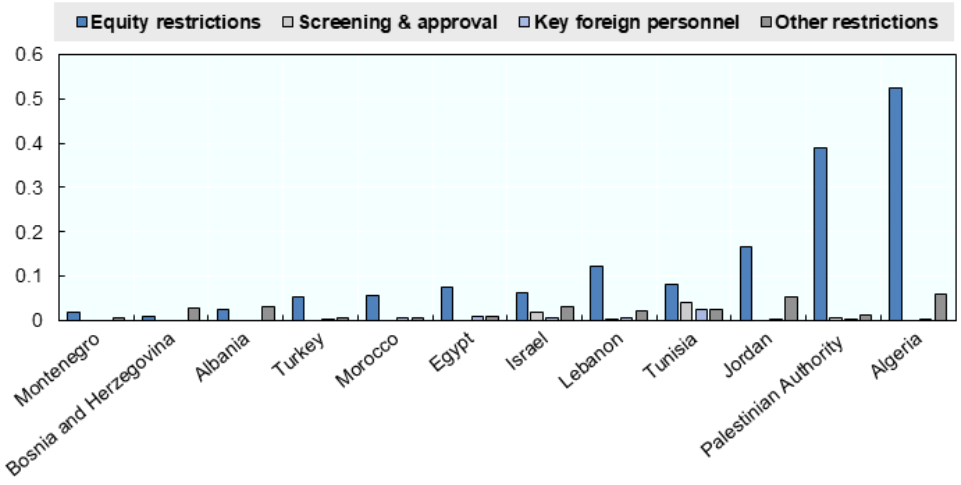
The overall lower restrictiveness of Tunisian markets is a result of changes in screening and approval procedures, notably following the entry into force in April 2017 of Investment law No. 2016-71, which repealed the 1993 Investment Code, and Law No. 2019-47 for the improvement of the investment climate. Screening and approval procedures restrictiveness dropped from 0.073 in 2010 to 0.042 in 2019. Law No. 2016-71 removed the necessity for foreigners to obtain approval from the High Commission for investment

in 46 sectors, and Law No. 2019-47 simplified enterprise creation and approval procedures for domestic and foreign investors.

In Jordan, throughout the 2012 to 2019 period, screening and approval procedures remained open, while all three other sub-indices improved. The Regulation for Organising non-Jordanian Investments No. 77 of 2016, which replaced regulation No. 47 of 2000, specifically lays out the framework for economic activities conducted in Jordan by non-Jordanians. Foreign equity restrictiveness dropped from 0.187 in the base year to 0.165 in 2019. While Article 4 broadened the scope of activities in which foreign investors can have a shareholding of up to 50%, Article 5 lowered the threshold of foreign ownership from 50% to 49% in certain activities, which likely has mitigated the improvement in this sub-index.

Figure 2.4. FDI regulatory restrictiveness sub-indices, 2019

From 0 (open) to 1 (closed)



Source: Authors, from the OECD FDI Restrictiveness Index database, https://stats.oecd.org/Index.aspx?datasetcode=FDIINDEX.

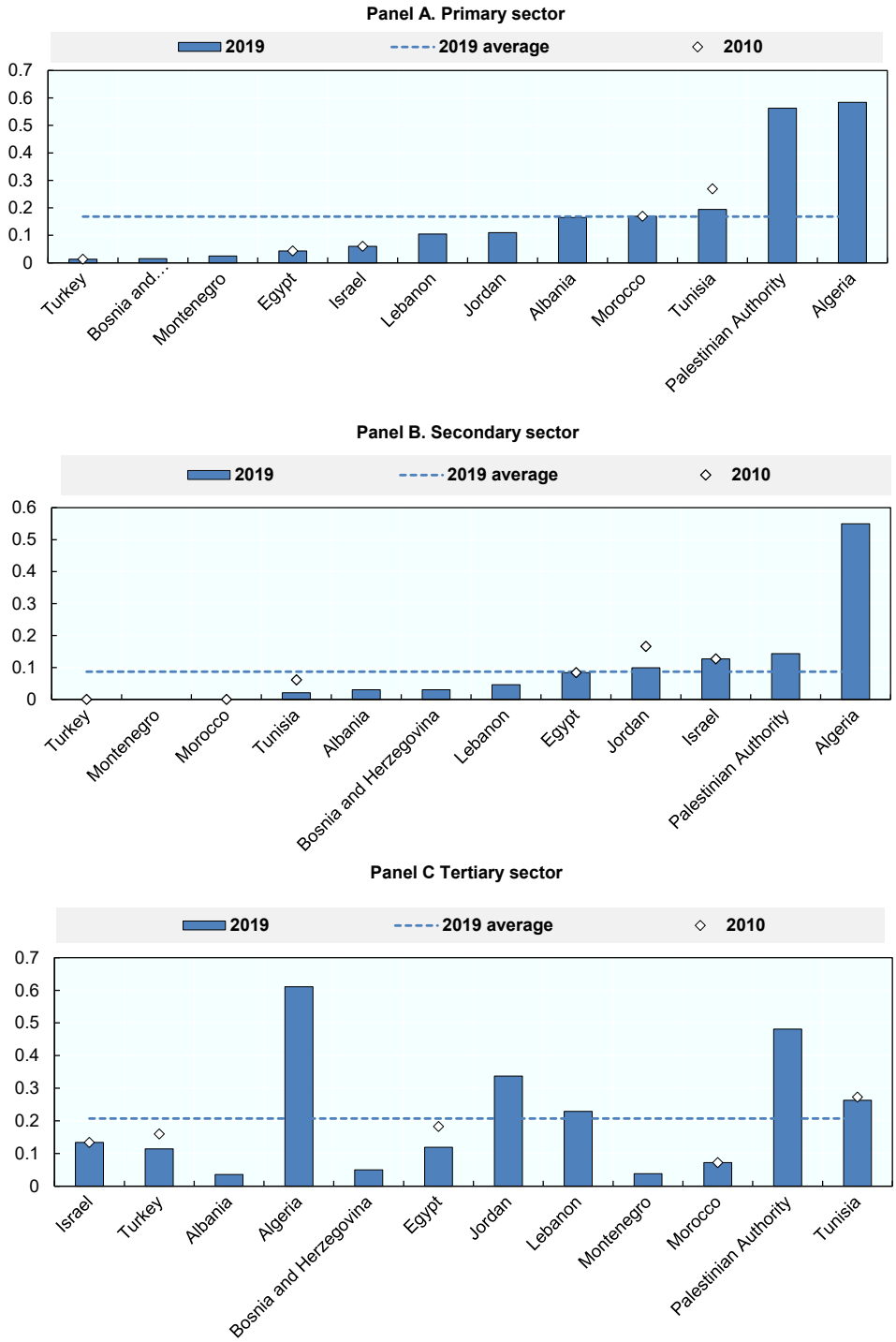
StatLink https://stat.link/1ulki3

In terms of economic sectors, restrictions are concentrated in the primary and tertiary sectors, with the lowest degree of closeness being recorded in the secondary sector (Figure 2.5). This is consistent with global trends, where the manufacturing sector is consistently more open to FDI than other sectors (Mistura and Roulet, 2019[26]). In 2019, the average for the secondary sector for non-EU UfM member states was 0.087, compared to 0.168 for the primary sector and 0.193 for the tertiary sector. MENA countries, especially Tunisia and Jordan, show the greatest decrease in restrictions. Western Balkan countries perform similarly to the EU average overall, with the exception of Albania's value for the primary sector.

An OECD survey of 60 developed and emerging economies showed that easing FDI restrictions has the most significant impact on the services sector as compared to manufacturing and agriculture (Mistura and Roulet, 2019[26]). As services tend to be the most restrictive sector in the UfM region, FDI liberalisation reforms oriented towards the tertiary industry may generate significant benefits in terms of bilateral stocks.

Figure 2.5. Regulatory Restrictiveness Index, by industrial sector

From 0 (open) to 1 (closed)



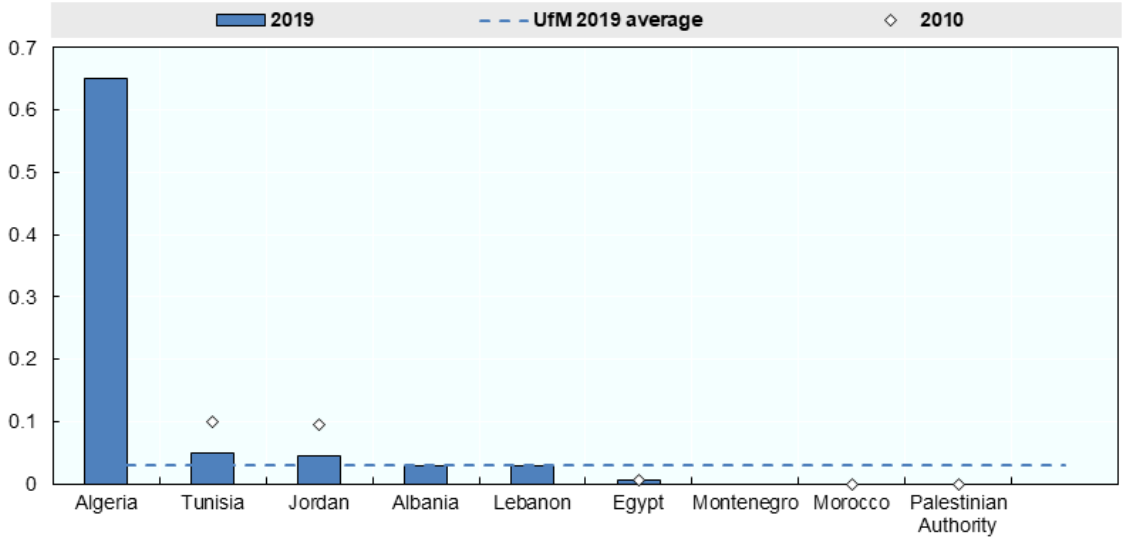
Note: 2010 data are missing for Albania, Algeria, Bosnia and Herzegovina, Jordan, Lebanon and the Palestinian Authority. Base-year data for Jordan is from 2012. EU average does not include Cyprus and Malta. UfM average does not include Cyprus, Malta and Mauritania.
Source: Authors, from the OECD FDI Restrictiveness Index database, https://stats.oecd.org/Index.aspx?datasetcode=FDIINDEX

StatLink https://stat.link/sn86fi

Restrictions on FDI can also affect the development of an economy's financial sector. For instance, restrictions on foreign entry in the banking sector can influence the level of regionalisation or internationalisation of the sector. The average restriction index on the banking sectors only across the UfM region (0.029) is significantly lower than when all sectors are considered (Figure 2.6). With the exception of Algeria, Jordan and Tunisia, non-EU UfM member states are approximately equal to or below the region's average. Given the relatively low levels of restrictions, there is potential for greater investments, which can spearhead the development of foreign bank entry in regions where it remains relatively constrained see (Box 2.3).

Figure 2.6. Regulatory Restrictiveness Index for the banking sectors, 2019

From 0 (open) to 1 (closed)



Note: The UfM average does not include Bulgaria, Cyprus, Malta and Mauritania. For Morocco, Montenegro and Palestinian Authority the value of the index in 2019 is 0.
Source: OECD FDI Regulatory Restrictiveness Index. https://www.oecd.org/investment/fdiindex.htm

StatLink https://stat.link/165fa3

Exposing the banking sector to foreign investments can lead to several potential benefits. When the management of branches in a foreign market is closely linked to the parent bank, foreign entry can enhance local supervisory mechanisms (OECD, 2009[27]). The presence of foreign banks can facilitate access to foreign capital and to new financing opportunities. Foreign banks can in principle reduce cross-border capital flight in periods of instability, by allowing foreign investors to shift their capital from domestically owned bank to local foreign banks. A sound legal framework is a necessary precondition for the successful integration of foreign banks into domestic markets and for the optimisation of its benefits. This includes, but is not limited to, modernised legislation on bankruptcy, risk management, accounting, capital requirements, and lending. Countries have taken steps to implement international standards to varying degrees.

Box 2.3. Foreign bank penetration

Through increased competition and knowledge transfer, the entry of foreign banks can improve the efficiency and quality of services of the domestic banking sector. When the management of branches in a foreign market is closely linked to the parent bank, foreign entry can enhance the local supervisory mechanisms (OECD, 2009[27]). The presence of foreign banks can also facilitate access to foreign capital and to new financing opportunities. Lastly, foreign banks could reduce cross-border capital flight in periods of instability, by providing foreign investors with the opportunity to shift their capital from domestically owned bank to local foreign banks. However, regulators can limit the entry of foreign banks into local financial sector due to specific concerns, notably the risk of transmitting financial shocks to the host economy.

Foreign bank presence is heterogeneous across the MENA region. The Jordanian banking sector is one of the most developed in the region – the country also ranks the best in the IMF Financial Development index as compared with other MENA countries. Among Arab banking institutions, Jordanian-headquartered Arab Bank has the largest international presence. There are also several foreign banks within the country, such as Standard Chartered (United Kingdom), Egyptian Arab Land Bank (Egypt), BLOM Bank (Lebanon), Bank Audi (Lebanon), Citibank (United States), Rafidain Bank (Iraq) and Al-Rajhi Bank (Saudi Arabia). In the Maghreb (Algeria, Mauritania, Morocco and Tunisia), where the banking sector is the main provider of financial services, foreign entry remains limited despite a growing regionalisation of banking services. Regionalisation of banks is most important in Morocco and, to a lesser extent, Tunisia (African Development Bank, 2010[5]). The following banks are an example of successful regional penetration of Maghrebi banks:

- Morocco's Attijariwafa Bank in Tunisia and Mauritania;
- Morocco's Axis Capital in Tunisia;
- Tunisian subsidiary banks and financial institutions in Algeria (Tunisia Leasing and Amen Leasing);
- Algerian investment bank in Tunisia (International Market Bank).

In 2017, the *Banque maghrébine d'l'investissement et de commerce extérieure* (BMICE) was established with the aim of promoting commercial ties and capital movement between Maghreb countries, notably by overcoming regulatory restrictions. The five countries participate equally in the USD 500 million capital of the BMICE.

Source: (OECD, 2009[27]), (African Development Bank, 2010[5]), *Banque maghrébine d'l'investissement et de commerce extérieure* (BMICE) https://www.bmice-maghreb.org/fr/accueil/, last accessed April 2021.

According to OECD research, liberalisation reforms can have a sizable and significant effect on FDI (OECD, 2021[25]). Overall, a 10% reduction in the level of FDI restrictiveness, as measured by the *Index*, could lead to a 2.1% increase in bilateral FDI inward stocks on average, all else held equal. If this average effect were to apply equally across all countries, the more restrictive economies could expect FDI stocks to be between 7 and 95% higher if they were to ease FDI restrictions to the OECD average level. While the magnitude of the impact of liberalisation reforms on FDI can vary between countries, it shows how restrictions still act as barriers to investment and that there is substantial room for FDI growth if governments continue to advance liberalisation reforms.

Finally, it is worth mentioning that FDI restrictions analysed in this section are discriminatory measures explicit in regulations or laws, but other de facto restrictions on foreign investors may exist (OECD, 2021[21]). These include institutional or informal barriers to investment (e.g. excessive bureaucracy or corruption), and also inconsistent enforcement of rules, distortions caused by state ownership in key

sectors, special treatment received by certain firms, insufficient competition, skills shortages, inadequate infrastructure, political instability, governance challenges, and weak regional integration.

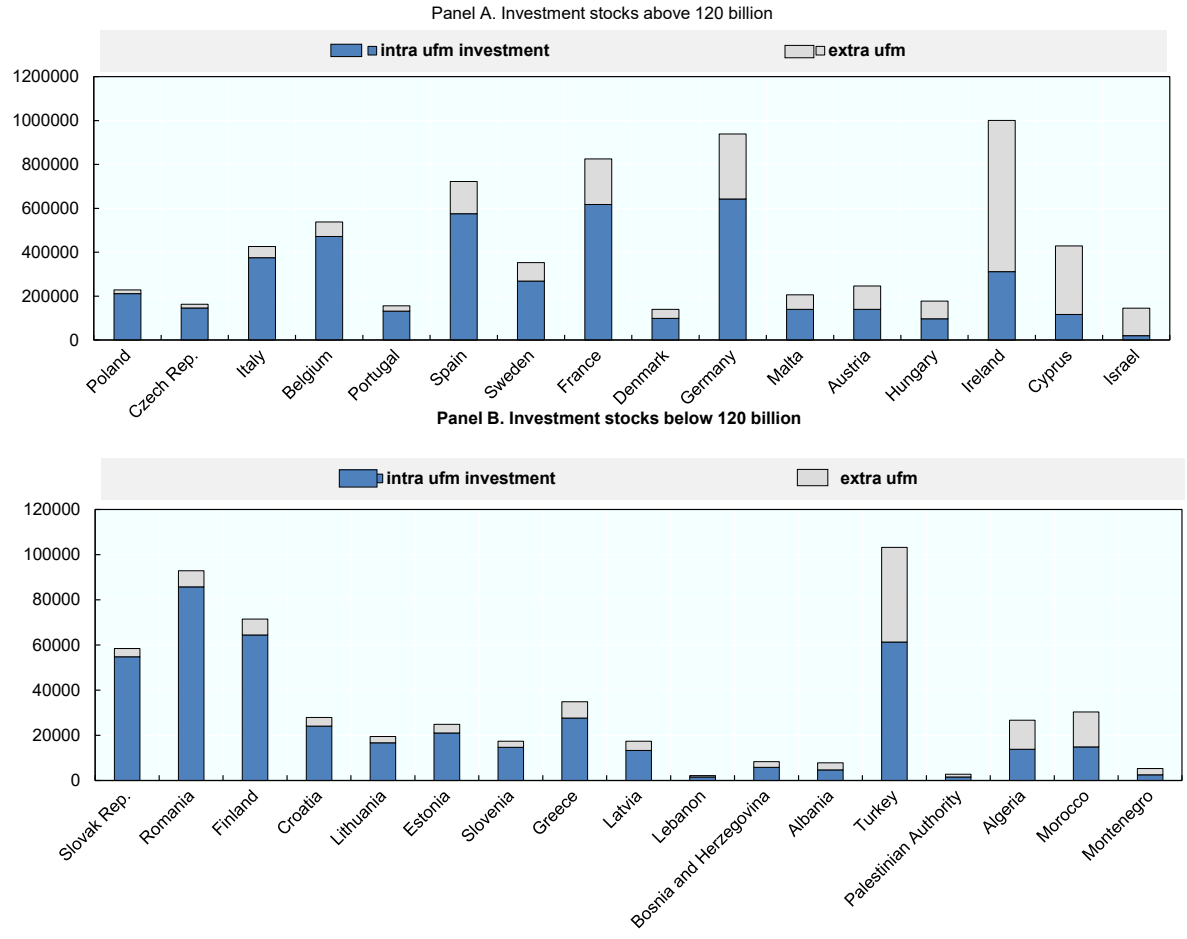
Indicator F3. FDI positions and flows

The distribution of FDI stock among UfM member states is considerably uneven (Figure 2.7). Also, within the UfM region, FDI flows usually involve an EU member state, whereas intra-MENA or intra-Western Balkans flows remain limited.

EU countries, especially, attract the overwhelming majority of investments due to the status as financial centres of some of the EU member states (Damgaard et al, 2019[28]). The relatively small share of investments distributed across MENA and Balkan countries reflects their low level of integration, coupled with existing restrictions to FDI in the regions. The predominance of the banking system, the limited development of financial systems, and external and internal shocks (such as financial crises) all constrain direct investment. Also, structural challenges shared by many MENA economies are hindering FDI (OECD, 2021[21]). These include insufficient competition, skills shortages, inadequate infrastructure, political instability, governance challenges, and weak regional integration.

On average, 68% of investment stock in a reporting economy from the UfM comes from another UfM member state. Given the depth of formal ties that EU member states share among themselves, they roughly have the highest share of intra-UfM investment. This is especially the case concerning smaller EU economies that have weaker financial ties with developed North American and Asian economies than countries like France and Germany. With the exception of Bosnia and Herzegovina and Lebanon, MENA and Western Balkan countries – in addition to Israel, Turkey and the United Kingdom – are below the average share of intra-UfM investment.

Figure 2.7. Inward FDI stock in UfM countries, 2018



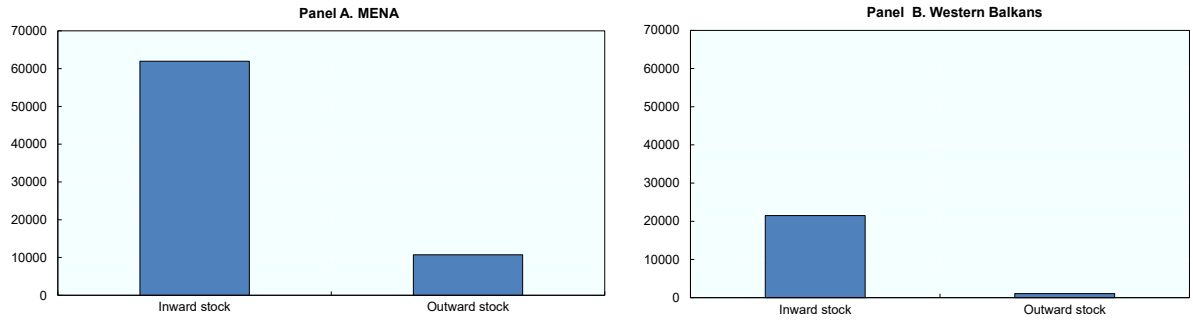
Note: Inward FDI measures investment by non-resident investors in the reporting economy, whereas outward FDI measures investment by residents of the reporting economy in partner economies. FDI stocks or positions are a measure of the total level of direct investment at a precise point in time, usually at end year or quarter, reflecting the accumulation of investment in or by the reporting economy and show long-term links between partner economies. FDI flows measure cross-border direct investment during a given period of time, usually a year or a quarter. Countries are ranked in order of decreasing share of intra-UfM investment position. The Netherlands and Luxembourg do not appear on the graph due to their significantly higher stocks; their shares of intra-UfM inward stock stand respectively at 51% and 42%. Bilateral FDI stocks in the IMF CDIS database include resident Special Purpose Entities (SPEs), which are particularly significant in countries like Luxembourg and the Netherlands. Data for Egypt, Jordan, Mauritania and Tunisia are unavailable.
Source: Authors, based on IMF *Coordinated Direct Investment Survey*, https://data.imf.org/?sk=40313609-F037-48C1-84B1-E1F1CE54D6D5.

StatLink https://stat.link/wpufqc

The MENA and Western Balkans regions are net receivers of foreign investments and have a limited presence as foreign investors (Figure 2.8). Lebanon is an exception, with USD 3.9 billion in outward stock against USD 2.9 billion in inward stock. In addition to structural long-term ties reflected by stocks, FDI flows reflect shorter-term changes in direct investment as influenced by global macroeconomic conditions and internal changes, including regulatory changes.

Figure 2.8. Inward and outward stock in UfM sub-regions, 2018

Million USD



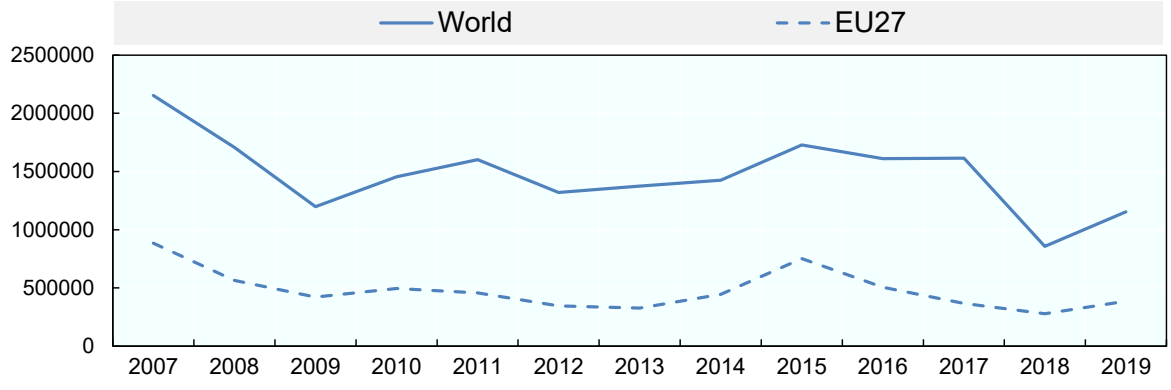
Note: Inward and outward stock data for Jordan are unavailable. Outward stock data for the Palestinian Authority and Montenegro are unavailable.
Source: Authors, from the IMF *Coordinated Direct Investment Survey*, https://data.imf.org/?sk=40313609-F037-48C1-84B1-E1F1CE54D6D5.

StatLink https://stat.link/52ltjv

Investment outflows from the EU, whose member states are significant investors in the MENA and Western Balkans regions, follow global trends (Figure 2.9), namely a sharp decline following the 2007-08 financial crisis and progressive decline between 2016 and 2018, mainly due to a constriction of investment relations with the United States (European Commission, 2018[3]).

Figure 2.9. FDI outflows, world and EU27, 2007-19

Million USD



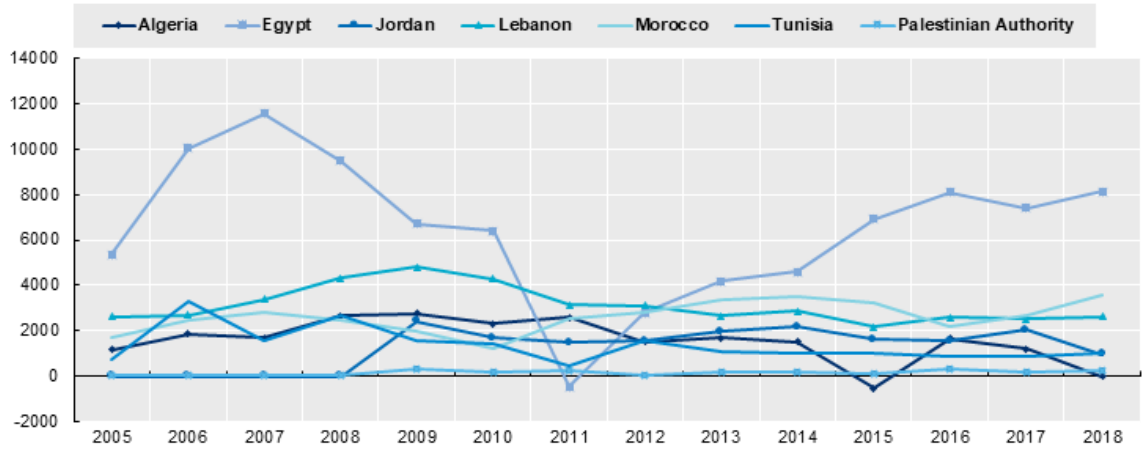
Source: OECD Foreign Direct Investment Statistics database, https://www.oecd.org/corporate/mne/statistics.htm.

StatLink https://stat.link/sjwzk4

In the MENA region, following the 2008 financial crisis, the outbreak of political upheaval in several countries put pressure on the recovery of FDI, including on intra-regional investment (Box 2.4) (Figure 2.10). Egypt receives the largest amount of FDI (despite being among the most affected by the 2007-08 financial crisis and the Arab Spring), followed by Morocco.

Figure 2.10. FDI inflows to MENA countries

Million USD



Source: IMF *Coordinated Direct Investment Survey*, https://data.imf.org/?sk=40313609-F037-48C1-84B1-E1F1CE54D6D5.

StatLink https://stat.link/fgut4d

Box 2.4. Intra-MENA investment flows

There is little reliable data available concerning intra-MENA investment flows. Economies in the region tend to compete to attract capital from other region, such as the EU and the GCC, while undertaking limited capital exchange amongst themselves. The amount of FDI flows within the region is three times lower than in the Asia Pacific region and more than two times lower than in Latin America (Wall J, 2019[29]). Recent analysis by the OECD founds that FDI flows between MENA economies are marginal, representing only 1% of total greenfield investment since 2003 (OECD, 2021[25]).

This is despite the existence of regional frameworks for financial integration, notably in North Africa – such as the Agadir Agreement, a multilateral trade agreement with investment provisions established between Egypt, Jordan, Morocco and Tunisia, and later joined by Lebanon and the Palestinian Authority. Previous studies have linked this to a limited implementation of existing agreements (OECD, 2014[30]).

Indicator F4. Restrictions on portfolio and bank capital inflows

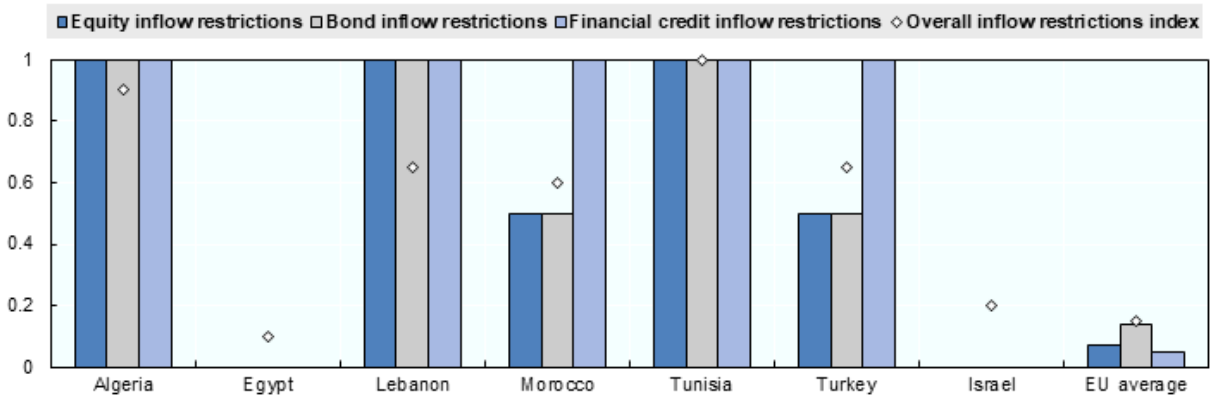
Moving to other types of capital flows beyond FDI, this section analyses the level of openness to portfolio and bank cross-border flows. The capital restrictions index computed by (Schindler et al, 2015[31]) covers controls on inflows and outflows for ten types of assets, including money market, bonds and equities.

Restrictions on capital flows are heterogeneous in the UfM region (Figure 2.11). In particular

- MENA economies implement more restrictions than the European average,
- Algeria, Lebanon and Tunisia show the maximum level of overall inflow restrictiveness;
- Egypt is open in the three categories on portfolio and financial credit capital inflows, while Morocco has some restrictions on equity and bond inflows.

Figure 2.11. Restrictions on portfolio and bank capital inflows, selected UfM countries, 2017

Index 0 (no restriction) to 1 (presence of a restriction)



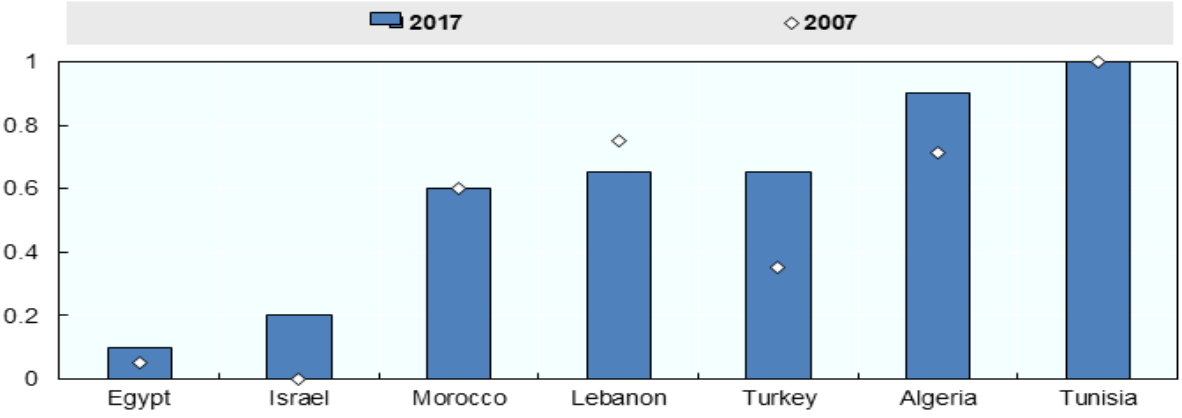
Note: The EU average covers 22 member states, except Croatia, Estonia, Lithuania, Luxembourg and the Slovak Republic. For Egypt and Israel, the values of restrictions indicator for the three specific type of inflows, i.e. equity, bond, financial credit, was equal to 0 in 2017
Source: Schindler et al. 2015, *Capital Control Measures dataset*, http://www.columbia.edu/~mu2166/fkrsu/.

StatLink https://stat.link/clkya6

With the exception of Lebanon and, to a lesser extent, Tunisia, most countries show greater degrees of restriction today than in 2007 (Figure 2.12). In Algeria, restrictions first increase in 2008 and follow a slow, fluctuating growth until 2013. But not all changes have been applied following the crisis across the region. In Israel and Turkey, the first restrictions appear in 2011, and the index continues to increase in 2012 and 2013. Lebanon experienced a slight decrease in 2016, highlighting a slightly more open market.

Figure 2.12. Overall capital inflow restrictions index

Index 0 (no restriction) to 1 (presence of a restriction)



Source: Source: Schindler et al. 2015, Capital Control Measures dataset, http://www.columbia.edu/~mu2166/fkrsu/.

StatLink https://stat.link/05gelm

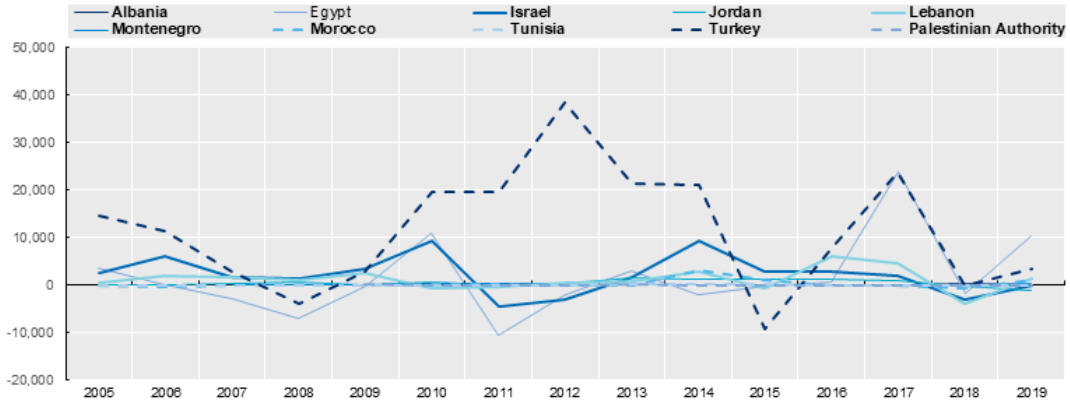
Indicator F5. Portfolio investment flows

Along with FDI flows, portfolio flows provide information on the level of financial integration from the perspective of capital markets. Inward portfolio flows (liabilities) represent the volume of portfolio investment coming into the MENA and Western Balkan regions from the rest of the world. Outward portfolio flows (assets) represent the volume of portfolio investment from local investors into foreign economies.

With the exception of Turkey, which received significantly higher flows between 2009 and 2014, the focus economies have relatively low inflows, with generally limited fluctuations. Turkey, but also Egypt and Israel – the three economies showing the lowest levels of capital control (Indicator F4) within non-EU/UfM member states – seem to be the most affected by external and internal shocks, notably the 2007 financial crisis and the Arab Spring (Figure 2.4)

Figure 2.13. Portfolio capital outflows, per country, 2005-19

Million USD

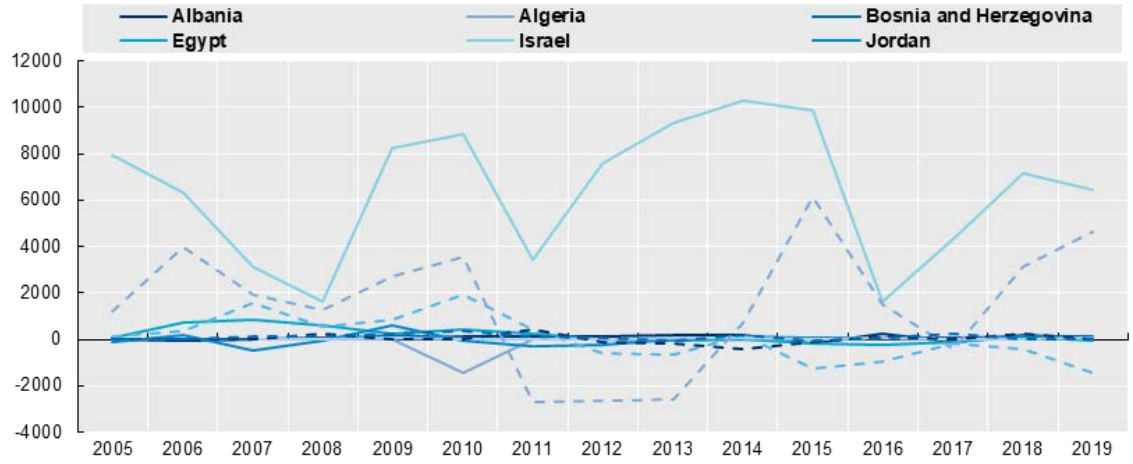


Note: Negative values refer to years where disinvestments exceed investments. In the case of inflows, this refers to a situation where foreign investors repatriated more funds than they have invested in the focus economy.
Source: Authors, from the, IMF *Coordinated Direct Investment Survey*, https://data.imf.org/?sk=40313609-F037-48C1-84B1-E1F1CE54D6D5

StatLink https://stat.link/snk3xp

Similarly to FDI flows, MENA countries are much less present as global investors. Egypt, Israel and, to a lesser extent, Turkey show significantly greater volumes of portfolio capital outflows, with a high propensity to fluctuate Figure 2.14

Figure 2.14. Portfolio capital outflows, per country, 2005-19



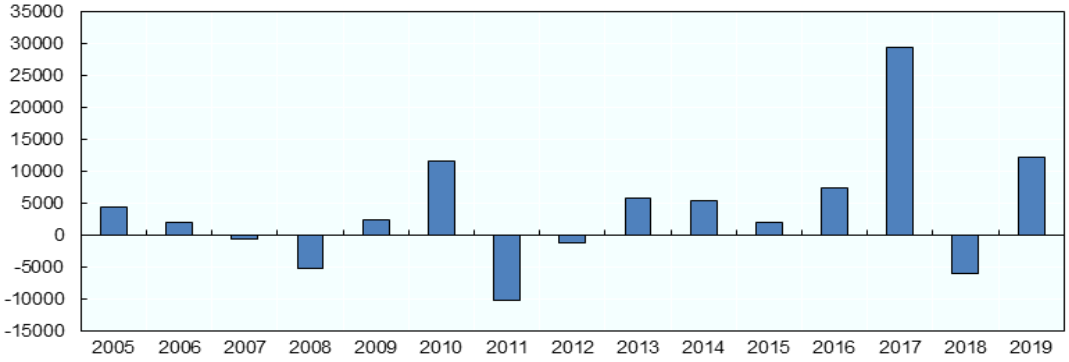
Note: Negative values refer to years where disinvestments exceed investments. In the case of outflows, this refers to a situation where local investors repatriated more funds than they have invested abroad
Source: Authors, from the IMF *Coordinated Direct Investment Survey*, https://data.imf.org/?sk=40313609-F037-48C1-84B1-E1F1CE54D6D5

StatLink https://stat.link/fi947y

Aggregated inflows of MENA and Western Balkan economies show high heterogeneity from one year to another. The years following the financial crisis and the Arab Spring witnessed higher disinvestments than investments. The surge of inflows in 2017 is mostly captured by inflows to Egypt following an improved economic outlook and monetary and fiscal reform (World Bank, 2017[32]) (Figure 2.15).

Figure 2.15. Total portfolio capital inflows, UfM MENA and Western Balkan countries

Million USD



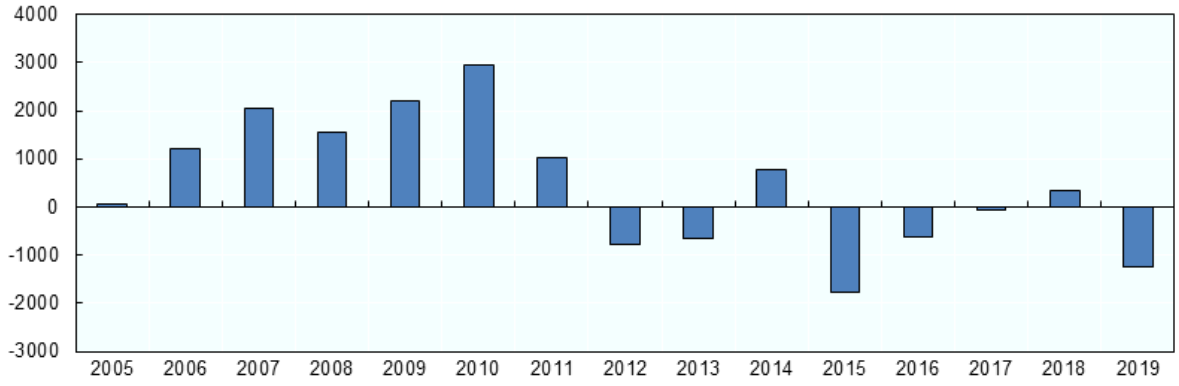
Note: Negative values refer to years where disinvestments exceed investments. In the case of inflows, this refers to a situation where foreign investors repatriated more funds than they have invested in the focus economy.
Source: Authors, from the IMF *Coordinated Direct Investment Survey*, https://data.imf.org/?sk=40313609-F037-48C1-84B1-E1F1CE54D6D5.

StatLink https://stat.link/oa1vn5

Total portfolio outflows, after reaching a peak in 2010, experienced a downward trend, with a fluctuating volume of outflows ever since: they are in general negative, except for 2014 and 2018 where however outflows remain far from pre-2010 levels (Figure 2.16)

Figure 2.16. Total portfolio capital outflows, MENA and Western Balkan countries, 2005-19

Million USD



Note: Negative values refer to years where disinvestments exceed investments. In the case of outflows, this refers to a situation where local investors repatriated more funds than they have invested abroad.
Source: Authors, from the IMF *Coordinated Direct Investment Survey*, https://data.imf.org/?sk=40313609-F037-48C1-84B1-E1F1CE54D6D5.

StatLink https://stat.link/0io1fd

Indicator F6. Remittance flows and costs

Remittances are money transfers between different parties, usually residing in different countries. Generally, a remittance refers to the sum of money sent by a migrant worker to family members in the worker's country of origin. Remittances represent a significant source of external financing in low-to-middle–income economies, where such inflows can exceed FDI flows (IEMed, 2020[33]). In the UfM, 90% of emigrants from North Africa and almost all emigrants from the Western Balkans lived in an EU country in 2019. A sizable share of them migrated to seek employment opportunities, with their families continuing to live in their countries of origin (see Chapter 4).

Through the allocation of the migrant labour force in foreign, more productive markets, countries of origin capture gains they would not have access to otherwise. Remittance flows are the result of a cross-border reallocation of labour, and represent the regional distribution of gains generated in the remittance sending economy. There has been a significant increase in remittance flow since the 1980s. Inflows to developing countries represent a large source of income, often surpassing official development assistance (ODA). In 2016, the World Bank estimated that remittances reached USD 575 billion and involved 232 million migrants (World Bank, 2020[34]); see Box 2.5 for more information on the World Bank Remittance prices worldwide database.

Remittance flows indicate the volumes of financial transfers, while costs and efficiency provide insights into the structures allowing remittance flows and possible barriers to them. The World Bank estimates that reducing remittance costs by 5% could generate, at the world level, savings of up to USD 16 billion a year (World Bank, 2020[34]). Target 10.c of the UN Sustainable Development Goals specifically concerns the transaction costs of remittances: "by 2030, reduce to less than 3% the transaction costs of migrant remittances and eliminate remittance corridors with costs higher than 5%".[3]

Several factors influence remittance prices, including the level of development of financial markets and institutions, low competition, statutory constraints, and constrained access to banks by remittance-sending migrants (World Bank, 2020[34]). Decision-making and cooperation at the national and regional levels can affect the volume of remittances going through formal challenges. Lowering transaction costs and strengthening the role of financial institutions in cross-border exchanges is an efficient way to capture remittances through formal channels. This can take the form of facilitation of foreign transactions through banks, reducing the fees of money transfer operators (MTOs), offering digital ways of transferring funds, etc. Furthermore, when domestic banks open borranches abroad, they provide remitters with lower transaction fees (World Bank, 2006[35]). Cost-efficient financial institutions operating at the regional level maximise the disposable income sent by remitters and encourage the use of formal transfer channels.

Remittance flows and costs are a relevant dimension of financial integration in the UfM region as they shed light on a form of capital exchange that is particularly significant between MENA and Balkan countries, on the one hand, and EU countries, Israel and Turkey on the other. While the volume of remittances is primarily determined by the presence of immigrants from a net remittance-receiving country in a net remittance-sending country, it also depends on the existence of financial structures allowing such transfer of money (i.e. MTOs) and on the costs imposed by such structures.

Remittances sent through formal channels can positively affect financial inclusion and literacy. Leveraging and maximising formal remittance flows can help lift migrant workers' families out of poverty. Encouraging contact of remittance-receivers with banks and MTOs provides a first contact with financial institutions and promotes inclusion in the financial system. Empirical studies conducted in five Sub-Saharan countries (Burkina Faso, Kenya, Nigeria, Senegal and Uganda) found that receiving remittances increases the probability that migrant workers' families subsequently open a bank account (Aga and Peria, 2014[36]).

Due to the Covid-19 pandemic, digital payments are expected to grow fast across the region in 2021 and beyond, which will require countries not only to develop the legal environment but also to strengthen the regulatory framework for service providers to allow for further innovation in this area. This would boost remittances as well as e-commerce, which is currently limited in part due to the lack of infrastructure for digital payments. In 2017, studies reported that only 8% of SMEs in the wider MENA region had an online presence (compared to 80% in the United States) and only 1.5% of the region's retailers were online (McKenna, 2017[37]).

Table 2.2. Remittance flows and cost analysis in MENA and Western Balkan countries

	UfM relevance in Key corridors	Net flows – million USD	Cost (%)	Competition	Network coverage	Digital channels	Average speed of MTOs
Country							
Albania	HIGH (Greece, Italy)	1 183	n.a.	n.a.	n.a.	n.a.	n.a.
Algeria	HIGH (France, Spain)	1 893	n.a.	n.a.	n.a.	n.a.	n.a.
Bosnia and Herzegovina	MODERATE (Croatia, Serbia)	1 957	n.a.	n.a.	n.a.	n.a.	n.a.
Egypt	LOW (KSA, Kuwait)	19 582	3.35	High	High	Null from KSA	High (less than a day on average)
Jordan	LOW (KSA, UAE)	1 562	6.4	High	High	Moderate from Kuwait	Very High (less than one hour on average)
Lebanon	LOW (KSA, US)	6 787	6.87	High	High	Null from KSA	High
Montenegro	MODERATE (Serbia, Turkey)	351	n.a.	n.a.	n.a.	Low from UAE	n.a.
Morocco	HIGH (France, Spain)	7 365	5.05	High	High	Null from	Very high

	UfM relevance in Key corridors	Net flows – million USD	Cost (%)	Competition	Network coverage	Digital channels	Average speed of MTOs
						KSA	
Palestinian Authority	MODERATE (Jordan, KSA)	1 118	N.a.	n.a.	n.a.	Medium from US	n.a.
Tunisia	HIGH (France, Italy)	1 382	8.59	High	High	n.a.	Very high
Israel	HIGH (France, Morocco)	1 936	n.a.	n.a.	n.a.	Medium	n.a.
Turkey	HIGH (Germany, Bulgaria)	3 692	n.a.	n.a.	n.a.	n.a.	n.a.

Note: Data is organised following the methodology adopted by the UN High Commissioner for Refugees (UNHCR) in their Remittances brief
Source: Authors, from the World Bank Remittance Prices Worldwide database and World Bank bilateral remittance matrices

Box 2.5. World Bank Remittance prices worldwide database

The World Bank Remittance Prices Worldwide website provides data on the costs of sending and receiving remittances across several key corridors, as well as additional data on the modalities of such transfers:

- The cost refers to the average cost (calculated on the basis of sending 200 USD) of sending money along the first two key corridors of the concerned country. This cost includes fees retained by the MTO, which usually makes up the main share of costs, as well as exchange rate margins.
- Net flows correspond to a net receiver's remittance inflows minus outflows, and to a net sender's remittance outflows minus inflows. The top ten key corridors are taken into account.
- Competition refers to the number of MTOs available for the first two key corridors. High corresponds to five or more, medium to three or more and low to less than three.
- Network coverage corresponds to the network coverage of MTOs. High refers to at least one MTO with high network coverage, medium to at least one MTO with medium coverage and low to no MTO with either high or medium coverage.
- Digital channels correspond to the possibility of sending of receiving money through digital means. High refers to corridors where the sender and receiver can transfer money digitally, medium when only the sender can transfer money digitally and low is when neither the sender nor the receiver can transfer money digitally.

Source: World Bank Remittance Prices Worldwide, https://remittanceprices.worldbank.org/en.

Key remittance corridors refer to the main source (or destination) of remittances for a country. UfM member countries from the MENA and Western Balkans regions are net remittance receivers, while Turkey and Israel are net remittance senders. Intra-UfM remittance flows are significant: 10 countries out of the 14 considered have at least one UfM member state as key partner. Based on available data, only Egypt is below the 5% target set by the United Nations – noting that the countries two key partners are not UfM member states. All other key corridors, notably ones with high UfM relevance, remain over the 5% threshold. Sending remittances to Tunisia, whose key partners are France and Italy, is the costliest transaction.

In several MENA and Balkan states, remittances represent a significant share of GDP (Table 2.3). On average, remittance inflows represent 10.4% of GDP in the Western Balkans and 7.8% in the MENA region against 0.8 in the EU. This percentage is likely underestimated in several countries due to remittance flows that are unaccounted for because they are sent through informal channels. In countries with significant inflows, the income generated through cutting transaction costs is significant both in absolute terms and as a share of GDP. This is the case with the Palestinian Authority, for instance, where remittances currently represent 17% of GDP.

Intra-UfM cooperation to reduce the costs of sending remittances would not only have a positive impact on the volume of remittances and on migrants' families income, but would also promote financial literacy and financial inclusion, through greater contact with the banking sector and other financial institutions.

Table 2.3. Remittances as percentage of GDP, 2019

	Remittances as percentage of GDP
Country	9.6%
Albania	1.1%
Algeria	11.3%
Bosnia and Herzegovina	8.8%
Egypt	10.0%
Jordan	13.9%
Lebanon	0.8%
Mauritania	10.6%
Montenegro	5.7%
Morocco	5.3%

Source: World Bank staff estimates based on IMF balance of payments data, and World Bank and OECD GDP estimates. World Bank *Remittance Prices Worldwide database*, https://remittanceprices.worldbank.org/en.

Conclusions and policy considerations

The countries of the UfM region vary considerably in their levels of financial development, and this can present a barrier to integrating the region's financial sector. Cohesion in the degree of financial development and in the soundness and modernity of legal frameworks regulating cross-border financial relations (notably in MENA countries and the Western Balkans) is a prerequisite to promoting potential benefits and avoiding negative externalities from integration, including the spread of macroeconomic instability.

The frameworks regulating capital flows and the actual volume of flows are complementary indicators of the relative financial integration of a region. The bulk of capital exchange in the UfM region involves at least one EU member state.

In terms of cross-border restrictions on portfolio capital flows and investment flows, MENA markets are more restrictive than other UfM sub-regions. Restrictions on portfolio flows have tended to increase in the past decade, generally as a result of the financial crisis and the economic impact of the Arab Spring.

Levels of financial flows have remained relatively low in MENA and Western Balkan economies in the past decade. Turkey, Israel and to a lesser extent Egypt capture higher volumes of flows but are also more subject to external shocks.

Restrictions on foreign investment in the manufacturing and services sectors, notably concerning foreign ownership of equities, strongly account for these gaps – although recent reforms efforts are narrowing the

gap, especially in Jordan and Tunisia. Further easing restrictions and facilitating investments in technology and science would allow for more technology transfers and linkages with local suppliers.

In terms of volume of direct investment, there is significant untapped potential for FDI within and between the MENA and Western Balkans sub-regions, which currently share limited FDI flows. Data on FDI flows and stocks in international databases is lacking for a number of countries in the UfM region, particularly in the MENA and Western Balkans sub-regions. It is recommended that countries report investment data so that the volume of financial flows can be properly estimated and monitored.

International organisations and frameworks like the OECD Codes of Liberalisation can provide guidance for gradually moving towards more openness and reaping the benefits of capital flows while ensuring resilience – in other words, for moving toward a 'level playing field' by raising the standards of financial systems such as capital requirements and loan and credit regulation.

Remittances represent a significant financial flow in the UfM region and an important source of income, notably in the MENA and Western Balkans regions. In some cases, there are few options for sending remittances through formal channels, and when such options exist, the associated costs can be prohibitive; as a result, it is estimated that a significant portion of remittances is sent through informal channels. International co-operation and public-private dialogue between UfM member states and the main remittance transfer institutions (including banks and MTOs) is necessary to promote the gathering of data on remittance costs and transfer efficiency, and to reduce avoidable costs.

Monitoring of financial flows globally and at the UfM level requires reliable and harmonised data collection. A greater engagement with international bodies, such as the OECD Investment Committee's Working Group on International Investment Statistics[4], is highly recommended to enhance data availability and comparability.

References

African Development Bank (2010), *Financial sector integration in three regions of Africa. How Regional Financial Integration Can Support Growth, Development, and Poverty Reduction*, https://www.afdb.org/fileadmin/uploads/afdb/Documents/Project-and-Operations/AfDB%20Regional%20Financial%20Integration%20REPORT_EN.pdf. [5]

Aga and Peria (2014), *International remittances and financial inclusion in Sub-Saharan Africa", Policy Research Working Paper Series 6991*, World Bank, https://openknowledge.worldbank.org/handle/10986/19383. [36]

Agénor (2001), *Benefits and Costs of International Financial Integration: Theory and Facts", Policy Research Working Paper 2699, prepared for the conference "Financial Globalization: Issues and Challenges for Small States"*, http://documents.worldbank.org/curated/en/240401468766831345/pdf/multi0page.pdf. [6]

Alomari et al (2019), *Contribution of financial market development in competitiveness growth", Cogents Economic & Finance 7(1)*, https://www.tandfonline.com/doi/full/10.1080/23322039.2019.1622483. [16]

Baele et al (2004), *Measuring financial integration in the Euro area, European Central Bank,*, https://www.ecb.europa.eu/pub/pdf/scpops/ecbocp14.pdf. [1]

Blaschke (2019), *Central banks, financial integration and capital flows: The perspective of the OECD Capital Movements Code", presentation at 5th Conference of Mediterranean Central Banks, Banco de España, Decembe*, https://www.bis.org/review/r191213e.pdf. [24]

Creane et al (2003), *Financial Development in the Middle East and North Africa*, International Monetary Fund, https://www.imf.org/external/pubs/ft/med/2003/eng/creane/. [17]

Damgaard et al (2019), *What Is Real and What Is Not in the Global FDI Network?"*, IMF, https://www.imf.org/en/Publications/WP/Issues/2019/12/11/what-is-real-and-what-is-not-in-the-global-fdi-network. [28]

Eichengreen (2001), "Capital Account Liberalization : What Do Cross-Country Studies Tell Us?,", https://openknowledge.worldbank.org/handle/10986/17435. [10]

European Commission (2018), "EU Foreign Direct Investment flows in 2018", https://ec.europa.eu/eurostat/web/products-eurostat-news/-/DDN-20190717-1. [15]

European Commission (2018), *EU Foreign Direct Investment flows in 2018*, https://ec.europa.eu/eurostat/web/products-eurostat-news/-/DDN-20190717-1. [3]

European Commission (2018), *European Financial Stability and Integration Review 2018*, https://ec.europa.eu/info/sites/info/files/european-financial-stability-and-integration-review-2018_en.pdf. [14]

Fons-Rosen et al (2018), *Foreign Investment and Domestic Productivity: Identifying Knowledge Spillovers and Competition Effects, Working Paper 23643,*, National Bureau of Economic Research, https://www.nber.org/papers/w23643. [4]

Graf (1999), *Policy responses to the banking crisis in Mexico, Bank for International Settlements,*, https://www.bis.org/publ/plcy06f.pdf. [11]

Herrala (2020), *Capital controls in an integrated world: A review of recent developments, policies and the academic debate, BOFIT Policy Brief 2020 No. 9,*, https://helda.helsinki.fi/bof/bitstream/handle/123456789/17551/bpb0920.pdf. [12]

IEMed (2020), *Financial integration and Inclusive development: A View from the Mediterranean Countries, Report No. 24,*, IEMed, https://www.iemed.org/recursos-compartits/pdfs/Report%2024%20Central%20Banks.pdf. [33]

Imam and Kpoda (2010), *Islamic Banking: How Has it Diffused?", IMF Working Paper No. 10/195*, IMF Working Paper, https://www.imf.org/external/pubs/ft/wp/2010/wp10195.pdf. [19]

Imam and Kpodar (2015), *Is Islamic Banking Good for Growth?" Ferdi Working paper P124*, https://ferdi.fr/publications/is-islamic-banking-good-for-growth. [20]

IMF (2020), *Financial Development Index Database*, https://data.imf.org/?sk=F8032E80-B36C-43B1-AC26-493C5B1CD33B. [18]

Kalinova et al., 2. (2010), *OECD's FDI Restrictiveness Index: 2010 Update", OECD Working Papers on International Investment*, OECD Publishing, https://doi.org/10.1787/5km91p02zj7g-en. [22]

Kose et al (2006), *Financial Globalization: A Reappraisal"*, IMF, https://www.imf.org/en/Publications/WP/Issues/2016/12/31/Financial-Globalization-A-Reappraisal-19435#:~:text=Summary%3A,variety%20of%20app. [13]

McKenna, J. (2017), *The Middle East's start-up scene: explained in five charts, World Economic Forum*, https://www.weforum.org/agenda/2017/05/what-you-need-to-know-about-the-middle-easts-start-up-scene-in-five-charts/. [37]

Mistura and Roulet (2019), *The determinants of Foreign Direct Investment: Do statutory restrictions matter?", OECD Working Papers on International Investment*, OECD Publishing, Paris, https://doi.org/10.1787/641507ce-en. [26]

OECD (2021), *Middle East and North Africa Investment Policy Perspectives*, OECD Publishing, Paris, https://dx.doi.org/10.1787/6d84ee94-en. [21]

OECD (2021), *Middle East and North Africa Investment Policy Perspectives,*, https://dx.doi.org/10.1787/6d84ee94-en. [25]

OECD (2020), *OECD Code of Liberalisation of Capital Movemen*, OECD Publishing,, http://www.oecd.org/investment/investment-policy/Code-capital-movements-EN.pdf. [23]

OECD (2018), *OECD Economic Outlook, Volume 2018 Issue 1*, https://doi.org/10.1787/eco_outlook-v2018-1-en. [7]

OECD (2014), *MENA-OECD Investment Programme, "Draft Background Note: Recent FDI Trends in the MENA Region", LAS-OECD Regional Conference and MENA-OECD Regional Investment Working Group*, https://www.oecd.org/mena/competitiveness/Draft%20Note_FDI%20trends%20in%20MENA_Dec.%202014.pdf. [30]

OECD (2012), *Financial Contagion in the Era of Globalised Banking?", Economics Department, Policy Note No. 14*, OECD Publishing, https://www.oecd.org/economy/monetary/50556019.pdf. [9]

OECD (2011), *OECD Economic Outlook, Volume 2011 Issue 1*, https://doi.org/10.1787/eco_outlook-v2011-1-en. [2]

OECD (2009), *Implications of Foreign Bank Activities in Emerging Markets", Presentation*, OECD Development Centre Warsaw,, https://www.oecd.org/global-relations/44183197.pdf. [27]

Schindler et al (2015), *Capital Control Measures: A New Dataset*, http://www.columbia.edu/~mu2166/fkrsu. [31]

Wall J (2019), *The geography of FDI in the Southern Mediterranean", background paper prepared for the workshop "Measuring FDI and its impact"*, http://www.oecd.org/mena/competitiveness/EU-OECD-Background-Note-Geography-FDI-Southern-Med.pdf. [29]

World Bank (2020), *Remittance Prices Worldwide: Making Markets More Transparent", About Us*, https://remittanceprices.worldbank.org. [34]

World Bank (2017), *Global Value Chain Development Report 2017: Measuring and Analyzing the Impact of GVCs on Economic Development*, World Bank, https://openknowledge.worldbank.org/handle/10986/29593. [32]

World Bank (2014), *Global Economic Prospects, January 2014: Coping with Policy Normalization in High-Income Countries*, World Bank, https://openknowledge.worldbank.org/handle/10986/16572. [8]

World Bank (2006), *Global Economic Prospects, 2006: Reducing Remittance Fees*, World Bank, http://documents1.worldbank.org/curated/fr/507301468142196936/841401968_20051031901 4045/additional/343200GEP02006.pdf. [35]

Notes

[1] See https://www.oecd.org/daf/inv/investment-policy/national-treatment-instrument-english.pdf;

https://www.oecd.org/daf/inv/investment-policy/codes.htm;

[2] Monitoring is produced within the framework of the OECD Freedom of Investment roundtables, in which 29 UfM countries participate. It is available at http://www.oecd.org/investment/g20.htm#foi

[3] See: https://sdgs.un.org/goals/goal10.

[4] See: https://oecdgroups.oecd.org/Bodies/ShowBodyView.aspx?BodyID=7250.

3 Infrastructure

This chapter examines infrastructure integration and the role of infrastructure for economic integration in the Euro-Mediterranean region. It covers regional transport and electricity networks that support economic development and competitiveness at both the national and regional levels. The chapter provides policy recommendations to enhance economic integration through better development of infrastructure in the region.

Key takeaways

- Infrastructure for transport and energy is an important enabler of economic integration and development. It facilitates movement of people, goods and services across the border and promotes economic diversification. Yet, in the Euro-Mediterranean region, especially the Southern and Eastern Mediterranean, infrastructure connectivity is still limited. Although in recent years economies in the region have built extensive transport and energy networks, the level of investment is not enough to meet the growing connectivity needs between countries.
- In transport, infrastructure connectivity challenges in the region include a lack of multi-modal connectivity, over-reliance on roads and a fragmented port system. The high logistics costs and delays limit participation in global value chains and trade integration. Other, more-efficient and potentially environmentally friendly modes of transportation, such as rail or inland waterways, could be a solution for freight traffic but are currently limited the region.
- Maritime transport is the main channel for trade across the region. Currently, there is potential for many ports in the Southern and Eastern Mediterranean to improve their trans-shipment function to become more competitive and enhance their role as national or regional gateways. Some ports have also become important hubs in the Mediterranean thanks to investments in logistics and infrastructure services, which have enhanced their connectivity with global markets.
- Energy integration could provide significant development benefits for the Southern and Eastern Mediterranean countries, but it is still in early stages of development. The electricity sector is largely dominated by state-owned enterprises, often supported by subsidies that make the price of electricity too low for investors to have any incentive to enter the market. Promoting more competition and lifting entry barriers could help attract more investments in electricity generation and distribution networks.
- Although economies in the Southern Mediterranean region are well endowed with renewable energy sources, they have not sufficiently diversified their power supply. Many have set up national renewable energy targets and the deployment of related projects is well under way, but many economies are expected to rely on gas and oil to generate electricity at least until 2030. Challenges include not only the lack of proper infrastructure but also a lack of a harmonised regulatory framework at the national and sub-regional levels.
- Integration in infrastructure is also limited due to regulatory barriers in the Southern and Eastern Mediterranean regions. The OECD foreign direct investment (FDI) Restrictiveness Index reveals that restrictions to foreign direct investment in these two regions are still relatively high compared to the OECD average, particularly in transportation sectors such as maritime, rails, airports (for both passenger and cargo services) and in a few countries in electricity generation and distribution services.

Introduction

Relevance of infrastructure for regional integration

Infrastructure connectivity[1] is high on the policy agenda of the Union for the Mediterranean (UfM), which has long recognised the multiplier effect of infrastructure connectivity on the process of regional integration, as well as the key role of infrastructure in sustainable development. The UfM Roadmap for Action, adopted in 2017, underlined the organisation's commitment to the connectivity of infrastructure, notably with regard to interconnectedness in energy, transport and, more recently, digitalisation (UfM, 2017[1]).

Better regional infrastructure can help the economies in the region overcome their peripheral situation in the global economy and play a more important role in regional and global value chains. High levels of transport and energy connectivity can also lead to better access to employment, education, health and other public services, as well as tourism activities, thereby raising productivity and promoting economic and social development (OECD-ITF, 2019[2]). For instance, with the extension of transportation links, more people in the UfM region could benefit from opportunities for personal and professional development, contributing to the region's knowledge creation and to regional stability and peace.

Despite these benefits, however, the integration of infrastructure in the region remains limited due to a range of challenges. Most often, infrastructure projects that support regional integration involve several countries and are sensitive to domestic and foreign policy issues. Projects that are part of regional corridors or networks linking two or more countries have strong public-good characteristics and require large-scale capital mobilisation where the distribution of costs and benefits across the borders is complex. The multiplicity of stakeholders involved in cross-border projects is an additional challenge, partly due to the difficulty of prioritising and securing widespread support for cross-border projects, vis-à-vis the process for domestic ones. Countries still need to develop a "thinking regional" approach that incorporates regional connectivity into the design and development of infrastructure at the national level.

In addressing these challenges, there is also a growing recognition that infrastructure investments in the region should focus on quality, inclusiveness, and sustainability. The UN Sustainable Development Goals (SDGs) and the Paris Agreement on Climate Change acknowledge the need for more sustainable growth. These agreements call for greater focus on infrastructure connectivity that is inclusive and sustainable, as well as more energy-efficient and benefiting the poor. Meeting such commitments requires level-playing-field policies for low-carbon infrastructure solutions, better institutions and market regulations.

This chapter focuses on the physical transport and energy networks in the UfM region, as well as the regulatory issues affecting the performance of such networks. It uses a set of indicators to monitor the evolution of performance of countries in the region in these areas. The chapter reflects that the policy discussion has broadened from the immediate concerns of financing and the enabling environment for investments in infrastructure, to the key question of how better connectivity across and within regions and countries can boost trade, investment, and industrial development – and, ultimately, more sustainable and inclusive economic growth.

The chapter does not cover digital interconnectedness, which has also gained relevance in the context of scaling up regional infrastructure connectivity, as exemplified by the UfM Official Ministerial Declaration on Digital Economy in 2014 (UfM, 2014[3]). It does, however, recognise that continuous progression in information and communication technologies (ICTs) is accelerating regional economic integration in the UfM – not only as a new engine of economic growth, but also a source of innovation across all economic sectors. ICTs are transforming the conduct of business and the delivery of public services, increasing the efficiency of trade of services, and improving people-to-people connectivity across borders. The Covid-19 health and economic crisis has also highlighted the opportunities and challenges of the digital infrastructure in many UfM economies, calling for more investments in digital connectivity to enhance its potential for the recovery.

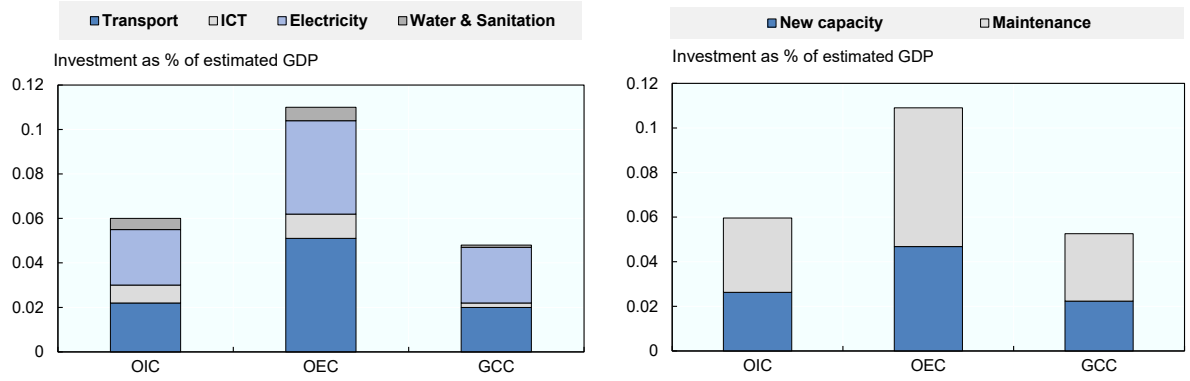
Current infrastructure gaps

Many Southern and Eastern Mediterranean economies have seen increased investments in physical infrastructure in the past decades, but the supply of infrastructure has not kept pace with the growing needs. The Middle East and North Africa (MENA) region spent between 3% and 5% of gross domestic product (GDP) annually in infrastructure in the last decade, mainly focusing on ports and airports; this spending was higher than in Latin America, Europe and Central Asia but lower than in South Asia and East Asia (IAI, 2018[4]). Numerous studies on the MENA region have shown a lack of investments in cross-border road and rail projects to develop a regional market and improve intra-regional connectivity (ISPI, 2019[5]). In the Western Balkans, despite annual public infrastructure investment rates averaging over 6% of GDP over the past 15 years, infrastructure gaps are also high (IMF, 2018[6]). In 2015 around 30% of the Western Balkan region's road network required immediate maintenance or upgrade, and 30% of the rail network had capacity constraints (IBRD, 2015[7]).

In MENA, the (World Bank, 2020a[8]) estimates that the needs over the next five to ten years are over USD 106 billion a year (or 7% of the annual regional GDP) to maintain existing infrastructure and create new (Figure 3.1). The gaps are present across all infrastructure segments, but are more prevalent in cross- border road transport and energy. Transport and electricity account for around 43% of total needs, followed by ICT (9%) and water and sanitation (5%). The electricity needs alone will require USD 46 billion (or 3% of the annual regional GDP). Oil exporting countries require infrastructure totalling around 11% of GDP, compared to 6% for oil importing countries. Proper maintenance and quality control of the existing assets is also necessary, while rehabilitation needs are expected to account for slightly more than 50% of the total infrastructure needs (Estache , et al, 2013[9]).

Figure 3.1. Annual infrastructure needs in selected economies in MENA region, up to 2025

By sector



Note Oil exporting economies include Algeria, Iran, Islamic Rep., Iraq, Libya, Syrian Arab Republic, Yemen, Rep.; Oil importing economies include Egypt, Jordan, Lebanon, Morocco, Tunisia. Data are estimated based on a general equilibrium model.
Source: World Bank 2020 estimations based on methodology developed in (Estache , et al, 2013[9]) which are still considered valid today.

StatLink https://stat.link/3zv8jk

Similarly to the rest of the world, infrastructure projects in the MENA region have been traditionally financed by state-owned enterprises (SOEs). In many MENA economies, SOEs have been dominating the infrastructure landscape while the presence of the domestic and foreign private sector has been limited. Public-private partnerships (PPPs) could be an avenue to mobilise more private sector investments, but currently they are limited. Some MENA governments (e.g. Jordan, Morocco, Tunisia and Egypt) have started to build a credible environment for PPPs by updating their PPP laws and setting up PPP agencies

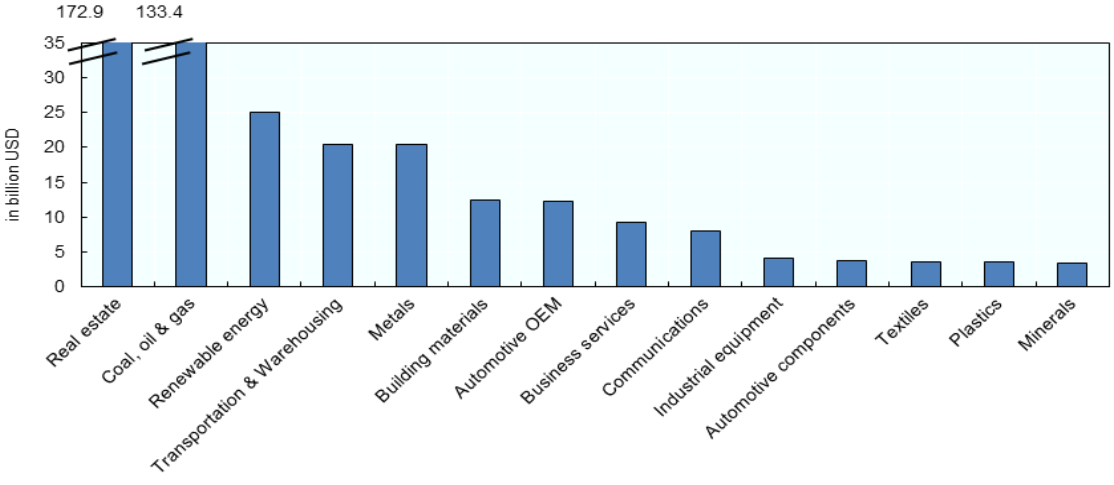
or specialised units within existing institutions. More involvement by the private sector in infrastructure through PPPs could not only improve infrastructure efficiency and bring new technologies and skills, but also reduce the fiscal burden on public budgets (OECD, 2021[10]).

In recent years, private foreign investments have increased, especially in the energy sectors. A review of announced greenfield FDI in eight economies of the region shows that direct investments in the region are still disproportionally flowing to real estate and extractive and fossil fuel projects (see Chapter 2 for overall FDI trends in selected economies in the region). Between 2003 and 2019, greenfield FDI in the region accounted for over USD 535 billion, with real estate accounting for USD 173 billion (or 32%) of total investments, closely followed by investments in infrastructure projects related to the oil and natural gas sector (USD 133 billion or 25%) (Figure 3.2). These sectors are the most attractive for greenfield FDI across almost all countries. For instance, Egypt attracted the largest share of investments in the region with USD 191 billion (43% of the total), followed by Algeria and Tunisia (both 15%). Investments in these three countries primarily targeted the coal, oil and natural gas sectors (46% for Egypt) and real estate.

Although at a much lower scale, greenfield investments in renewable energy accounted for a total of USD 20 billion or 4% of the total investments in the region, while the transport sector received only USD 4 billion (or 1% of total greenfield FDI). In recent years, the MENA region, and increasingly the Western Balkans, became a significant recipient of Chinese investment and construction deals (Box 3.1). Overall, while these investments are growing, they are primarily in fossil fuels and extractive industries, which is not in line with the economic diversification objectives of the region.

Figure 3.2. Announced greenfield FDI in selected economies in the MENA region, 2003-19

By selected sectors



Note: Data are available for Algeria, Egypt, Jordan, Lebanon, Libya, Morocco, Palestinian Authority, and Tunisia.
Source: OECD based on fDi Markets (2020), https://www.fdiintelligence.com/fdi-markets.

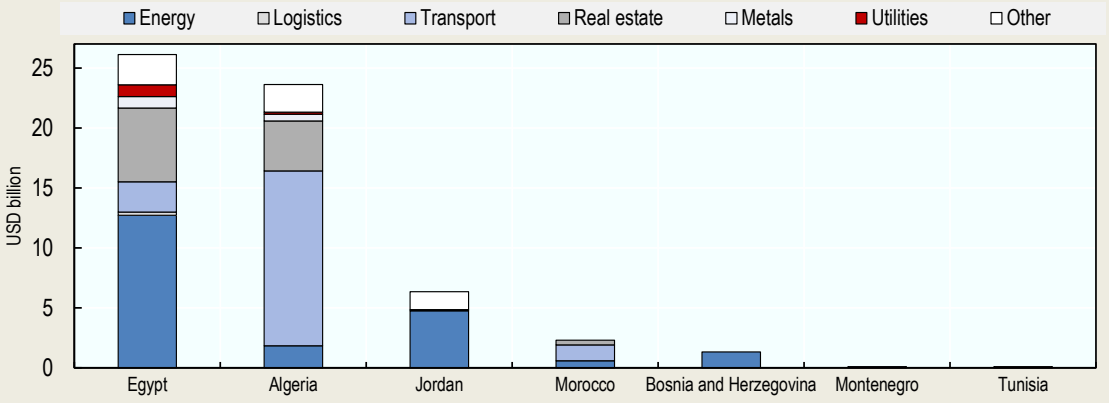
StatLink https://stat.link/59o4r2

Box 3.1. Belt and Road Initiative in MENA and Balkan countries

Between 2005 and 2019, the MENA and Balkan regions received significant Chinese investments in infrastructure, with nearly half of them focusing on energy projects, followed by transport and real estate. Many of these projects are considered part of the Belt and Road Initiative (BRI), a development strategy launched by China in 2013 to build global connectivity and co-operation. The largest investments are in Algeria and Egypt. In Egypt, investments have increased by 53% (up from USD 16.4 billion) since the launch of the BRI, and now total USD 26.1 billion. Half of these investments are focused on the energy sector, followed by real estate (23%) and the logistics and transport sectors (11%). Algeria is the only country in the region where most projects are focused on the transport sector (USD 14.6 billion or over 62%), with major contracts managed by Chinese construction companies such as China Railway Construction. Other countries in the region have also received Chinese investments, albeit on a lower scale. This is the case in Tunisia, which has received USD 110 million of investments in real estate.

In Bosnia and Herzegovina, Chinese investments total close to USD 3 billion, 71% of which in the energy sector, while Montenegro received USD 1.2 billion of investments primarily focusing on the transport sector. Besides Chinese investments, the EU also contributed with grants and loans of over USD 13 billion in transport and energy infrastructure in the Western Balkans since the 1990s. More recently, the EU launched the Economic and Investment Plan for the Western Balkans, a USD 11 billion package for flagship projects to foster regional economic integration. Priority projects include transport and energy connections to foster economic development, market integration and cross-border trade within the region and with the European Union.

Chinese investments and construction projects in selected MENA and Balkan economies 2005-19, by sector



Note: Other includes agriculture, utilities, tourism, education, health, chemicals, entertainment, industry, textiles, and telecom.
Source: (AEI, 2019[11]), (European Commission, 2020b[12]).

Monitoring infrastructure integration

International indicators of infrastructure integration are available for nearly all countries in the UfM region, including in the Southern and Eastern Mediterranean region. The indicators selected for monitoring are intended to provide an update on the status of transport and energy integration in the region, and to help

identify where the gaps are and what areas can be improved (Table 3.1). The information conveyed by the indicators is complemented by more discerning factual information on the current situation in individual economies.

Table 3.1. Key indicators of infrastructure integration in the UfM

Indicator	Description	Coverage	Frequency
Indicator I1. Cross-border projects in transport and energy	This indicator provides an overview of selected regional infrastructure projects in the energy and transport sector that are planned and under construction. *Multiple sources*	All UfM	Various years
Indicator I7. Regulatory restrictiveness on foreign direct investment in the energy and transport sectors	This indicator measures the restrictiveness of a country's FDI rules in four areas: foreign equity restrictions; discriminatory screening or approval mechanisms; restrictions on key foreign personnel; and operational restrictions. It covers 22 sectors, among which are restrictions in transport (air, maritime and surface) and energy services (electricity generation and distribution). *Source:* OECD FDI restrictiveness index	Available for OECD, EU, Albania, Algeria, Bosnia and Herzegovina, Egypt, Jordan, Lebanon, Morocco, Palestinian Authority and Tunisia	Annual, last available 2019
Transport			
Indicator I2. Logistics Performance	This indicator, based on the World Bank Logistics Performance Index, measures the quality of trade logistics in a country. It measures the perceptions of logistics operators in countries they operate in and those with which they trade on the ground. *Source*: World Bank Logistics Performance Index	All UfM, except Palestinian Authority	Biannual, last available 2018
Indicator I3. Liner Shipping Connectivity	This indicator measures the level of each country's integration into global liner shipping networks. It is based on an index set at 100 for the maximum value of country connectivity in the first quarter (Q1) of 2006. It comprises six components: scheduled ship calls, annual twenty-foot-equivalent units (TEU) capacity, number of regular liner shipping services and shipping companies, average size (in TEU) of ships, and number of direct liner shipping services to other countries. *Source*: UNCTAD Maritime Transport Indicators	All UfM except Palestinian Authority	Annual, last available 2020
Indicator I4. Median time in port (days)	This indicator measures the median time (in days) container ships spend in a country's ports during one calendar year. The figures are derived from the fusion of automatic identification system information with port mapping intelligence by Marine Traffic (http://marinetraffic.com), covering ships of 1000 gross tonnage. Passenger and ferry ships are excluded from the calculations. Source: UNCTAD STAT	All UfM	Annual, last available 2018
Energy			
Indicator I5. Getting electricity indicators	These indicators measure the procedures, time and cost required for a business to obtain a permanent electricity connection for a newly constructed warehouse. In addition, they also measure supply reliability, transparency of tariffs and the price of electricity. *Source*: World Bank Doing Business	All UfM	Annual, last available 2019
Indicator I6. Electricity trade flows	This indicator measures regional imports and exports of electricity within the UfM. The information is based on UN Comtrade data on electrical energy flows. *Source*: UN Comtrade Database	All UfM	Annual, last available 2019

Indicator I1. Cross-border projects in transport and energy

Regional infrastructure projects are important for enhancing integration in the UfM region, especially by increasing the connectivity of Southern and Eastern Mediterranean economies. A number of cross-border transport and energy projects have been identified under different initiatives and programmes involving several economies in the region. Some of these are new projects, while others are part of already existing

projects linking two or more countries. Their completion, and the launch of new projects, are used as one of the dimensions to measure progress in regional integration in infrastructure.

Major regional infrastructure projects, under construction or planned, involving economies in the region include the following:

Transport

- The Central Section of the Trans-Maghreb Motorway Axis, currently under construction, aims at connecting the Algerian, Moroccan and Tunisian national motorway networks. It will provide a continuous motorway corridor from Agadir (Morocco) to Ras Jedir (Tunisian-Libyan border). The project is expected to cost USD 797 million (with funding coming from the European Union and the governments of Tunisia and Morocco) and is considered of strategic importance to the Euro-Mediterranean region because it will improve transport conditions, facilitate trade relations and increase mobility for the population of the region (UfM, 2017a[13]).
- The Adriatic-Ionian Motorway project currently under construction is a 1500 km motorway linking north-east Italy with south-west Greece through Slovenia, Croatia, Bosnia and Herzegovina, and Montenegro. The project is part of the Trans-European Transport Network (TEN-T) Mediterranean Core Network Corridor connecting central and Northern Europe with the Balkan Peninsula. The project is estimated to cost USD 1 428 billion, partially funded by the governments of concerned countries (Total Slovenia News, 2018[14]).
- The Halkali-Kapikule Railway Line (Turkey) is a planned railway project that involves the construction of a 76 km section of a new high-speed railway line from Halkali station, Istanbul, to just before Cerkezkoy station. The project is part of a new high-speed railway between Istanbul and Kapikule near the border with Bulgaria. It will also be part of the TEN-T and is expected to cost USD 382 million; it will be funded by the Asian Infrastructure Investment Bank and the European Bank for Reconstruction and Development (AIIB, 2020[15]).

Energy

- The Trans Adriatic Pipeline is an 878 km-long oil and gas pipeline currently under construction to transport natural gas from the Caspian region to Europe through Greece, Albania and Italy. The initial capacity of the pipeline will be 10 billion cubic meters (bcm) per year, which can be expanded to 20 bcm per year in future. The greenfield project is expected to cost USD 4.3 billion, to be funded by Snam Rete Gas, BP Global, the State Oil Company of the Azerbaijan Republic (SOCAR), Fluxys, Enagas, and AXPO Group (NS Energy, 2020[16]).
- The Euro-Africa Interconnector project, which is currently under construction, comprises the development of a 2 000 megawatt (MW) electricity interconnector between Egypt, Cyprus, Greece and Europe. With a total length of 1 396 km, it is considered the largest interconnector cable in the world. The first stage of the construction will have an initial transmission capacity of 1 000 MW and an estimated cost of USD 3 billion. The commissioning of the Cyprus-Egypt line is expected to start in December 2022, while the Cyprus-Crete line is expected to start in December 2023. The project is expected to be developed following best industry practices and EU, national and international regulations (EuroAfrica Interconnector, 2020[17]).
- The Italy-Montenegro-Serbia-Bosnia and Herzegovina Energy Interconnection Project currently under construction consists in a new 455 km-long cable line (of which 433 km is an undersea power link) between Italy and Montenegro and a 400 kilowatt (kW) transmission line between Serbia and Bosnia and Herzegovina. It is designed to allow export of renewable energy from the Western Balkans to Italy and to create an integrated European energy market, with Montenegro being a significant regional hub. The project has a wider significance for the region in that it represents the first energy interconnection between the Western Balkans and the European Union (Serbia Energy,

2019[18]). The project is expected to cost USD 1 billion and will be funded by the Italian investor Terna.

- The Elmed Interconnector (Tunisia-Italy Power Interconnector) currently under construction involves the development of a new 600 MW sub-sea high-voltage direct current (HVDC) link between Tunisia and Sicily. With a length of 200 km, it will connect the Italian and Tunisian electricity grids, allowing them to trade electricity. Among other objectives, the project aims to help Tunisia integrate its future intermittent renewable energy with the wider European power network and enable deeper integration. The USD 600 million project will be jointly funded by the Société Tunisienne de l'Electricité et du Gaz and the Italian company Terna.
- The Mediterranean Solar Plan is a planned project to build a 20 gigawatt (GW) power plant to produce solar energy in North Africa by 2020. The ultimate objective is to develop renewable energy and electricity transmission capacity in the Euro-Mediterranean region (Plan Solaire Mediterranean, 2020[19]).

While these regional projects and initiatives will provide additional infrastructure to ensure a higher level of integration, they might not be enough to bridge the infrastructure gaps of countries. To facilitate the development of more regional infrastructure, countries also need to integrate the regional dimension into their domestic infrastructure strategies and plans. There are currently a number of infrastructure strategies across countries that take into account regional connectivity objectives:

- In Morocco, the 2040 Rail Strategy (*Plan Rail Maroc*) aims to develop the rail network across the country by 2040 and contribute to territorial development (ONCF, 2020[20]). The National Port Strategy 2030 aims to expand and upgrade the country's ports along the Atlantic and Mediterranean coasts.
- In Algeria, an important priority is to upgrade ports to increase their capacity to handle large vessels and make Algeria a Mediterranean hub (International Trade Administration, 2019[21]). The opening of a rail line linking Annaba with Tunisia is also driving the push for regional connectivity (Oxford Business Group, 2017[22]).
- In Jordan, infrastructure priorities are laid out in the Jordan Economic Growth Plan 2018-22 for each sector. The Plan's objectives include completing and upgrading transport networks such as airports and ports, and developing a multimodal transport system to connect with neighbouring countries and Europe.

In developing regional infrastructure, governments in the region should cooperate in taking advantage of existing international tools and instruments designed to improve the quality, compatibility and inter-operability of infrastructure networks. Annex 3.A provides a list of selected internationally recognised tools and instruments related to sustainable infrastructure. Adhering to best-practice principles may be expensive in the short term, because infrastructure projects will have to meet higher standards of efficiency, safety and sustainability; however, they incur lower lifecycle costs than infrastructure with various standards at country level, which could impose long-term costs.

Indicator I2. Logistics Performance

Transport and logistics plays a critical role in strengthening ties between domestic and global markets and facilitating regional and global trade. Despite significant achievements in recent years, the quality and quantity of infrastructure in the Southern and Eastern Mediterranean region still lags behind, causing higher trade cost and delays. The World Bank's Logistics Performance Index (LPI), which measures the quality of infrastructures and the efficiency of customs services, reveals considerable variations between UfM economies (Figure 3.3).

In the MENA region, the LPI indicates that Egypt improved its score from 2.61 in 2010 to 2.82 in 2018, moving from 92nd to 67th in the total ranking of countries; Algeria also improved its performance by 3.8%.

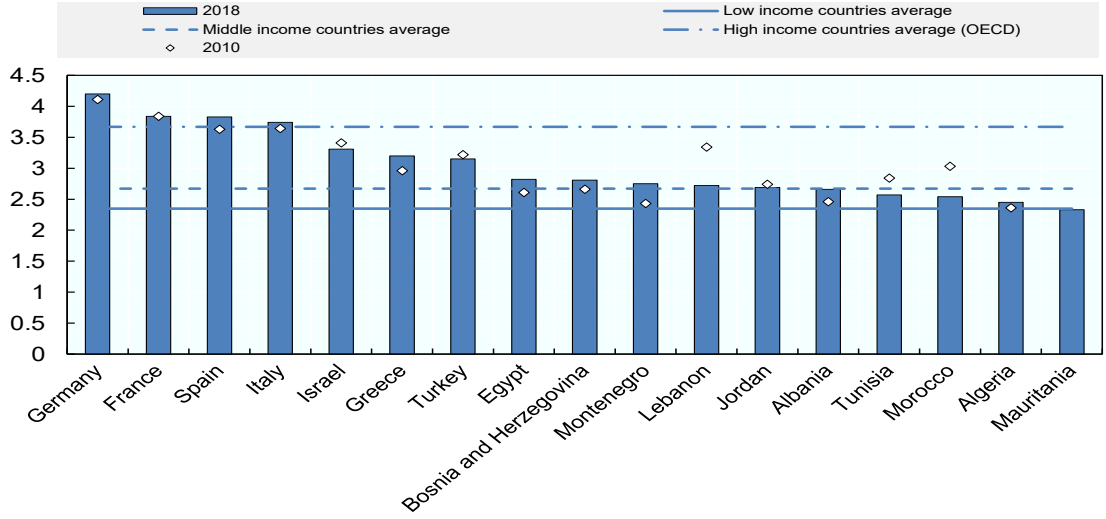
In Tunisia and Lebanon there is significant scope for improvement as compared to 2010 as their performance decreased by 9.5% and 19%, respectively. Morocco`s performance declined from 3.03 in 2012 to 2.54 in 2018, moving from 50th to 109th, which may be due to weaknesses in customs services and the ability to track and trace consignments. Morocco has many logistics operators that provide low-quality and fragmented services, and the number of logistics operators that meet international standards is low (Chauffour, 2018[23]).

Currently, there are numerous missing links in the road and rail transport that impede the development of trade corridors. These include the closing of the Morocco-Algeria border, which makes it impossible to transport goods from Libya, Tunisia, and Algeria to Morocco or Mauritania by road. Rail tracks in Algeria, Morocco and Tunisia also stop at the borders, making rail connectivity weak (IMF, 2019[24]).

In the Western Balkans, Bosnia and Herzegovina performs the best (2.81), followed by Montenegro (2.75) and Albania (2.66). While good logistics is not a guarantee for deeper involvement in regional and global value chains, countries with poor logistics performance tend to be less engaged in trade (OECD, 2021[10]). In the Balkan region, road transport dominates the freight sector and there are significant quality gaps in transport and logistics systems, leading to high trading costs and congestion as well as high levels of pollution (World Bank, 2018[25]). Other transport modes that are more efficient and environmentally sustainable, such as rail or inland waterways, could be a solution for freight traffic, but they are limited across the region, and often need maintenance or urgent repair (Ash N and Gibb A, 2018[26]).

Figure 3.3. Logistics performance, selected UfM economies

Score from 1 to 5 (best)



Note: The World Bank Logistics Performance Index (LPI) is based on a worldwide survey of logistics operators on the ground, providing feedback on the logistics "friendliness" of the countries in which they operate and those with which they trade. Data for Morocco refer to 2012 instead of 2010.
Source: World Bank Logistics Performance Index (LPI) database, https://datacatalog.worldbank.org/dataset/logistics-performance-index.

StatLink https://stat.link/j4l7kv

Improving the quality of infrastructure and logistics is crucial for the region's integration and participation in production networks. The MENA economies' participation in trade and value chains is driven partly by exclusive zone-based regimes such as the Tangier Free Zone in Morocco, the Suez Canal Economic Zone in Egypt, or special exporting regimes in Tunisia and Jordan, which also play an important role in the economic development of the Mediterranean region.

- In Egypt, the expansion of the Suez Canal in 2015 and the establishment of the Suez Canal Economic Zone aims at reinforcing the position of the Suez Canal as a global maritime trade route, and exploiting its potential for investment attraction and export-oriented growth.
- In Morocco, Tanger Med port is a major logistic and industrial hub that connects to 186 ports worldwide. It is currently used as a platform for major European car manufacturers to assemble vehicles and build engines to export to EU and African markets. The aim of the Tanger Med project is to better integrate Morocco into global supply chains by offering logistics zones with free port advantages and direct accessibility to global shipping routes.

An integral part of a successful logistics strategy is the dry-port projects that have been set up in various countries in the region:

- In Egypt, the 6th of October Dry Port, expected to be operational by 2022, will be the country's first inland port (DB Schenker, 2020[27]). With an area of over 100 *feddans* (approx. 420 000 square meters), it will be the largest logistics facility in Africa. It is expected to handle 720 000 containers per day and will be linked by railway lines between Alexandria and 6th of October City. The project is one of the eight dry ports that the government aims to develop throughout the country to improve logistics.
- Jordan aims to establish a network of dry ports to exploit its geographic position as a natural transport and logistics corridor for the rest of the region. Dry ports are planned at Ma'an, at Madounah in Amman, and at Mafraq to link rail to the country's overall logistics network (Oxford Business Group, 2016[28]). These projects, which are part of an integrated logistics policy, could play an important role in facilitating economic activities that generate more commercial and trade flows in the region.

Indicator I3. Liner Shipping Connectivity

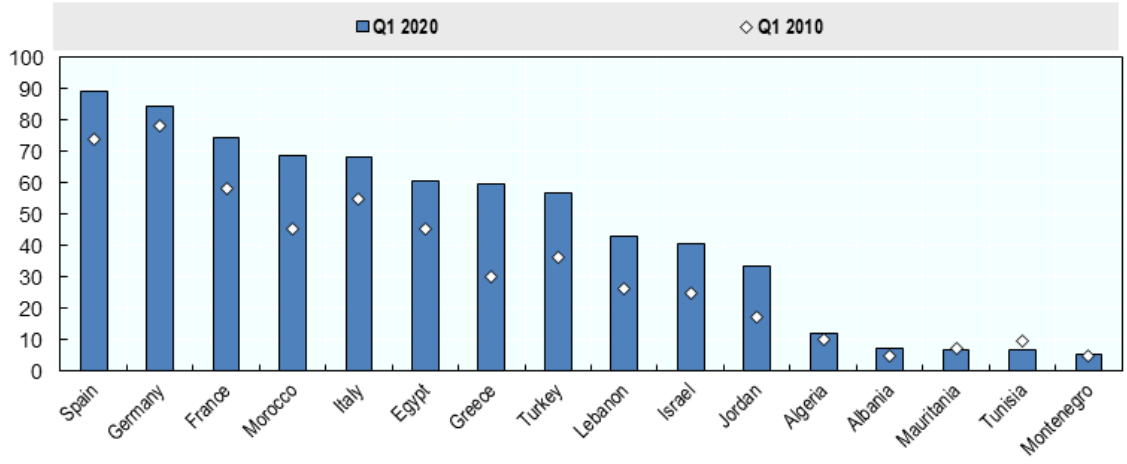
With 80% of the volume and 70% of the value of international trade across the globe carried on ships, maritime transport is the most important transport mode for goods, including in the Mediterranean region (OECD, 2021[10]). Today, the Mediterranean shores concentrate around 27% of the world's scheduled services and short-sea shipping between its shores, making the region a central trade route for global container shipping (SRM, 2020a[29]). The maritime networks in the Mediterranean are fragmented, which impedes the development of intra-regional maritime trade. Cargo traffic between MENA countries is only 5% of total cargo traffic in the Mediterranean, while traffic between European ports is 70% and between Europe and North Africa is 15% (IMF, 2019[24]).

In general, there are few direct links among MENA countries. The number of inter-port links or port pairs across the Mediterranean has declined in recent years, from 2,279 in 2009 to 1,532 in 2016 (Arvis et al, 2019[30]). For instance, Tunisia has direct links only to its closest European trade partners. There are very few direct lines of sea transport among Maghreb countries, which transport their intraregional goods through third-country ports, such as Marseille, Almeria or Rotterdam (ibid). Such diversions generate additional trade costs and reduce price competitiveness.

An essential factor in the success of port connectivity depends on how well they are positioned in global transportation networks, shipping and other services. The Liner Shipping Connectivity Index (LSCI)[2], which captures how well countries are connected to global liner shipping networks, reveals that there is scope for Mediterranean ports in general to be part of these networks (Figure 3.4). Spain and Germany rank high thanks to their major global seaports. In the MENA region, Morocco and Egypt score higher than their regional peers. In the Western Balkans, both Albania and Montenegro rank low. With the exception of Mauritania and Tunisia, most countries improved their performance between 2010 and 2020 – with Greece and Jordan making the most progress, followed by Lebanon[3], Israel and Morocco. Given that most of international trade, particularly in MENA countries, is by sea, the LSCI is also an important determinant of a country's trade competitiveness.

Figure 3.4. Liner shipping connectivity, 2010-20

Scale (0-100)



Note: Please see (Table 3.1) on key indicators for further explanation on what the indicator measures. The index for Lebanon reflects the situation before the explosion at Beirut port in August 2020 and consequent disruption in logistics.
Source: UNCTAD Maritime transport indicators, http://unctadstat.unctad.org/wds/TableViewer/tableView.aspx?ReportId=92.

To increase participation in value chains, policy actions should combine policies that increase logistics performance with efforts to build on trade agreements with regional and non-regional partners. The recently signed African Continental Free Trade Agreement (AfCFTA) opens opportunities for the Southern Mediterranean in terms of new markets and attracting investment.

Indicator I4. Median time spent in port (days)

To further benefit from international trade and strengthen their role as an important maritime route, ports in the Mediterranean need to increase their profile as a global trans-shipment hub. The main trans-shipment hubs in the Mediterranean Sea include Piraeus (Greece), Marsaxlokk (Malta), Gioia Tauro (Italy), Algeciras and Valencia (Spain), Suez Canal (Egypt), and Tanger-Med (Morocco). Their competitiveness is determined not only by their strategic geographic position, but also by the overall quality of services – for example, the integration between port facilities, inland terminals and multimodal corridors (Euromesco, 2020[31]). All of these container ports are operated by global terminal operators, each operating a wide number of terminals in different countries; best practices are transferred between all of their terminals, creating continuous upward pressure on service levels. This means that terminal attractiveness is also determined by the way in which concessions granted to them allow operators to improve performance (OECD, 2017[32]).

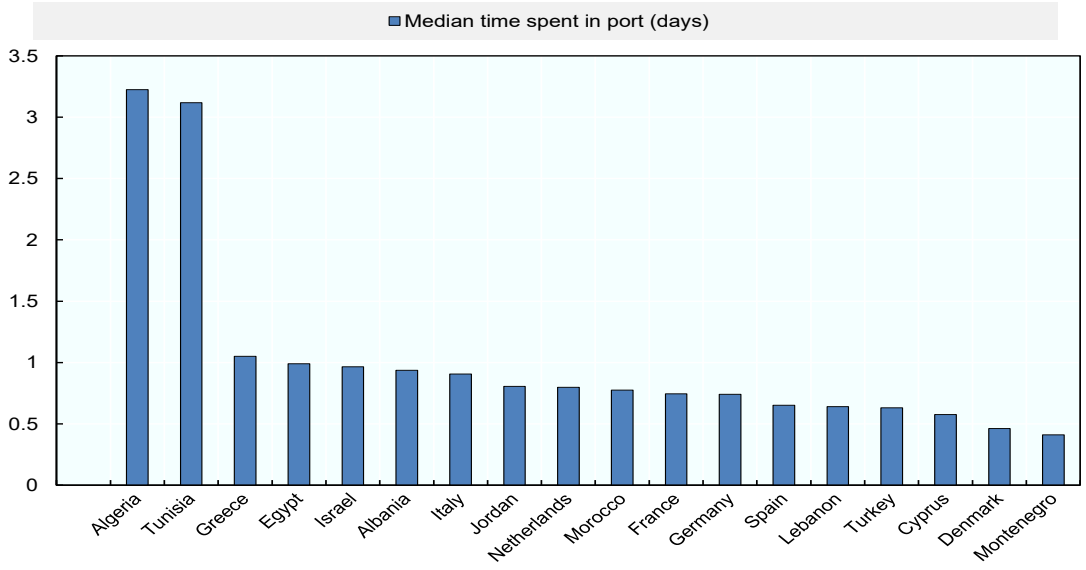
The time ships spent in port is also an indication of a port's efficiency and competitiveness in trade. Every hour of ship time saved in a port helps ports, carriers and shippers save money on various costs and investments, including capital expenditures on ships and inventory holding costs of merchandise goods (UNCTAD, 2019[33]).

New marine-traffic data compiled by UNCTAD on the time ships spend in port during calls reveal variations among Southern and Eastern Mediterranean ports for container ships (Figure 3.5).

- Whereas almost all ports presented in the figure have waiting times of less than one day, Algeria and Tunisia are the exceptions, with waiting times of over three days. More specifically:

- In 2019, the median time of container ships spent in port during one port call in the MENA region ranged from 0.6 days in Lebanon to 3.2 days in Algeria. Morocco and Jordan had 0.8 each, while in Tunisia and Egypt, the waiting times 3.1 and 1 day respectively.
- In the Western Balkans, Montenegro is the best performer, with 0.5 days spent in port while in Albania it takes 0.9 days.
- With the exception of Greece, in 2019 the median time spent in ports in other EU countries was less than one day.

Figure 3.5. Median time spent in ports, 2019



Note: Container ships refer to ships that carry standardized sea-containers.
Source: UNCTAD port call and performance statistics.
https://unctadstat.unctad.org/wds/ReportFolders/reportFolders.aspx?IF_ActivePath=P%2C11

StatLink https://stat.link/mt6rcz

One of the most important developments in container shipping in the Mediterranean is the rise of concentration of container shipping lines, which has important implications at the regional level. This trend has accelerated in recent decades, mainly due to mergers and acquisitions and the rise of alliances between big container shipping carriers. Between 2002 and 2016, the concentration rate of the top four container-carriers increased from around 25% to 50% (OECD, 2017[32]). As a result, fewer big players control larger flows of cargo, which will determine the ability of the Southern Mediterranean ports to capture more trans-shipment cargo, depending on the competitiveness of their trade routes. For example, for Asia-Europe trade, container carriers can re-route their services via Cape Hope around the African continent to avoid Suez Canal charges, which is now possible thanks to low oil prices. For instance, Maersk and MSC have diverted two of their joint services, adding seven days to the round trip between Asia and northern Europe. This in fact occurred in the context of the COVID-19 crisis, which pressured the Suez Canal Authority into tariff reductions (OECD-ITF, 2020[34]).

Another important related trend which requires adaptations of infrastructure is the rise of mega container ships. As transport costs per ton are decreasing due to bigger containers, larger ports in the Mediterranean such as Suez have a comparative advantage in moving large vessels. Despite the increase in trade distance (measured by nautical miles for maritime trade), cost per ton has declined while container-carrying

capacity has increased by approximatively 1 200% since 1968. With its expansion, the Suez Canal can accommodate bigger container ships. For instance, in April 2017, Mitsui O.S.K. Lines (MOL) put into service for the first time a container ship with a capacity of 20,170 TEUs – which Egypt can handle, but other ports in the Mediterranean cannot, even with expansion (MOL, 2017[35]).

Indicator I5. Getting electricity

Access to reliable and affordable electricity is a key decision factor for investors in industries where electricity is a major component of their cost structures. The reliability and cost of electricity supply remain important concerns for many investors in MENA and Western Balkan economies (Table 3.2).

- In the MENA region, in Jordan it takes 55 days to obtain electricity, which is faster than in other countries in the region such as Egypt, Morocco, and the Palestinian Authority; but the price of electricity in Jordan is the highest in the region (US cent 24.6 per kWh).
- In the Western Balkans, Montenegro has the highest number of days to get electricity (131) and the highest cost per kWh. It recently implemented automated systems to monitor and report power outages. This performance is relatively better than the average of the MENA region, but it is still lower than some of its regional peers.

Table 3.2. Getting electricity indicators in selected UfM economies, 2020

	Getting Electricity' Rank	Procedures (number)	Time (days)	Cost (% of income per capita)	Reliability of supply and transparency of tariff index (0-8)	Price of electricity (US cents per kWh)
Country						
Albania	107	6	71	448.6	5	9.4
Algeria	102	5	84	967	5	2.1
Bosnia and Herzegovina	74	5	69	289	6	11.6
Egypt	77	5	53	180.2	5	9.7
Jordan	69	5	55	285.3	6	24.6
Israel	83	5	102	13.3	6	11.8
Lebanon	127	4	89	128	0	13
Morocco	34	4	31	1308.8	6	12.4
Montenegro	134	7	131	144.4	5	14.1
Tunisia	63	4	65	719.1	6	7.7
Palestinian Authority	86	5	47	1383.9	5	17.6
Turkey	41	4	34	62.3	5	8.9
Middle East and North Africa	86	4.4	63.5	419.6	4.4	
OECD high income	43	4.4	74.8	61.0	7.4	

Source: The World Bank, Doing Business Indicators 2020, https://www.doingbusiness.org.

Indicator I6. Electricity trade flows

The integration of energy is a key economic link between the Southern and Eastern Mediterranean and with the EU. Although the MENA region has historically been a peripheral demand market for energy, its energy demand has been growing fast in recent years and is expected to almost double by 2040 (Zelt , et al, 2019[36]). The region holds one third of global oil and gas production and resources, and has growing energy connections with Europe, particularly power interconnections and natural gas and hydrogen infrastructure (International Energy Forum, 2020[37]). The European Commission estimates that total final

energy consumption in Southern Mediterranean could increase by 37% by 2040, with one-half being driven by an increase in electricity consumption (SRM, 2020b[38]).

A number of sub-regional initiatives are in place to interconnect the electricity networks and allow for electricity trade among the UfM countries (Box 3.2). Each has the potential to substitute power generation and provide stability to the energy system of a country. While some of these electricity interconnections have existed for some time, their utilisation remains low (particularly in the Southern Mediterranean) and they have led only to a modest electricity trade. Challenges include not only the lack of proper infrastructure but also a lack of a harmonised regulatory framework at the national and sub-regional levels.

Box 3.2. Selected regional interconnection schemes in the UfM

The Southern and Eastern Mediterranean economies have a number of regional electrical interconnection projects and schemes; combined, they form a total transmission system comprising around 400 000 km of high-voltage transmission lines. The EU also has its own policy to connect the energy infrastructure of its member states:

Western Balkans

Trans-Balkans Electricity Corridor is a 400 kV transmission network connecting the electricity transmission systems of Serbia, Montenegro, Bosnia and Herzegovina to those of Croatia, Hungary, Romania and Italy. The project includes the construction of an undersea interconnection cable between Montenegro (Lastva) and Italy (Villanova), converter stations in Italy and Montenegro, new constructions and upgrades in internal 400 kV network in Montenegro and Serbia, and the construction of 400 kV interconnection overhead lines between Montenegro, Serbia and Bosnia and Herzegovina. Overall, the project aims to improve conditions for electricity transmission from the north to the southern part of the region and allow further integration of the electricity market with Europe.

MENA

The Maghreb regional interconnection between Algeria, Morocco and Tunisia. Initially developed in the 1950s, the network evolved into multiple high-voltage transmission interconnections between the three countries. All three countries are now synchronised with the pan-European high-voltage transmission network (ENTSO-E Continental Europe Network). Despite increases in network capacity in recent years, electricity trade among countries has been rather modest. For instance, Tunisia and Algeria are only allowed to exchange 200 MW despite being linked via five tie lines with a transmission capacity of 1760 MW.

The Eight-Country and Territories Interconnection (ECI) between Egypt, Iraq, Jordan, Lebanon, Syria, Turkey and the Palestinian Authority. The projects started in 1988 with Egypt, Iraq, Jordan, Syria, and Turkey as part of an effort to upgrade their electricity systems to a regional standard. Later, the agreement was extended to other three countries, namely Lebanon, Libya and the Palestinian Authority. Among the eight, Turkey fully synchronised its grid in 2011 with the European one, with a view to starting commercial electricity trade in subsequent years.

European Union

The *Trans-European Network for Energy (TEN-E)* is an EU policy to better connect the energy infrastructure of EU countries through cross-border infrastructure projects called “Projects of Common Interest”. The projects cover nine priority corridors in the areas of electricity, gas and oil infrastructure, which the EU will help develop in order to connect regions that are isolated from European energy markets, strengthen existing cross-border interconnections and help integrate renewable energy. This includes: North Seas Offshore Grid; North-South Electricity Interconnections in Eastern Europe (NSI

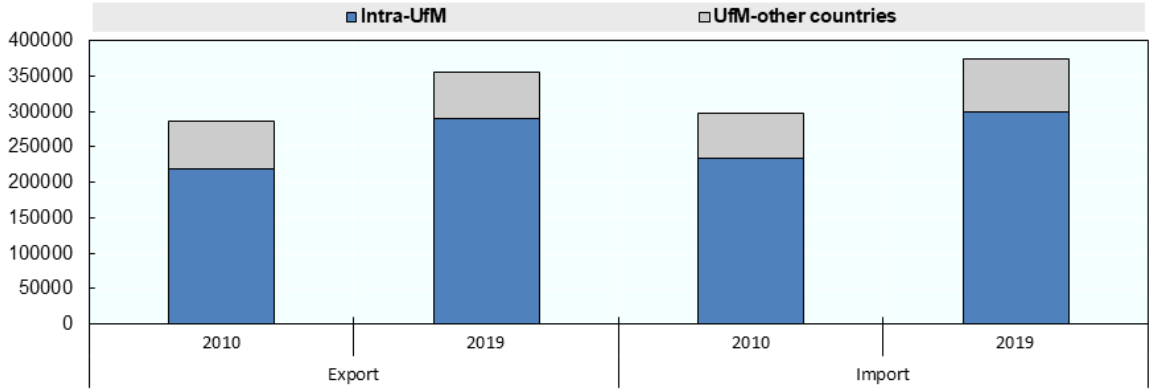
West Electricity); North-South Electricity Interconnections in Central Eastern and South Eastern Europe (NSI East Electricity); Baltic Energy Market Interconnection Plan in electricity (BEMIP Electricity); North-South Gas Interconnections in Western Europe (NSI West Gas); North-South Gas Interconnections in Central Eastern and South Eastern Europe (NSI East Gas); Southern Gas Corridor (SGC); Baltic Energy Market Interconnection Plan in Gas (BEMIP Gas); and oil supply connections in central eastern Europe (OSC). The regulation for TEN-E is currently being updated by the European Union to ensure alignment with the climate neutrality objective of the European Green Deal.

Source: (CGES, 2020[39]), (European Commission, 2020a[40])"

Overall, both exports and imports of energy between countries in the UfM increased between 2010 and 2019 (Figure 3.6). These averages are largely driven by member states of the European Union, where national electricity markets are well integrated, allowing for complementarities among countries. For instance, France, Portugal and Slovenia are big exporters of power, while Greece, Italy and Spain are big importers (although Spain also exports). In the Southern and Eastern Mediterranean regions, international electricity trade is rather limited except for a few cases where countries trade electricity with the EU; Morocco, for example, imports about 15% of its electricity from Spain.

Figure 3.6. Electrical energy trade in the UfM

in thousands of kilowatt-hours



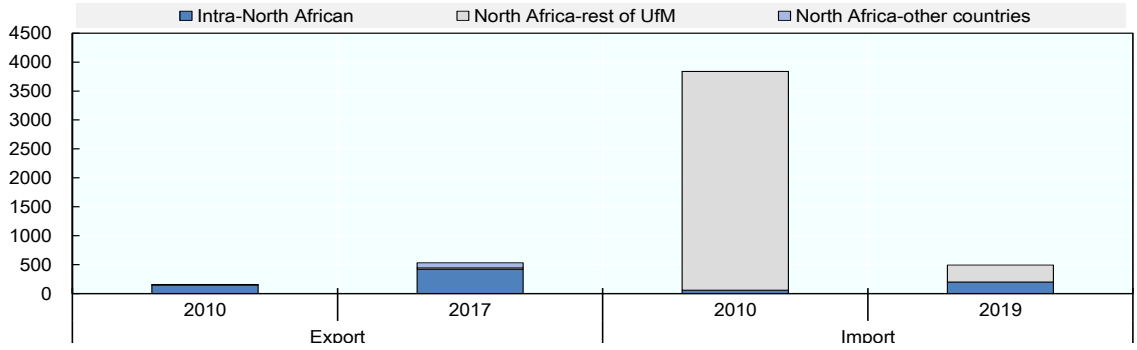
Note: Exports to other countries include Afghanistan, Andorra, Vatican, Iraq, Libya, Macedonia, Norway, San Marino, Russian Federation, Serbia, Switzerland, Syria, and the United States. Imports from other countries include Azerbaijan, Belarus, Macedonia, Northway, Russian Federation, Switzerland, Ukraine and United Kingdom.
Source: UN COMTRADE Statistics, https://comtrade.un.org.

StatLink https://stat.link/596gfn

North African countries' electricity exchanges with the EU are limited to mutual aid and annual trade contracts (MEDREG, 2019[41]). The Moroccan-Spanish cross-border interconnection is the only line that connects the sub-region with the EU, and represented almost 100% of North African electricity imports from the rest of the UfM in 2010 (Figure 3.7). These imports decreased in 2019, but the share of imports among North African economies increased. In terms of exports, between 2010 and 2017 the volume of total exports increased, primarily driven by exports to non-UfM countries, while the share of intra-regional exports decreased slightly.

Figure 3.7. Electrical energy trade in North Africa

in thousands of kilowatt-hours



Note: North Africa includes Algeria, Egypt, Morocco and Tunisia. Exports to and imports from other countries include Libya and Syria.
Source: UN COMTRADE Statistics. https://comtrade.un.org.

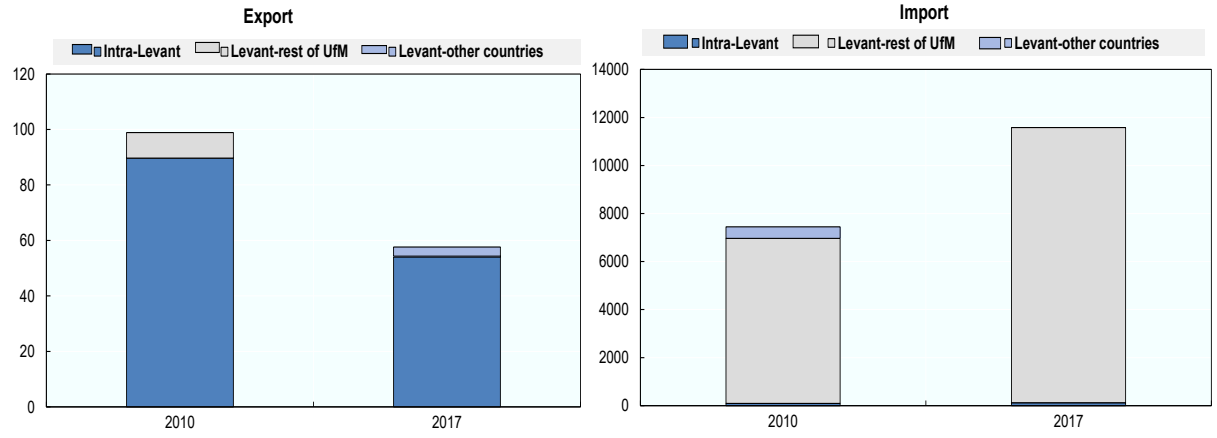
StatLink https://stat.link/u4oh5r

In the Levant, the volume of electricity shared between the three countries (Lebanon, Palestinian Authority, and Jordan) is very low despite being part of the Eight-Country and Territories Interconnection project see Box 3.2. The region exports a symbolic amount of electricity, while imports from the rest of UfM increased by more than half between 2010 and 2017 (Figure 3.8).

This includes Jordan imports from Egypt, and Palestinian Authority imports from both Egypt and Israel. The Palestinian Authority's dependence on Israel for its electricity supply is high, reaching up to 99% in the West Bank. Since 2008, Jordan also started exporting 20 MW of power to the West Bank, and there are plans for a new interconnection to increase the voltage level to 400 kW (MEDREG, 2019[41]). The Lebanese electrical grid is only connected with Syria.

Figure 3.8. Electrical energy trade in the Levant

thousands of kilowatt-hours



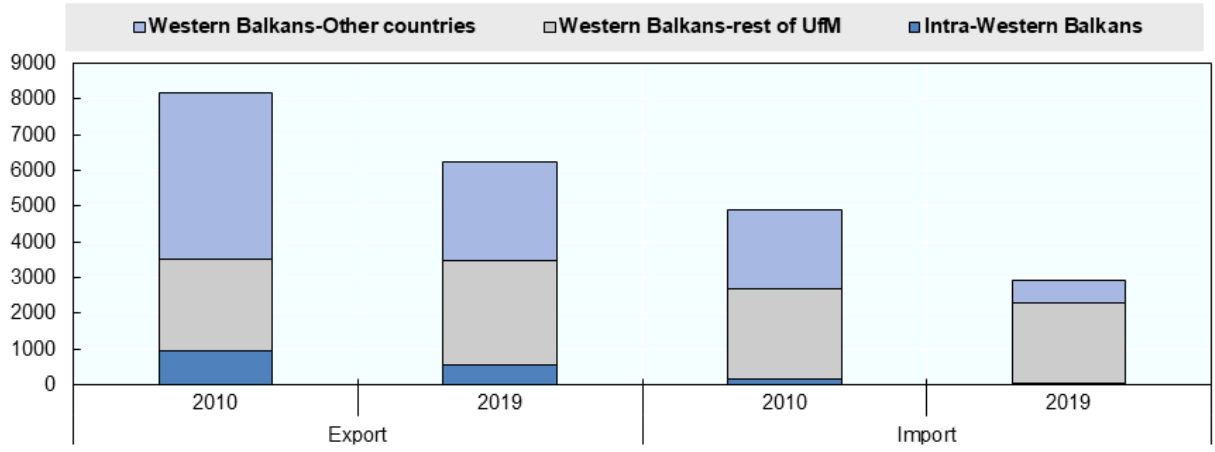
Note: Levant includes Lebanon, Palestinian Authority and Jordan. Imports from other countries include Syria.
Source: UN COMTRADE Statistics, https://comtrade.un.org.

StatLink https://stat.link/973vjx

In the Western Balkans, both exports and imports of electricity trade decreased between 2010 and 2019 (Figure 3.9). More than half (57%) of electricity was exported to non-UfM countries in 2010, while 32% of electricity exports were to other UfM countries. In 2019, however, this trend reversed and the Western Balkans exported more electricity to UfM countries rather than to other (non-UfM) countries. The region's imports of electricity decreased significantly in 2019 compared to 2010, with an important decrease of imports from other countries and a slight decrease of imports from the rest of UfM.

Figure 3.9. Electrical energy trade in the Western Balkans

in thousands of kilowatt-hours



Note: Exports to and imports from other countries refer only to Serbia and Switzerland.
Source: UN COMTRADE Statistics, https://comtrade.un.org/.

StatLink https://stat.link/tjnyio

Energy relations between North Africa and Europe are still based on oil and gas with over 60% of North Africa's oil and gas exports being sent to Europe (Eurostatgas, 2019[42]). However, given North Africa's geographical position, it has a high potential for the deployment of renewable energies for power generation. Thanks to a relatively large number of sun-rising hours per year, some countries in the region have among the best solar-power potentials worldwide, including in solar photovoltaic (PV) and concentrated solar power. Concentrated solar power plants could generate 100 times the combined electricity consumption of MENA and Europe together (IEA, 2010[43]). Increased trade of electricity from green energy sources between the two regions could also play a crucial role in achieving the EU objectives to completely decarbonise the European electricity system by 2050 and allow countries to move towards a low-carbon future (SRM, 2020b[38]).There is also a growing interest in the potential of renewable hydrogen to achieve this transition; the MENA region could be an important supplier for the EU, as highlighted in the recent European Hydrogen Strategy (European Commission, 2020[44]).

Despite the high potential of renewable energy for electricity generation, the share of renewables in the electricity capacity of the Southern Mediterranean remains low compared to global trends. As a result, the share of renewable energy in final energy consumption varies greatly between countries. It is estimated to account for 0.1% in Algeria, between 5 and 5.5% in Egypt and Jordan, and between 10 and 12% in Morocco and Tunisia (OECD, 2021[10]). Many countries in the region have set up national renewable energy targets and the deployment of related projects is well under way in the MENA region (Table 3.3). However, many economies are expected to rely on gas and oil to generate electricity at least until 2030

and need to better articulate these strategies with a clear action plan on greenhouse gas emissions or the long-term sustainability of transport and energy systems. Further investments are also needed to enable inter-zonal flows while ensuring continuity of services without security issues, including those related to geopolitical concerns (SRM, 2020b[38]).

Table 3.3. Renewable energy targets in selected Southern Mediterranean economies

	Overall renewable energy targets	Technology-specific targets	Year
Country			
Algeria	27% of electricity generation by 2030; 22 GW of installed capacity	Solar photovoltaic (PV): 3 GW by 2020, 13.6 GW by 2030 Wind: 1 GW by 2020, 5 GW by 2030 Concentrating solar thermal power (CSP): 2 GW by 2020, 2 GW by 2030 Biomass: 0.4 GW by 2020, 2 GW by 2030 Geothermal: 15 MW by 2030	2020 and 2030
Egypt	20% of electricity generation by 2022 and 42% by 2035	Solar PV: 0.2 GW by 2020, 0.7 GW by 2027 Wind: 7.2 GW by 2020 CSP: 1.1 GW by 2020, 2.8 GW by 2030 Hydropower: 2.8 GW by 2020	2022 and 2035
Israel	10% of electricity generation by 2020 and 17% of electricity generation by 2030	Solar PV and CSP: 63.4% of total generation by 2020 Wind: 29% of total generation by 2020 Biomass (including biogas): 7.6% of total generation by 2020	2020 and 2030
Jordan	2 GW of installed capacity by 2020; 10% of energy supply	Solar PV: 0.6–1 GW by 2020 Wind: 0.6–1 GW by 2020 Waste-to-energy: 30–50 MW by 2020	2020
Lebanon	12% (9 TWh) of the total electricity and heating demand by 2020	Solar PV, CSP and solar water heaters: 4.2% of total RE by 2020 Wind: 2.1% of the total RE by 2020 Hydropower: 3.2% of the total RE by 2020 Biomass: 2.5% of the total RE by 2020	2020
Morocco	42% of electricity installed capacity and 52% by 2030	Solar energy (PV and CSP): 2 GW by 2020 Wind: 2 GW by 2020 Hydropower: 2 GW by 2020	2020 and 2030
Palestinian Authority	10% of domestic electricity generation by 2020; 130 MW of installed capacity	Solar PV: 34.6% of the total RE by 2020 Wind: 33.8% of the total RE by 2020 CSP: 15.4% of the total RE by 2020	2020
Tunisia	30% of electricity generation by 2030	Solar PV: 1.5 GW by 2030 Wind: 1.7 GW by 2030 CSP: 0.5 GW by 2030 Biomass: 0.3 GW by 2030	2030

Source: (Aghahosseini et al, 2020[45])

One of the main challenges in promoting renewable energies, particularly for the MENA region is to create a reliable regulatory environment and improve institutional conditions. In the MENA region, most economies still need to encourage competition and entry of independent power producers for renewable energy (OECD, 2016[46]). The electricity sector is largely dominated by state-owned enterprises (SOEs), often with subsidies that make the price of electricity too low for investors to have any incentive to enter the market (World Bank, 2020b[47]). Numerous countries rely on line ministries as regulators, even if they often operate in the sector through SOEs. Separate regulators can help promote confidence about the regulator acting objectively and transparently. Jordan and Morocco have been among the first to reinforce enabling conditions for investment in renewable electricity generation. Jordan is a positive example, as it has unbundled generation, transmission, and distribution in the electricity sector, following the 2003 General Electricity Law.

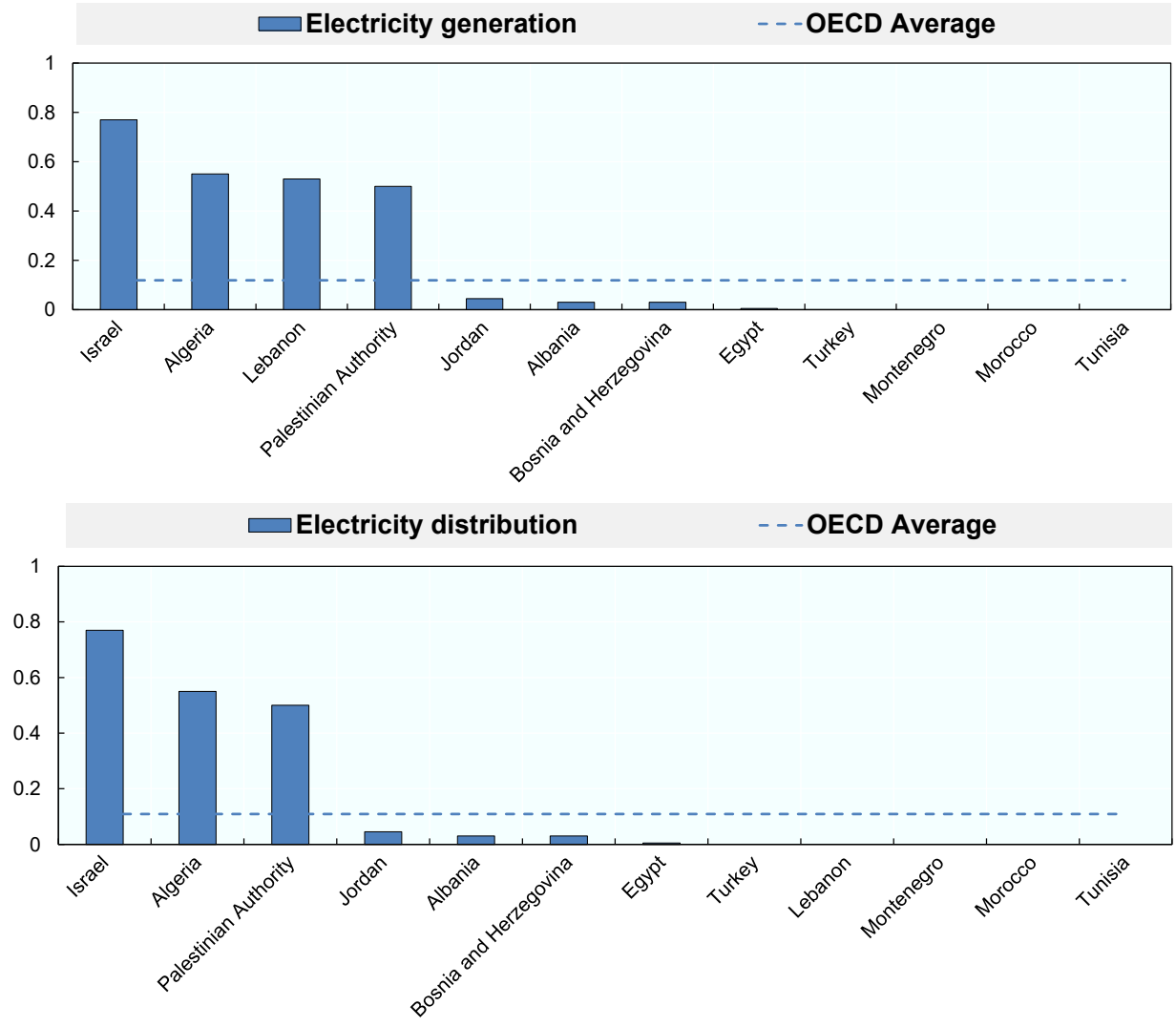
Indicator I7. Regulatory restrictiveness on foreign investments in energy and transport

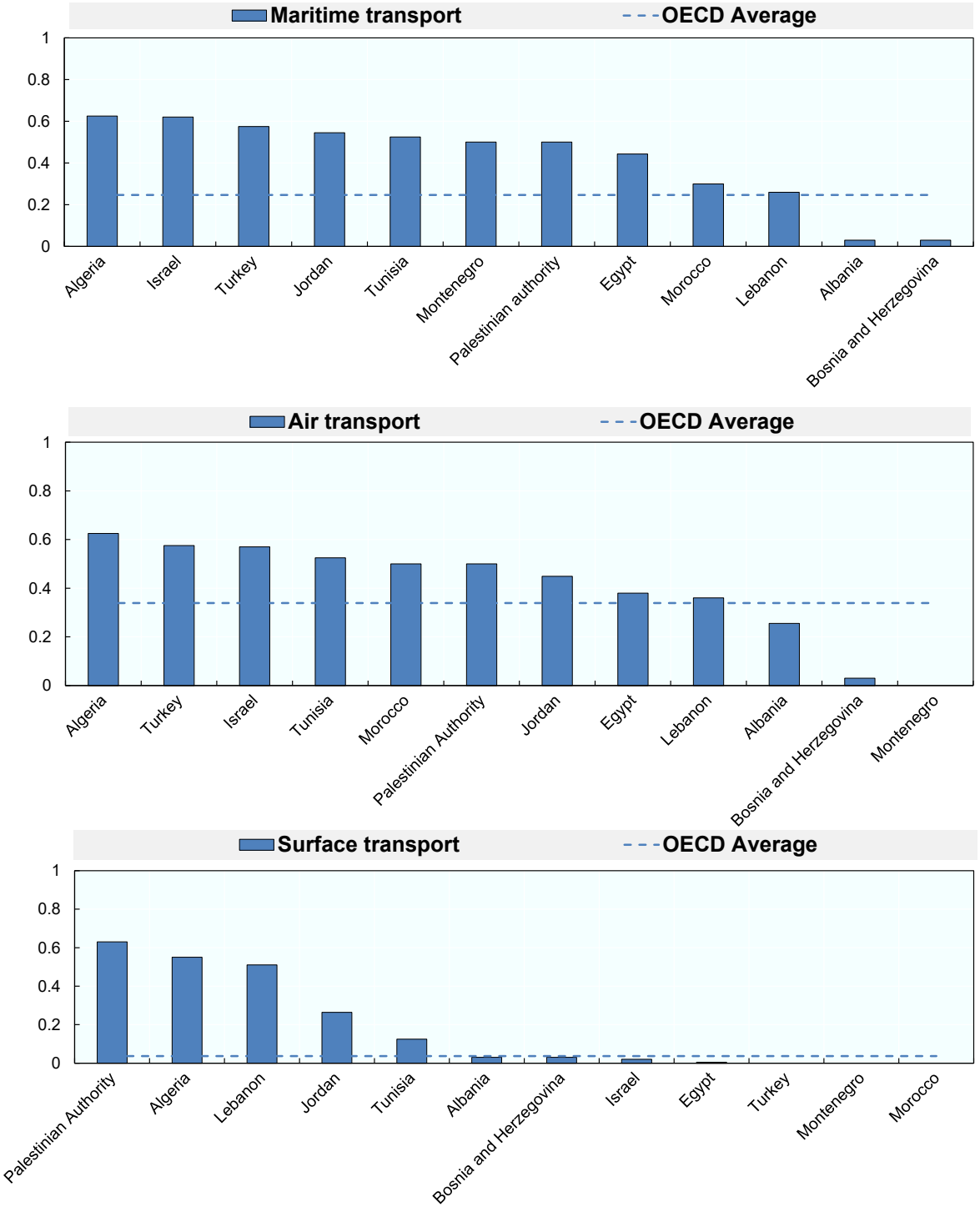
Investments in connectivity require an adequate policy environment, which involves removing administrative bottlenecks to investment and improving the regulatory environment. For connectivity, competitive transport (maritime and air) and electricity sectors are essential. Most of the Southern and Eastern Mediterranean markets are relatively open to foreign investments. Yet, in the transport and electricity sectors, restrictions are still relatively high (Figure 3.1)(see Chapter 2 on Finance for a general overview of restrictions measured by the OECD FDI Regulatory Restrictiveness Index). The FDI Index covers services provided over the infrastructure, including the management of the infrastructure itself; but most of the restrictions, and the bulk of activities, lie in services provided over the infrastructure. Countries in the Eastern and Southern Mediterranean generally have higher restrictions than the OECD average. the restrictions, and the bulk of activities, lie in services provided over the infrastructure. Countries in the Eastern and Southern Mediterranean generally have higher restrictions than the OECD average.

- In the Eastern Mediterranean, Montenegro's restrictions in the maritime sector are higher than those of Albania and Bosnia and Herzegovina, as well as being higher than the OECD average. In contrast, Albania and Bosnia and Herzegovina's restrictions in electricity generation and distribution are lower than the OECD average.
- In the Southern Mediterranean, Algeria has among the highest restrictions across the board, in maritime and air transport, and electricity sectors. In Jordan, high restrictions in the transport sector have reduced market entry and increased market power of trucking companies. In Morocco, foreign investment in air transport companies is limited to 49% of capital, while in maritime transport, for a vessel to fly the Moroccan flag, it must be 75% Moroccan-owned (OECD, 2017a[48]). Egypt has higher restrictions in maritime transport than Morocco and Lebanon. Its Maritime Law 1 of 1998 allows foreign investments only in the form of joint-venture companies in which foreign equity does not exceed 49%. Other horizontal restrictions among economies in the southern Mediterranean that can affect infrastructure investments include limits on foreign land ownership. For instance, in Lebanon and Jordan, land purchases for business use by foreigners require approvals, while Algeria, Jordan and the Palestine Authority apply preference to domestic firms in government procurement (OECD, 2021[10]).

Figure 3.10. FDI regulatory restrictiveness in selected infrastructure sectors, 2019

From 0 (open) to 1 (closed)





Note: PA refers to the Palestinian Authority.
Source: OECD, *FDI Regulatory Restrictiveness Index*, https://www.oecd.org/investment/fdiindex.htm

StatLink https://stat.link/s5239x

Conclusions and policy considerations

- In order to improve the level of integration in the Southern and Eastern Mediterranean, governments need to consider the regional dimension when developing transport and energy networks. This means defining infrastructure in a more integrated and structured way, taking into account regional connectivity as part of the design and development of infrastructure. This also requires overcoming a range of co-ordination and government capacity challenges, including better co-ordination between countries and different branches of ministries.
- In developing such infrastructure, governments should also co-operate on common standards to ensure better quality, compatibility and inter-operability of infrastructure networks across the region. While this may be expensive in the short term (because infrastructure projects have to meet higher standards of efficiency, safety and sustainability), they incur lower lifecycle costs than infrastructure with different standards, which often impose long-term costs. Having a common approach to standards can also create a larger market for products and services, with lower prices and shorter times for deployment.
- Increasing investments in transport and logistics can reduce trade costs while supporting integration in regional and global value chains. Governments could consider more investments in the logistics industry to expand capacity and support better logistics services. Better multi-modal transport links could also help reorient some of the freight trade from a high reliance on roads to other modes of transport, such as rails and ports.
- Economies in the region need to improve the capacity and efficiency of their ports and ensure connectivity with the inland areas. This includes reducing capacity bottlenecks and waiting times while also linking ports with rails and other multi-modal transport for better connectivity with large inland areas. Successful policies have also focused on linking ports with well-developed special economic zones and research centres and universities, as well as building on trade agreements with regional and non-regional partners to facilitate movements of goods and services and develop linkages with global economic hubs. Projects should also have an inclusive approach to connect rural-urban areas and benefit all segments of the population in the society.
- Promoting more competition and lifting entry barriers in the power sector to improve the level playing field between new entrants and incumbents – could help attract more investments in electricity generation and distribution networks. The electricity sector is largely dominated by SOEs, often with subsidies that make the price of electricity too low for investors to have any incentive to enter the market. Numerous countries rely on line ministries as regulators, even if they often operate in the sector through such enterprises; having separate regulators can also help promote more confidence in the market that the regulator will act objectively and in a transparent way. Overall, incentives-based regulations with independent regulators have positive effects on investment levels, and therefore can contribute to more regional integration.
- Encouraging competition and entry of private investors in the energy sector may also allow more renewable projects to be developed and contribute to the power generation mix. Many countries in the region are well endowed with renewable energy sources but have not sufficiently diversified their power supply. Although many have set up national renewable energy targets and the deployment of related projects is well under way, they expect to rely on gas and oil to generate electricity at least until 2030. Challenges include not only the lack of proper infrastructure but also a lack of a harmonised regulatory framework at the national and sub-regional levels. The European Union could play a key role in providing technical support to its southern neighbours on harmonisation of regulations in the renewable energy sector.
- The economies of the Southern and Eastern Mediterranean present high restrictions to foreign investment ownership in maritime and air transport as well as electricity distribution and generation.

When such policies are necessary to address the countries' national security risks or concerns, governments should ensure that these statutory regulations are not more restrictive than needed.

- A major challenge in the UfM region relates to the limited availability of specific indicators to measure regional integration in energy and transport sectors. To better understand the reasons behind the limited integration and the specific policy options, more forward-looking indicators – focusing on key integration aspects including dry ports (size and typology), costs, permits and technical standards – could be developed at both national and regional levels.

References

AEI (2019), *China Global Investment Tracker, American Enterprise Institute*, https://www.aei.org/china-global-investment-tracker. [11]

Aghahosseini et al (2020), *Towards sustainable development in the MENA region: Analysing the feasibility of a 100% renewable electricity system in 2030", Energy Strategy Reviews, Volume 28*, https://doi.org/10.1016/j.esr.2020.100466. [45]

AIIB (2020), *Turkey: Halkali-Cerkezkoy Rail Project", Asian Infrastructure Investment Bank*, https://www.aiib.org/en/projects/details/2020/proposed/Turkey-Halkali-Cerkezkoy-Rail-Project.html. [15]

Arvis et al (2019), *Maritime Networks, Port Efficiency, and Hinterland Connectivity in the Mediterranean: International Development in Focus*, https://openknowledge.worldbank.org/handle/10986/30585. [30]

Ash N and Gibb A (2018), *Transport in the Balkans: Current Problems and Future Strategies*, https://secco2.eu/sites/default/files/digital_library/2018-10/AnA-TransportintheBalkansCurrentProblemsandFutureStrategies.pdf. [26]

CGES (2020), *Trans-Balkan corridor section Montenegro*, https://www.cges.me/en/projects/trans-balkan-corridor#:~:text=The%20Trans%2DBalkan%20corridor%20is,connection%20with%20the%20immediate%20surroundings.&text=%E2%80%93%20the%20undersea%20cable%20Italy%20%E2%80%93%20Montenegro. [39]

Chauffour, J. (2018), *Morocco 2040: Emerging by Investing in Intangible Capital, Directions in Development, World Bank*, https://openknowledge.worldbank.org/bitstream/handle/10986/28442/9781464810664.pdf?sequence=2&isAllowed=y. [23]

DB Schenker (2020), *1st Dry Port in Egypt", DB Schenker News*, https://www.dbschenker.com/eg-en/about/press-center/corporate-news/1st-dry-port-in-egypt-628286. [27]

Estache , et al (2013), *Infrastructure and Employment Creation in the Middle East and North Africa, World Bank, Washington*, https://openknowledge.worldbank.org/bitstream/handle/10986/12237/NonAsciiFileName0.pdf. [9]

EuroAfrica Interconnector (2020), *EuroAfrica Interconnector*, https://www.euroafrica-interconnector.com/. [17]

Euromesco (2020), *Infrastructure and Power in the Middle East and North Africa, Joint Policy Study 17, Euromesco*, https://www.euromesco.net/wp-content/uploads/2020/09/JPS_Infrastructures-and-power-in-the-MENA.pdf. [31]

European Commission (2020), *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: A Hydrogen Strategy for a Climate-Neutral Europe*, https://ec.europa.eu/energy/sites/ener/files/hydrogen_strategy.pdf. [44]

European Commission (2020b), *An Economic and Investment Plan for the Western Balkans*, https://ec.europa.eu/neighbourhood-enlargement/sites/near/files/communication_on_wb_economic_and_investment_plan_october_2020_en.pdf. [12]

European Commission (2020a), *Trans-European Energy Networks*, https://ec.europa.eu/energy/topics/infrastructure/trans-european-networks-energy_en. [40]

Eurostatgas (2019), *Natural gas supply statistics; Consumption trends*, https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Natural_gas_supply_. [42]

IAI (2018), *Technological trends in the MENA region: the case of digitalisation and information and communications technology (ICT)*, Istituto Affari Internazionali, https://www.iai.it/sites/default/files/menara_wp_23.pdf. [4]

IBRD (2015), *The Regional Balkans Infrastructure Study (REBIS) UpdateReport No. 100619-ECA, International Bank For Reconstruction and Development*, https://openknowledge.worldbank.org/bitstream/handle/10986/28413/REBIS-Update-Final-Report-Main-Text.pdf?sequence=1. [7]

IEA (2010), *Technology Roadmap - Concentrating Solar Power*, https://www.iea.org/reports/technology-roadmap-concentrating-solar-power. [43]

IMF (2019), *Economic Integration in the Maghreb: An Untapped Source of Growth*, https://www.imf.org/en/Publications/Departmental-Papers-Policy-Papers/Issues/2019/02/08/Economic-Integration-in-the-Maghreb-An-Untapped-Source-of-Growth-46273. [24]

IMF (2018), *Public Infrastructure in the Western Balkans – Opportunities and Challenges, IMF, Washington DC,*, IMF, https://www.imf.org/en/Publications/Departmental-Papers-Policy-Papers/Issues/2018/02/07/Public-Infrastructure-in-the-Western-Balkans-Opportunities-and-Challenges-45547. [6]

International Energy Forum (2020), "Relevance of MENA in energy investment, trade, and innovation for energy sector transformation: The green new deal and circular economy: Session I", https://www.ief.org/_resources/files/events/4th-ief-eu-energy-day-the-green-new-deal-and-circular-economy/03.-ivan-marten.pdf. [37]

International Trade Administration (2019), *International Trade Administration*, https://www.trade.gov/knowledge-product/algeria-public-works-infrastructure-development-and-water-resources. [21]

ISPI (2019), *Weathering the storm, Charting new Courses in the Mediterranean, Italian Institute for International Political Studies*, Italian Institute for International Political Studies, https://www.ispionline.it/sites/default/files/pubblicazioni/med2019_web.pdf. [5]

MEDREG (2019), *How to stimulate infrastructure investments from a regulator's perspective", booklet, Association of Mediterranean Energy Regulators*, http://www.medreg-regulators.org/Portals/_default/Skede/Allegati/Skeda4506-415-2019.5.16/Leaflet-How_to_stimulate_infrastructure-web.pdf?IDUNI=3ojke5qil5tanzq43whrv1ye4263. [41]

Middle East Eye (2020), *Beirut explosion: How the port blast will hit Lebanon's economy*, https://www.middleeasteye.net/news/beirut-explosion-lebanon-economy-port-will-hit. [50]

MOL (2017), "World's Largest Containership Delivered", Mitsui O.S.K. Lines", https://www.mol.co.jp/en/pr/2017/17018.html. [35]

NS Energy (2020), *Trans Adriatic Pipeline*, https://www.nsenergybusiness.com/projects/trans-adriatic-pipeline/#:~:text=The%20Trans%20Adriatic%20Pipeline%20(TAP,had%20begun%20in%20June%202015. [16]

OECD (2021), *Middle East and North Africa Investment Policy Perspectives*, OECD Publishing, Paris, https://dx.doi.org/10.1787/6d84ee94-en. [10]

OECD (2017), "Supporting the Development of the Suez Canal Economic Zone: Identifying Priority Actions for a Dynamic and Sustainable Economic Zone", https://www.oecd.org/mena/competitiveness/SCZone_Project_Brief_EN.pdf. [32]

OECD (2016), *Strengthening governance and competitiveness in the MENA region for stronger and more inclusive growth, Better Policies*, OECD Publishing, https://doi.org/10.1787/9789264265677-en. [46]

OECD (2017a), *National Treatment for Foreign-Controlled Enterprises.*, https://www.oecd.org/daf/inv/investment-policy/national-treatment-instrument-english.pdf. [48]

OECD/World Bank (2018), *Global Infrastructure Connectivity Alliance (GICA) First Annual Meeting Summary.*, https://www.oecd.org/finance/private-pensions/g20-global-infrastructure-connectivity-alliance-2018.htm. [49]

OECD-ITF (2020), *Global Container Shipping and the Coronavirus Crisis", International Transport Forum*, International Transport Forum, https://www.itf-oecd.org/sites/default/files/global-container-shipping-covid-19.pdf. [34]

OECD-ITF (2019), *Summit Ministerial Declaration on Transport Connectivity for Regional Integration*, https://ww. [2]

ONCF (2020), *Morocco's 2040 Rail Strategy", Office National des Chemins de Fer*, https://www.oncf.ma/en/Development/Strategy/Morroco-s-2040-rail-strategy. [20]

Oxford Business Group (2017), *The Report: Algeria*, https://oxfordbusinessgroup.com/overview/peak-performance-development-key-projects-supports-modernisation. [22]

Oxford Business Group (2016), *Jordan's transport sector stabilised by foreign investment and domestic growth*, https://oxfordbusinessgroup.com/overview/stabilising-force-increased-foreign-investment-coupled-domestic-expansion-has-transformed-sector. [28]

Plan Solaire Mediterranean (2020), "Plan Solaire Mediterranean", https://fr.wikipedia.org/wiki/Plan_solaire_m%C3%A9diterran%C3%A9en. [19]

Serbia Energy (2019), *Submarine cable between Italy and Montenegro, importance and perspectives"*, https://serbia-energy.eu/submarine-cable-between-italy-and-montenegro-importance-and-perspectives/. [18]

SRM (2020a), *Italian Maritime Economy. The impact of Covid-19 on maritime transport: strategic routes and global scenarios*, https://www.srm-maritimeconomy.com/wp-content/uploads/2020/10/SUMMARY-maritime-2020-english.pdf. [29]

SRM (2020b), *MED & Italian Energy Report 2020*, https://www.srm-med.com/p/med-italian-energy-report-2019. [38]

Total Slovenia News (2018), "Adriatic-Ionian Transport Infrastructure Needs Investment to Integrate", https://www.total-slovenia-news.com/business/1308-adriatic-ionian-transport-infrastructure-needs-investment-to-integrate. [14]

UfM (2017), *UfM Roadmap for Action*, https://ufmsecretariat.org/wp-content/uploads/2017/10/UfM-Roadmap-for-action-2017.pdf. [1]

UfM (2014), *UfM Official Ministerial Declaration on Digital Economy*, https://ufmsecretariat.org/wp-content/uploads/2014/09/UfMMinistersDeclarationEN.pdf. [3]

UfM (2017a), *Trans-Maghreb Project,*, https://ufmsecretariat.org/wp-content/uploads/2017/12/TUD-Trans-Maghreb_EN.pdf. [13]

UNCTAD (2019), *Review of Maritime Transport 2019, United Nations*, https://unctad.org/en/PublicationChapters/rmt2019ch3_en.pdf. [33]

World Bank (2018), *Project Appraisal Document*, World Bank, http://documents.worldbank.org/curated/en/215731536304313045/pdf/PAD2551-PAD-PUBLIC-Project-Appraisal-Document-PAD-ELMED-v8-3-003.pdf. [25]

World Bank (2020a), *World Bank Enterprise Survey*, https://www.enterprisesurveys.org/. [8]

World Bank (2020b), *World Bank Enterprise Survey*, https://www.enterprisesurveys.org/. [47]

Zelt , et al (2019), *Long-Term Electricity Scenarios for the MENA Region: Assessing the Preferences of Local Stakeholders Using Multi-Criteria Analyses, Energies 12 (16), 1-26*, https://ideas.repec.org/a/gam/jeners/v12y2019i16p3046-d255660.html. [36]

Annex 3.A. International tools and instruments for sustainable infrastructure

A. Policy-related tools and instruments	
Framework condition	G7 Ise-Shima Principles for Promoting Quality Infrastructure
	G20 principles for quality infrastructure investment
	OECD Policy Framework for Investment, adopted by an OECD council recommendation in 2015 to improve investment climate to mobilise private investments, including in quality infrastructure, and to enhance the policy framework.
	Application to selected sectors such as—Transport infrastructure-Procurement guidelines (ITF)
	The OECD Principles for Private Sector Participation in Infrastructure, approved by the OECD council in 2007
Financing	G20/OECD High-level Principles of Long-term Investment Financing by Institutional Investors
	OECD Policy Guidance for Investment in Clean Energy Infrastructure
	Mapping Channels to Mobilise Institutional Investment in Sustainable Energy
	Investment governance and the integration of environmental, social and governance factors
	OECD Investing in Climate, Investing in Growth
	OECD/ WB/ UNEP Financing Climate Futures: Rethinking Infrastructure
Governance	OECD Framework for the Governance of Infrastructure to plan and prioritise investments, manage PPPs and procurement, design effective regulatory environments and manage integrity risks
	G20 Compendium of Good Practices for Promoting Integrity and Transparency in Infrastructure Development – focuses on transparency and integrity in the infrastructure cycle. (anti- corruption and fraud) at Appraisal, Planning, Tendering, Implementation & Contract Management, etc.
	OECD Guidelines for Multinational Enterprises, that integrate Responsible Business Conduct (RBC) principles and standards for investments in the infrastructure project life e-cycle for better economic, environmental and social outcomes, avoid political gridlock, and ensure that infrastructure serves public interest
	G20/OECD Principles of Corporate Governance and OECD Guidelines on Corporate Governance of State-Owned Enterprises
	Anti-corruption, responsible business conduct and the environment, with the OECD Anti-Bribery Convention, OECD Integrity Framework for Public Investment
	Open competition in procurement, with the OECD Recommendation of the Council on Public Procurement and OECD Arrangement on Officially Supported Export Credits
Development	United Nations Sustainable Development Goals OECD DAC Blended Finance Principles for Unlocking Commercial Finance for the SDGs
Environment	The 2019 OECD council Recommendation on the Assessment of Projects with Significant Impact on the Environment
B. Project-related tools and instruments	
Planning and prioritisation	WBG Infrastructure Prioritisation Framework (IPF)
	OECD Principles for the Public Governance of Public-Private Partnerships
Institutional capacity for project development	Multi-lateral Development Banks APMG PPP Certification Program
	WBG Country PPP Readiness Diagnostic
Project preparation	WBG PPP Screening Tool
	WBG/IMF PPP Fiscal Risk Assessment Model (PFRAM)
	WBG Project Readiness Assessment
	WBG Policy Guidelines for Managing Unsolicited Proposals
	OECD Recommendation on Public Procurement
	OECD Recommendation on Fighting Bid Rigging in Public Procurement
	Sustainable Infrastructure Foundation SOURCE

A. Policy-related tools and instruments	
	UNECE International Specialist Centers
	UNECE Standard On Zero Tolerance to Corruption
Transaction support and contract management	WBG Framework for Disclosure in PPP Projects
	WBG Guidance on PPP Contractual Provisions
	GI Hub Annotated Public-private Partnership Risk Allocation Matrices
	The GI Hub PPP Contract Management Tool

Source: Adapted from OECD (2019), *Sustainable Infrastructure for Low-Carbon Development in Central Asia and the Caucasus: Hotspot Analysis and Needs Assessment,* Green Finance and Investment, OECD Publishing, Paris, https://doi.org/10.1787/d1aa6ae9-en

Notes

[1] *Infrastructure connectivity* is a complex concept spanning across several dimensions. At the G20 level, connectivity is defined as linkages of communities, economies and nations through transport, communications, energy and water networks across countries (OECD/World Bank, 2018[49]), Global Infrastructure Connectivity Alliance (GICA) First Annual Meeting Summary).

[2] http://unctadstat.unctad.org/wds/TableViewer/tableView.aspx?ReportId=92.

[3] The data reflect information prior to the explosion in 2020 at Beirut port, which at the time was handling around 70% of the country's exports and imports, including food. Although Lebanon has a smaller second port in Tripoli, 80 km from the capital, the port is not equipped to handle additional cargo volumes or to deal with the amount of food imports needed (Middle East Eye, 2020[50]).

4 Movement of people

Movements of people play an important role in the integration process of the Union for the Mediterranean region, given their potential to be an engine of economic and social development at the regional and the national level. This chapter investigates the evolution of mobility of persons in the Union for the Mediterranean (UfM) region in recent decades, with a special focus on migrations and how legal and institutional frameworks on migration facilitate cross-border mobility and the socio-economic integration of migrants.

Key takeaways

- Movement of people is an important driver of economic and social development, and has been recognised from the outset of the Barcelona Process in 1995 as a key component of integration in the Union for the Mediterranean region.
- Since 1995, countries have taken important steps to facilitate movement of people in the UfM region, including easing visa requirements and signing bilateral and/or regional agreements on labour and education mobility. However, progress achieved in terms of free circulation of people, including South-South movements, has been unequal across countries in the region.
- Migrations are an important form of movement of people in the UfM region. While the number of intra-UfM migrants almost doubled over the past 25 years to reach 37 million people in 2019, patterns of migration have been relatively stable and the centrality of the EU in migration flows remains.
- Since the early 2000s, the EU has looked at schemes of circular migrations as a way to address both labour market needs in destination countries and sensitive issues linked to the permanent settlement of migrants. The design of circular migration programmes has been driven by a "triple win" narrative for origin and destination countries as well as migrants themselves, but their implementation has often been detrimental to migrants' rights and working conditions, especially in the case of low-skilled, seasonal workers in sectors such as agriculture or construction. To address these shortcomings, countries should review the design of circular migration schemes to put migrants' rights at the centre and ensure the attractiveness of circularity for all parties – origin and host countries, employers, and migrants.
- Recent years have seen a nascent trend of mobility schemes targeting new categories of migrants including tertiary education students and young, highly skilled professionals. The scope of existing schemes is still limited, and there are structural challenges linked to youth employability in the Mediterranean region; these constitute barriers to unlocking the full potential of mobility patterns in the region. Enhanced cooperation between countries within the framework of Skills Mobility Partnerships will allow the development of sustainable mobility schemes that also support returning migrants in re-integrating with the labour market in their origin country.
- Addressing the question of youth employability is crucial to diversifying patterns of migration in the UfM region. Policies aimed at increasing the quality of education systems and labour market opportunities in Southern Mediterranean countries, combined with programmes focusing on skills development and transferability, can play a key role in fostering greater integration of non-EU countries in labour- and education-related mobility patterns in the region.
- The availability of high-quality and comparable data is crucial to efforts to monitor movement of people in the UfM region. Important gaps remain in this regard, in particular in the Southern Mediterranean and Balkan sub-regions. Moving forward, countries should give particular attention to strengthening their capacity for migration-related data collection and dissemination. As circular migration schemes are implemented in the region, specific indicators could be developed relating to the number of programmes implemented and/or the number of individuals migrating within the framework of such programmes.

Introduction

Movement of people as a driver of economic and social development

The importance of mobility of people has been recognised from the outset of the regional integration process in the Mediterranean. The socio-cultural pillar of the Barcelona Declaration (1995) mentions "the importance of the role played by migration in [the] relationships" between participant countries. In line with the Valletta Declaration on Strengthening Euro-Mediterranean Cooperation through Research and Innovation (2017) and the Union for the Mediterranean (UfM) Roadmap for Action, the UfM currently aims to contribute to implementing the Migration and Development approach, placing at its heart issues related to youth employability, education, women's socio-economic empowerment, and job creation (UfM, 2017[1]).

Human mobility is a significant driver of economic and social development at both the regional and national levels, and facilitating it often constitutes a primary or secondary goal of regional integration processes, whether formal or informal. The UfM region has a longstanding history of hosting dynamic flows of people across both shores of the Mediterranean, which has been determinant to the region's development throughout the centuries.

The UfM region is characterised by a variety of economic situations and social, cultural and demographic attributes driving multiple forms of movements of people. These can be classified into two main categories of mobility:

- Migration, in which a person *settles* in the country of destination, whether temporarily or permanently. This category encompasses different motives of migration, such as labour migration, family migration, and migration for education purposes.
- Travel, a form of mobility that does not involve settlement in the country of destination. This category encompasses tourism, as well as some forms of business-related mobility or student and/or research mobility (e.g. attending a conference).

Migrations in particular can play a key role in achieving deeper economic integration of the UfM, both within the Southern Mediterranean and Western Balkans sub-regions and with the European Union (EU), whether from the perspective of host countries or countries of origin (see Box 4.1 for the definition of migration).

Migrants may positively contribute to the economies of their country of origin through several channels. Literature on the benefits of migration for sending countries has mainly focused on financial flows from migrants (e.g. remittances and investment). On average, remittance inflows represent 10.4% of gross domestic product. (GDP) in the Western Balkans and 7.8% in the Southern Mediterranean, two major sub-regions of origin in the UfM (see Chapter 2). Migrations support greater integration of countries within regional and global networks by creating links between people and businesses from origin and host countries. Migrants also contribute to transferring back knowledge, skills, and capital, which can support enterprise development in countries of origin. Mobility of highly skilled labour in particular can enhance countries' integration in global knowledge flows and markets, thereby driving innovation and competitiveness (OECD, 2004[2]). Finally, although less easily measurable, a recent and growing literature investigates the social and political role and impacts of migrants on their countries of origin (Fargues, 2017[3]).

At the same time, by filling labour market gaps in their host countries, migrants contribute to completing and complementing the labour force. In low-wage and low-skilled sectors, migrants can fill needs for which the supply of native labour force has been reduced due to increased educational attainment or lack of attractiveness of certain types of jobs. In high-skilled industries, such as information technology, where demand for labour is growing rapidly, migrant workers can help drive innovation while increasing the availability of skilled human capital (OECD, 2004[2]). These dynamics, if managed effectively, can contribute to improving labour market efficiency in destination countries.

Empirical evidence suggests that the main costs for countries of origin related to emigration concern labour shortages and possible losses of human capital (OECD, 2016[4]).

Box 4.1. Migration: definition and measurement

The definition of the term *migrant* set out in the 1998 Recommendations on Statistics of International Migration of the United Nations Department of Economic and Social Affairs (UN DESA) is the most widely accepted. It defines an international migrant as any person who changes his or her country of usual residence, distinguishing between "short-term migrants" (those who have changed their countries of usual residence for a period between three months and one year) and "long-term migrants" (those who have done so for at least one year).

According to the OECD, there are two types of migration:

- *Permanent*-type migrations apply to individuals who have been granted the right to permanent residence upon entry in a foreign country as well as those admitted with a permit of limited duration that is more or less indefinitely renewable. Different categories of entry may fall under this scope (labour, family, humanitarian, migrations under free mobility agreements).
- *Temporary*-type migrations involve individuals who enter a foreign country on a permit that is either not renewable or renewable on a limited basis only. This excludes tourist and business-related mobility, as well as irregular migration (unauthorised movement of people)*.

In operational terms, migrant-related definitions are informed by geographic, legal, political, methodological, temporal and other factors; that is to say, countries may apply different criteria to identify international migrants. This hinders full comparability of migrant data at the global level. Also, an important challenge in applying the definition of international migrant concerns people who maintain two or more residences in different countries in a given year, such as workers who live away from home for a certain period of time each year, as well as seasonal workers who cross borders in a circular way i.e. circular migration typically involves both return to the country of origin and repeated moves to the destination country. This implies that international migrant statistics may fail to capture certain categories of short-term migration.

Data on stocks and flows of international migration are important to understand and monitor migrant patterns and trends (however defined). The chapter draws upon current statistical sources compiled by UN DESA, Eurostat, OECD and ILOSTAT. UN DESA estimates of migrant stock cover most countries of the world and all countries in the UfM region since 1995; these data, in principle, also include refugees as reported by UNHCR and the UN Relief and Works Agency for Palestine Refugees in the Near East.

The analysis does not compare data across databases (unless specified). This, however, still entails possible discrepancies from aforementioned differences in concepts, definitions and methodologies used in national statistics. Readers are encouraged to refer to primary sources cited in this chapter for information on specific definitions underlying data.

* *Irregular migration* is defined as "movement of persons that takes place outside the laws, regulations, or international agreements governing the entry into or exit from the State of origin, transit or destination" (IOM, 2019[5]).
Source: (OECD, 2020[6]), (UN DESA, 2019[7]), (UN DESA, 1998[8]).

A highly heterogeneous region with different propensities to migrate

There are different migration patterns in the UfM region. In particular, the diverse paces at which countries are transitioning towards an ageing population affect their propensity to migrate – and, thus, their position in migration stocks and flows (as either a sending or a receiving country). The existing literature has shed

light on the interaction between demography and migration, whereby migration flows from developing countries to developed countries are linked to a fast-growing working-age population in sending countries contrasting with a stagnating, and even shrinking, one in receiving countries (Fargues, 2011[9]).

In the UfM region, the increasing age imbalance in EU labour markets, with growth of retirees outpacing that of the working-age population, has created a space for immigration towards the EU to fill the gaps in the labour market.

By contrast, in the Southern Mediterranean sub-region[1], the number of new entrants to the labour markets is still increasing every year. UNICEF estimates that, at the current pace, by 2030, 39 million additional youth will arrive on the labour market across the region (UNICEF, 2019[10]). This results in important labour market frictions whereby the labour market is unable to provide enough employment opportunities to absorb the increasing labour supply. The Middle East and North Africa (MENA) region[2] already has the highest youth unemployment rate worldwide, at 29% in North Africa and 25% in the rest of MENA (ibid). Lack of capacity to generate sufficient employment opportunities to respond to the needs of a growing working-age population constitutes a major driver of emigration from these countries.

The situation in the Western Balkan countries is notable. Large-scale emigration following the break-up of Yugoslavia and the subsequent conflicts in the region during the 1990s, combined with decreasing fertility rates, have contributed to a rapidly ageing population – and even, for most countries, a process of depopulation. However, this has not yet translated into a shift in the migration profiles of Western Balkan economies, which remain dominated by the emigration component. This is most likely due to persistently high levels of unemployment, which reached 20.8% in Bosnia and Herzegovina in 2018 (Šabić and Kolar, 2019[11]). As in the Southern Mediterranean sub-region, unemployment continues to drive significant outward migration flows. This is also true in a number of Eastern European EU countries – Romania, for example – although the present analysis does not cover intra-EU migration flows.

Countries' economic development also affects propensities to migrate. Much consideration has been given to wages and national per-capita income as important drivers of labour migrations. An important share of the literature suggests that, as countries experience social and economic development, propensity to migrate among low- and medium-educated migrants follows an inverted U-shaped curve (the notion of a "migration hump" was developed by Martin and Taylor in 1996). This implies that, for relatively poor sending countries, economic growth initially increases propensity to migrate; however, once a certain national income threshold is reached, propensity to migrate decreases as people are sufficiently well-off not to have to emigrate. In the case of Southern Mediterranean countries, most have not yet reached this income threshold. Moreover, the region's economic development in recent decades has been accompanied by an increasing wage differential with the more advanced economies of the EU, which has played a role in increasing migration pressures (Martín Iván, 2009[12]).

Beyond demographic and labour market considerations, regional geopolitical developments and the political and social instability in some Southern Mediterranean countries constitute an important driver of forced migrations in the UfM region. The repercussions of the Arab Spring and the ongoing conflicts in Syria, Libya and Iraq have created important migratory pressures towards neighbouring countries and beyond. In particular, the recent refugee crisis that resulted from the war in Syria, which left 6.6 million people living in displacement by the end of 2019, has affected migration patterns in the region, by significantly increasing the overall stock of migrants in UfM countries (in particular the stock of migrants from all countries of origin compared to intra-UfM migrants, as shown in Figure 4.1, but also by potentially redirecting labour migration flows due to the additional pressures created by the large influx of refugees on labour markets in host countries (see Box 4.5 later in this chapter on immigrant integration in Jordan in the context of the refugee crisis). However, while this phenomenon is sadly an important aspect of movement of persons in the UfM region, it falls beyond the scope of the present analysis on movement of people and regional integration, and will therefore not be covered in this chapter.

Finally, it is worth noting that the mobility of people depends not only on macro-level economic, demographic and political considerations, but also on subjective considerations linked, for instance, to willingness to move (see the section on Indicator M1).

The remainder of this chapter is divided into two parts. The first examines efforts to monitor progress in the mobility of persons, while the second addresses current efforts to enhance mutually beneficial cross-border mobility and suggests policy options for the future.

Monitoring progress in mobility of persons

There is no standard measure of mobility of persons across countries, although stocks and flows of migrants, as well as tourism flows are most often used in the literature. In the context of regional integration in the UfM, based on the aforementioned limitation on data availability, this chapter considers a set of indicators on movement of people as presented in Table 4.1. Indicator M1 relates to enhancing migrations in the region, and includes considerations for improving integration outcomes of migrants in destination countries. Indicator M2 covers one of the necessary pre-conditions for facilitating mobility in the region. Indicator M3 considers the contribution of tourism to the economies of the UfM region. Finally, Indicator M4 relates to improving regional cooperation on migration.

Table 4.1. Key monitoring indicators of movement of people

	Description	Coverage	Frequency
Indicator M1. Number of migrants and migrant-to-population ratios	It measures how many UfM emigrants migrate to another UfM country and how many immigrants host the respective countries from other UfM countries, with a view to showing the actual mobility within the region from both an origin and a host-country perspective. Source: UN DESA International Migrant Stock database https://www.un.org/development/desa/pd/content/international-migrant-stock	All UfM member states	Five years, last available year 2019
Indicator M2. Visa requirements	It measures visa policies that hinder or facilitate different types of movement of people across countries. Source: Henley & Partners Passport Index, 2020 https://www.henleypassportindex.com/	All UfM member states	Annual, last available year 2020
Indicator M3. Contribution of tourism to GDP and employment	It measures the relevance of the travel and tourism sector to countries' economies in terms of direct and indirect contribution to employment and GDP. Source: World Travel and Tourism Council, 2019; https://wttc.org/Research/Economic-Impact/Data-Gateway Eurostat, 2018	All UfM member states	2000-19
Indicator M4. Bilateral and regional agreements between UfM countries	This indicator adds to the quantitative analysis by discussing selected agreements and legal frameworks, which are important for management of migrations, and labour and education mobility. Source: International Organisation for Migration	EU27, Egypt, Jordan, Mauritania, Morocco, Tunisia	

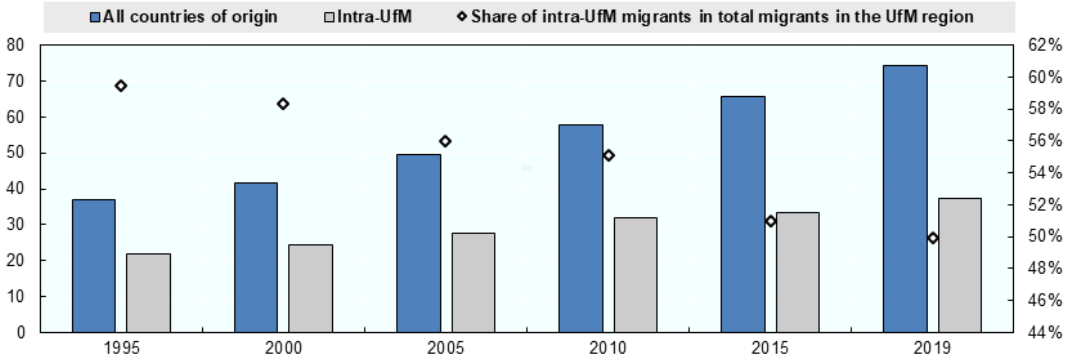
Indicator M1. Number of migrants and migrant-to-population ratios

The increase in regional migrants has been evident over time – both numerically and proportionally. In 2019, the stock of international migrants in UfM countries reached 74 million persons, up from 38 million in 1995 (Figure 4.1). The significant increase in migrant stock in the region in the 2010s was driven not only by migrations within free-movement areas, but also by humanitarian migrations resulting from the Syrian refugee crisis. Among all international migrants in the UfM, roughly one-half originated from other

UfM countries (intra-UfM migrants). The share of intra-UfM migrant stock in total migrants, however, has been shrinking since 1995 due to the increasing number of immigrants to the UfM originating from extra-UfM countries. In terms of migrant-to-population ratios, intra-UfM migrants constitute an increasingly important share in the total population in the region, up from 3.2% in 1995 to 4.5% in 2019 (.(Figure 4.3) This was higher than the ratio of international migrants to the global population in 2019 of 3.5% (IOM, 2019[5]).

Figure 4.1. Migrants in the UfM, 1995-2019

Numbers of migrants and share of intra-UfM migrants in total migrants in the UfM region



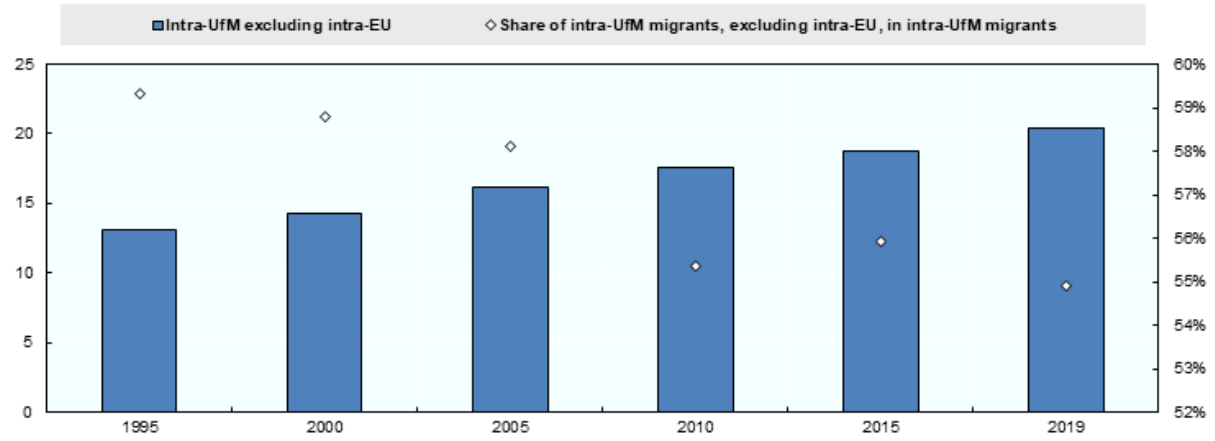
Note:Data for UfM include all member states. Data on migrants of all countries of origin include Syrian refugees. Intra-UfM data exclude Syrian migration.
Source: Authors calculation based on UN DESA (2019) International Migrant Stock (database), https://www.un.org/en/development/desa/population/migration/data/estimates2/estimates19.asp.

StatLink https://stat.link/m3i0qn

Intra-UfM (excluding intra-EU) migrant stock rose to 20 million in 2019, up from 13 million in 1995 Figure 4.2Although the size of the migrant stock (excluding migrants who move within the EU) has been increasing constantly over time, its share in total intra-UfM migrant stock has decreased since 1995. This is due to the progressive expansion of the EU membership, which makes the free movement of people within the EU a key driver of the growth in the migrant population.

Figure 4.2. Intra-UfM migrants excluding intra-EU migrants, 1995-2019

Number of intra-UfM migrants (excluding intra-EU) and share of intra-UfM migrants (excluding intra-EU) in total intra-UfM migrants

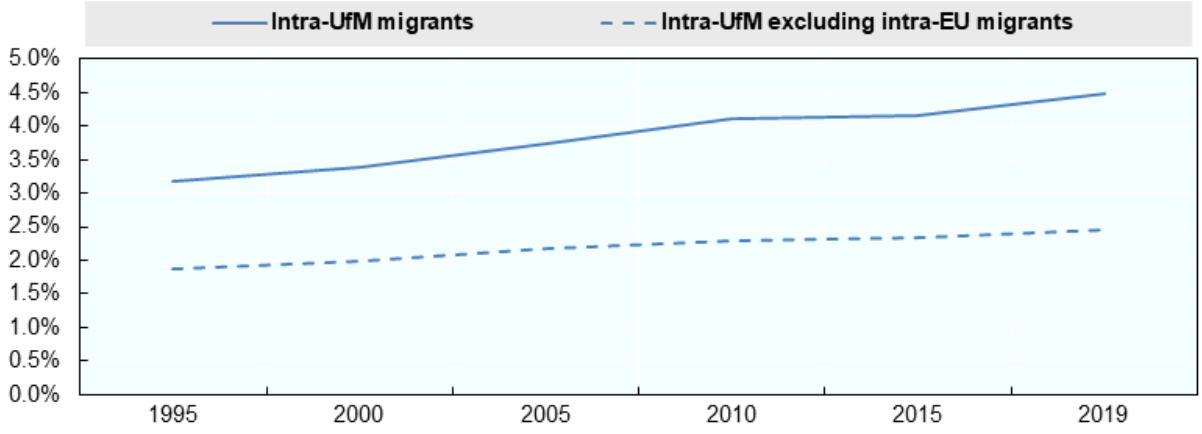


Note: Data for UfM include all member states. EU refers to EU27 member states.
Source: Authors' calculation, based on UN DESA (2019), *International Migrant Stock* (database), https://www.un.org/en/development/desa/population/migration/data/estimates2/estimates19.asp.

StatLink https://stat.link/ue4s0m

Figure 4.3. Migrant shares of populations, 1995-2019

Shares of migrants as percentage of total populations in the UfM region



Note: The population size used to calculate the percentage of immigrants and emigrants is based on the UN DESA total resident population of the country, which includes foreign-born populations.
Source: Authors' calculation, based on UN DESA (2019), *International Migrant Stock* (database), https://www.un.org/en/development/desa/population/migration/data/estimates2/estimates19.asp

StatLink https://stat.link/qmn4s1

There have been minor evolutions in migration patterns in the Mediterranean region over the past decade(s), including the emergence of new destinations for labour emigrants from Southern Mediterranean countries in response to the tightening of migratory policies and the effects of the financial crisis in Europe.

Nonetheless, EU countries continue to play a central role in intra-UfM labour migrations. Studies report that 91% of the increase in emigration from Southern Mediterranean countries between 2001 and 2010 was directed to Europe (Bardak, 2015[13]). In the following period (2010-17), approximately 400 000 people emigrated annually from Southern Mediterranean countries to Europe using legal pathways (Alcidi, 2019[14]). In 2019, the EU27 countries delivered just over 320 000 first permits to nationals of Southern Mediterranean UfM countries (Eurostat, 2020[15]).

Migration from and to European Union countries

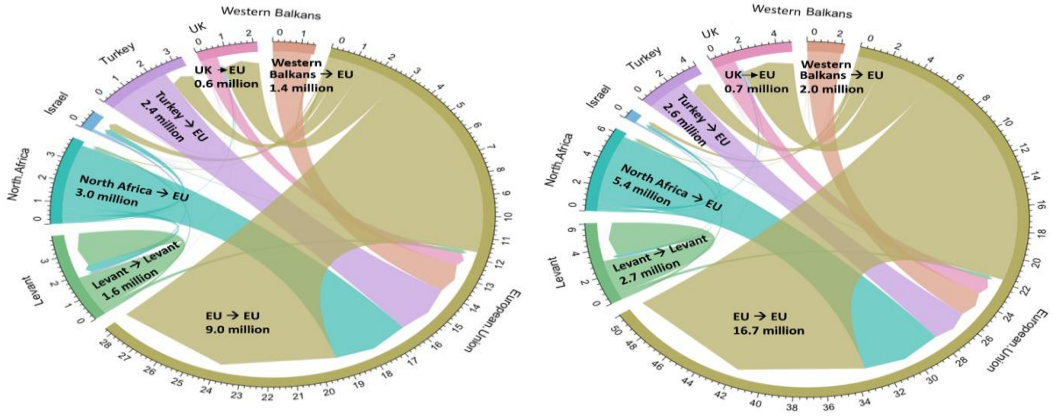
As mentioned, the EU plays a central role in the movement of people in the UfM region. This is not only because the EU, as a sub-region, takes the lion's share of intra-UfM migrants, but also because most migration from the extra-EU countries flows towards the EU (Figure 4.4). In 2019, there were around 5.4 million emigrants from North Africa (Algeria, Egypt, Mauritania, Morocco and Tunisia), 2.7 million from the Levant (Lebanon, Jordan and Palestinian Authority), 2.6 million from Turkey, and 2 million from the Western Balkans (Albania, Bosnia and Montenegro) living in an EU country (Figure 4.4). These numbers accounted for 19%, 9.1% and 7.1% of all immigrants in the EU, respectively. It is worth noting that the number of emigrants from North Africa to the EU has almost doubled since 1995. A relatively small increase in migrant stock can be observed in 2010-15 compared to other periods, resulting from a moderate increase of immigrants from both within the EU and North Africa (Figure 4.5.A). This is partly due to the EU's gradually tightened migration policies, which now tend to prioritise selective or chosen immigration aimed at meeting skilled labour needs; this has limited the number of migrants from outside the EU (Idrissi and Moufti, 2019[16]).

The major sending countries of immigrants in the EU remained largely unchanged, although their rankings fluctuated from year to year. Morocco, Turkey and Algeria are the largest extra-EU sending countries, with 2.7, 2.6 and 1.7 million immigrants in the EU originating from these countries in 2019, respectively (Figure 4.5 B) However, Albania and Bosnia and Herzegovina outnumbered other countries in terms of proportion of migrants to population, as around 30% of the populations born in these two countries lived in the EU in 2019. Tunisia has also been an important migrant-sending country in the UfM region, with 5.3% of its population residing in the EU in 2019.

The number of emigrants from the EU living in non-EU countries in the UfM has remained much less significant than the immigrant population the sub-region absorbed, although it increased steadily in the 1995-2019 period (Figure 4.5.A). As a matter of fact, the large majority of UfM emigrants from the EU lived in another EU country due to the free movement of people policies in the region. Turkey has been the largest extra-EU country to receive EU emigrants since 1995 (Figure 4.4)

Figure 4.4. Migrant stock in the UfM by region/country of origin and destination, 1995 and 2019

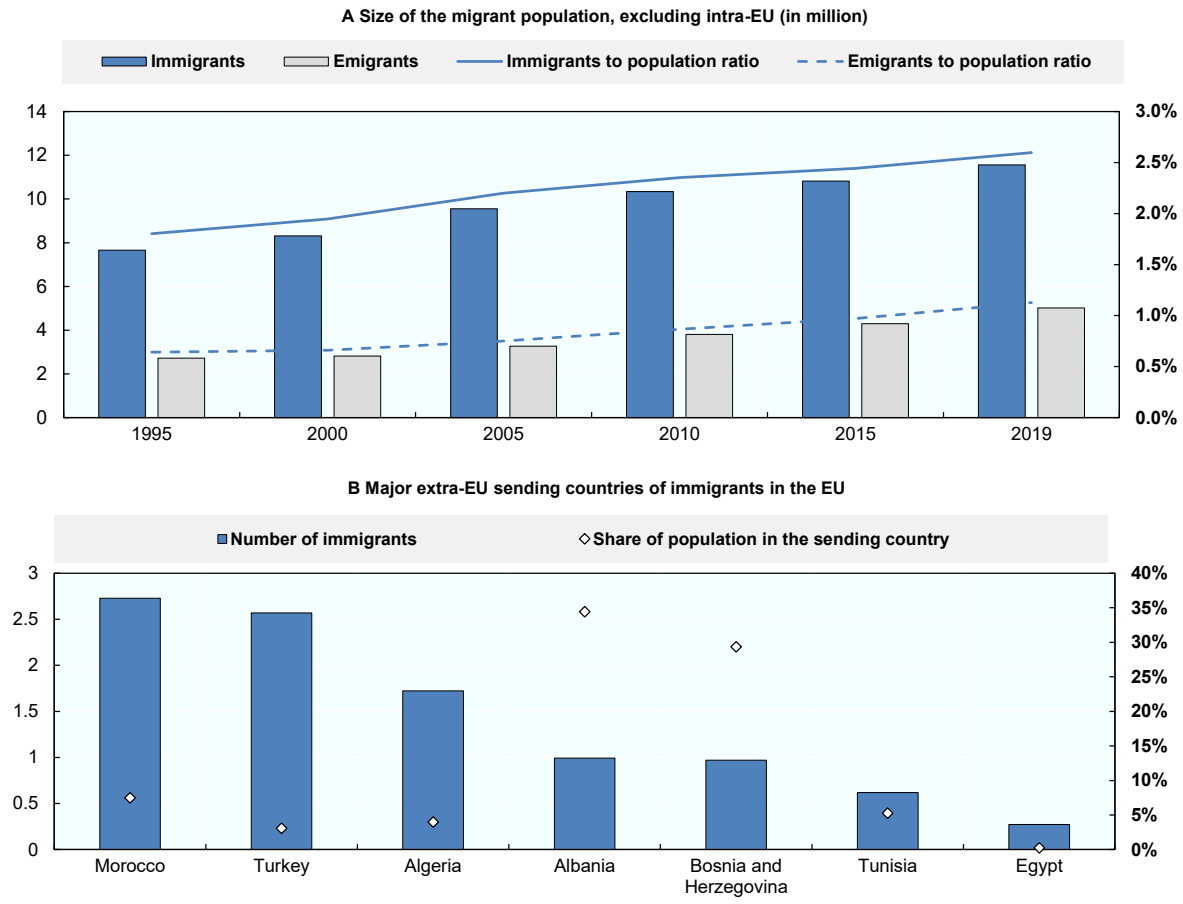
Numbers (millions) of intra-UfM migrants by sub-region/ country of origin and destination



Note: Each sub-region/country is represented by a coloured fragment along the circumference of the circle. Arcs between fragments show migration stocks, with the direction of arrows indicating the direction of flows. The thickness of the arcs is proportional to the significance of the stocks. For example, in 1995, 3.0 million emigrants from North Africa lived in the European Union. EU includes EU member states as of September 2020.

Source: Authors' calculation, based on UN DESA (2019), *International Migrant Stock* (database), https://www.un.org/en/development/desa/population/migration/data/estimates2/estimates19.asp.

Figure 4.5. UfM immigrants to and emigrants from the EU, 1995-2019



Note: "Immigrant" refers to people born in a UfM country other than the EU and residing in a country within the EU. "Emigrant" refers to people born in a country within the EU and residing in a non-EU country in the UfM region. The population size used to calculate the percentage of immigrants and emigrants is based on UN DESA data for total resident populations of countries, which includes foreign-born populations. In both panels, percentages of population show ratios of EU immigrants to EU population and of EU migrants to EU population.
Source: Authors' calculation, based on UN DESA (2019), *International Migrant Stock* (database),https://www.un.org/en/development/desa/population/migration/data/estimates2/estimates19.asp.

StatLink https://stat.link/qau5on

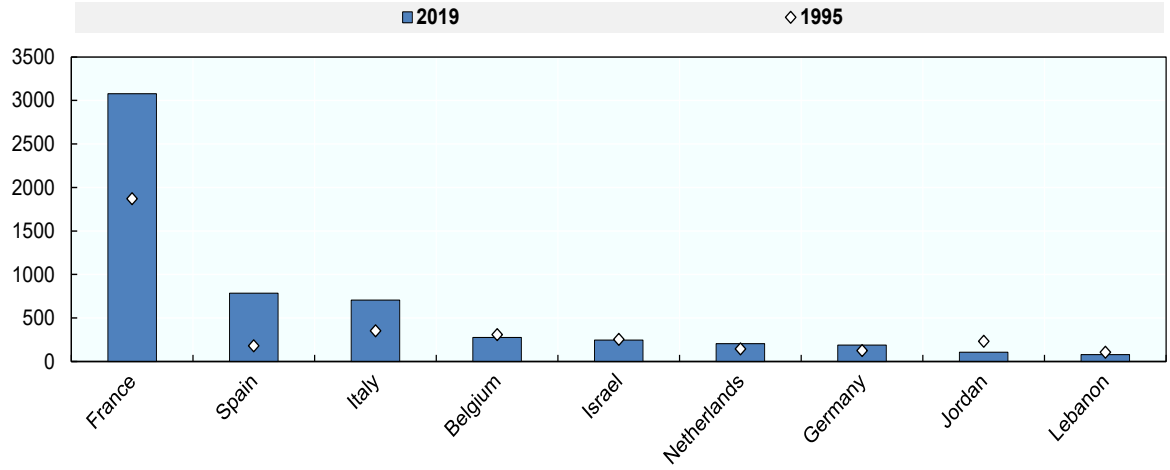
In 1995-2019 North Africa was a major region sending migrants to other UfM countries, notably to the EU (Figure 4.6) with emigrants from Morocco and Algeria constituting almost 80% of the sub-regional emigrant population. The number of emigrants grew from 3.7 million in 1995 to 6 million in 2019. Emigrant-to-population ratios remained rather stable, averaging 3% in the period 1995-2019.

Countries of destination for North African emigrants have slightly diversified over the past two decades. Although France remains the most important destination for North African emigrants due to historical ties (1.9 million in 1995 and 3.1 million in 2019), Spain and Italy have witnessed significant increases in receiving North African emigrants since 1995. In 1995-2019, North African migrants in Spain have more than quadrupled, and doubled in Italy (Figure 4.6). Other EU countries such as Sweden, Finland and Luxembourg have increased their number of North African migrants by 3 times, 4 times and 11 times in 25 years, although they remain a small population in these countries (respectively 29 812, 7 041 and 4 776 in 2019). It is noteworthy that migration from the North African countries to some other Southern

Mediterranean countries has become less important over time. This is the most visible for Jordan, which has seen a declining number of emigrants from North Africa, notably from Egypt.

Figure 4.6. UfM countries hosting the largest numbers of North African emigrants

Numbers of North African emigrants per country (thousands)



Source: Authors' calculation, based on UN DESA (2019), *International Migrant Stock* (database), https://www.un.org/en/development/desa/population/migration/data/estimates2/estimates19.asp.

StatLink https://stat.link/2da6jt

The immigrant population in North Africa is much less significant than the emigrant population, although it slightly grew from 0.2 million to 0.3 million in 25 years. The Levant has been the largest area of origin for immigrants in North Africa, with the Palestinian Authority as an important source of migration. France has been the second largest sending country, with the number of migrants moving to North Africa from France having more than doubled in 1995-2019, most likely driven by the return-migration phenomenon. Some members of the North African diaspora (i.e. born in France to immigrant parents) are choosing to migrate to their parents' country of origin due to cultural ties. Algeria, Morocco and Tunisia are also noteworthy destinations for retirees' migration from France.

The Western Balkans faces similar challenges as North Africa with regard to negative net migration (Figure 4.7). The sub-region has been experiencing massive emigration for decades, notably from Albania and Bosnia and Herzegovina. In 1995 and 2019, the emigrant-to-population ratio in the Western Balkans increased from 18.5% to 30.7%, highest among all sub-regions in the UfM. 96.7% of them moved to a neighbouring EU country, such as Italy, Greece or Croatia. Meanwhile, although the immigrant stock in the Western Balkans has increased in recent decades, the share of immigrants relative to the population has remained low (2%), especially compared to its large emigrant population. The majority of immigrants from Bosnia and Herzegovina lived in Montenegro.

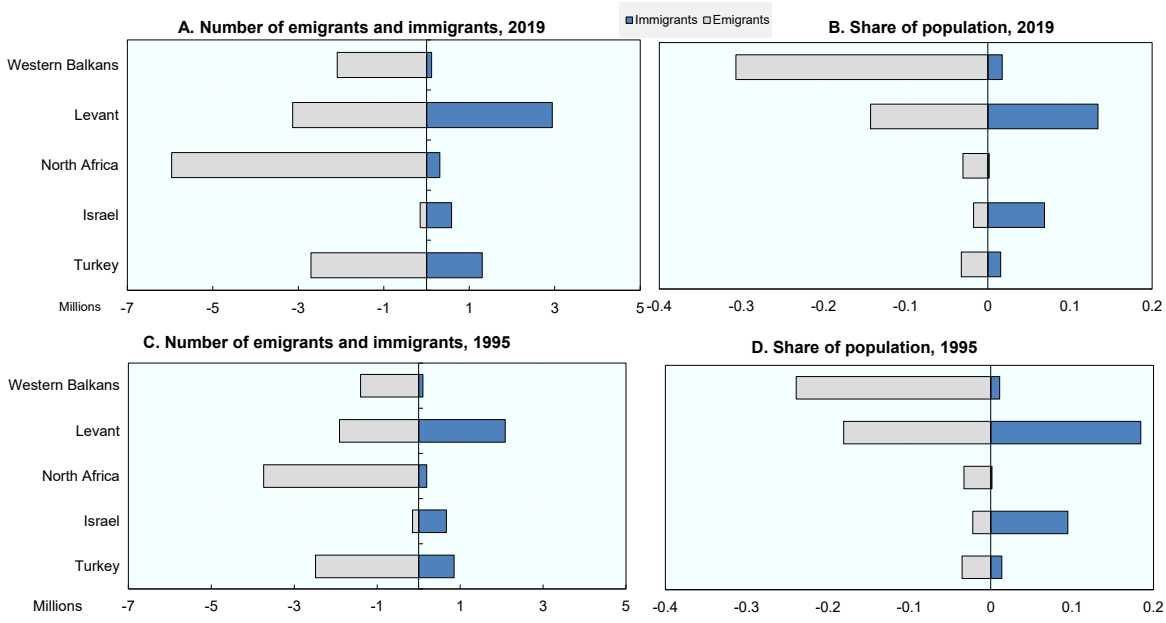
Lack of attraction for immigrants, compounded with high levels of emigration (especially of working-age population) has resulted in a decrease in population and workforce in the Western Balkans. Continuous efforts have been made to encourage migrants or emigrants to return.

In contrast to the trends followed by other sub-regions, migration in the Levant takes the predominant form of intra-regional migration (Figure 4.7), with a large size of forcedly displaced Palestinians in Jordan and Lebanon as a main driverJordan alone hosts 2.2 million Palestinian refugees registered with UNRWA in 2018. The Syria refugee crisis severely affected migrations in the Levant by forcing roughly 120 000

Palestinian refugees to flee Syria to Lebanon and Jordan, as well as to Turkey and beyond (UN, 2019[17]). In 2019, among the 2.9 million UfM emigrants residing in the Levantine sub-region, 2.6 million were Palestinians. For the same reasons, emigrant- and immigrant-to-population ratios have been constantly high in the Levantine sub-region, figuring 13.4% and 14.3% in 2019 (Figure 4.7), albeit both decreasing since 2005 (Annex 4.A).

Turkey continues to be both a sending and receiving country for migrants in the region, although its immigrant population has grown faster than its emigrant population since 1995.

Figure 4.7. UfM emigrants from and immigrants in non-EU sub-regions/countries, 1995 and 2019



Note: Immigrants" refers to foreign-born persons residing in the country. "Emigrants" refers to people born in the country who were residing outside their country of birth in 2019.
Source: Authors' calculation, based on UN DESA (2019), *International Migrant Stock* (database), https://www.un.org/en/development/desa/population/migration/data/estimates2/estimates19.asp

StatLink https://stat.link/z1uyt3

South-South migrations in the Southern Mediterranean

Although a relatively minor phenomenon compared to migrations involving the EU, it is noteworthy to look at South-South migration flows in the UfM region. Several Southern Mediterranean countries have a longstanding tradition of migrations for work purposes within the region, including Egypt, Jordan and Lebanon (David and Marouani, 2016[18]). While the majority of intra-MENA labour migration flows have traditionally been directed towards Gulf labour-importing countries, two other patterns that do not involve Gulf countries can be identified (IOM, 2010[19]). The first concerns migrations from highly-populated MENA countries to resource-rich countries such as Libya – although this pattern is most likely not as significant as in the past due to important changes in the regional situation over the past decade, especially with regard to the attractiveness of Libya. The second consists in "replacement migration" flows between countries that are both labour-importing and labour-exporting. These flows generally occur between Levant economies (including Egypt) and may encompass both skilled and unskilled migrations. Different patterns can be identified, from situations where job vacancies resulting from the emigration of nationals are directly

filled by incoming migrants, to situations where internal social mobility creates a skills gap between migration inflows and outflows.

Jordan provides an example of a country at the centre of such "replacement migration" flows. As an important labour exporting country, a large part of its labour emigration is highly skilled (with 62% of labour emigrants holding a university degree in 2010 (Wahba, 2012[20]) and directed towards the Gulf. Incoming migration to Jordan, on the other hand, is an interesting illustration of the South-South labour mobility flows occurring between Southern Mediterranean countries. According to data from the Labour Department of Jordan, most of the foreign workers (nearly 65%) in Jordan in 2015 came from Arab countries, and more specifically from Egypt (61%) (EMNES, 2018[21]). This figure encompasses only migrants arriving to Jordan with on a work visa, and thus excludes the important refugee population in Jordan, mainly from Palestinian Authority and Syria. 93% of these foreign workers had a qualification level equivalent or inferior to secondary education, confirming the low skill intensity of labour migration between Southern Mediterranean countries (ibid).

Between 2000 and 2015, the number of Egyptian migrant workers in Jordan more than doubled (Razzaz S, 2017[22]). In 2016, according to CAPMAS, Egyptian migrants in Jordan represented 18% of all Egyptian migrants in the MENA region (CAPMAS, 2017[23]), making Jordan the second most important destination for migration outflows from Egypt after Saudi Arabia – and first destination in the UfM region. This is in line with findings at the sub-regional level pointing to a large-scale phenomenon of unskilled labour migrations between Syria, Jordan, Lebanon, Palestinian Authority and Egypt in the 2000s, in particular for seasonal migrations, driven by slight income differentials between countries during this period (Bardak, 2017[24]).

Nonetheless, these South-South dynamics remain minor compared to outward migration patterns from Southern Mediterranean countries to the EU, or to other MENA countries outside the UfM region. Indeed, within the Southern Mediterranean sub-region, the share of migration outflows towards other countries of the sub-region, relative to the total migration outflows from the sub-region, decreased between 2005 and 2019, indicating the persistence of barriers to and lack of attractiveness of labour mobility between countries of the sub-region.

South-South migrations in the Western Balkans

South-South migration flows within the Western Balkans sub-region follow a dynamic considerably different to that observed between Southern Mediterranean countries. In recent years, migration for work purposes between Balkan countries – especially migrations for family motives – has been decreasing relatively to other forms of migration. Eurostat data indicates that, while first-time residence permits for work purposes accounted for 43% of all permits issued to intra-Balkan migrants in 2008, this share dropped to approximately 20% in 2016 (World Bank/Vienna Institute for International Economic Studies, 2018[25]).

Studies covering the period 2009-13 had already pointed out to the seasonal character of intra-Balkan labour migrations. Indeed, a majority of work permits to foreign workers were issued in the tourism, agriculture and construction sectors, which have an important seasonal component. The share of work permits among all temporary residence permits had consistently increased between 2009 and 2013, reaching 67% in Montenegro in 2013 (IOM, 2014[26]).

Previous studies have also highlighted the central role played by Montenegro in intra-Balkans labour migration flows: in 2013, the country attracted about three-quarters of all regional migrant workers (Vidovic H et al, 2015[27]). These flows were mainly low-skilled, with 87% of work permits in Montenegro issued to migrants with secondary educational attainment or below. Albania, on the other hand, was in large part excluded from intra-regional flows, attracting only 1% of regional migrant workers (ibid).

During the same period, studies documented the relatively recent phenomenon of return migration in Balkan countries. As an illustration, the number of Albanians returning increased sharply after 2008. A total of 133,554 Albanian immigrants returned to Albania during 2009–13, 35% of whom were youth aged

between 18 and 29. These return migrants represent a significant potential in terms of labour supply for their country of origin.

Immigrants' contribution to and integration into the labour market in host countries

Immigrants constitute a sizeable share of the labour force in the key countries of destination in the UfM region. At the regional level, the share of foreign-born labour force among all workers increased slightly from 10% in 2010 to 12% in 2019 (Table 4.2). During the same period, in the 33 countries of destination of the UfM, labour participation rates of immigrants increased from 72% to 74%. While data on employment rates of immigrants by country of origin does not allow us to conduct an in-depth analysis of migrants from UfM countries' contribution to and integration into host countries' labour markets, interesting insights can be drawn from qualitative analysis and specific case studies.

Table 4.2. Foreign-born labour force in UfM countries, by sex

Labour force	2010			2019		
	Total	Male	Female	Total	Male	Female
Foreign-born from all countries (in thousands)	21 998	11 956	10 041	28 092	15 338	12 751
Share of foreign-born work force in total workforce	10%	9%	10%	12%	11%	12%

Note: Data refer to labour force aged between 15 and 64 years. *Foreign-born from all countries* refer to persons born outside of the reporting country, including non-UfM countries. Data are available for 32 UfM countries: 27 EU countries, Montenegro, Bosnia and Herzegovina, Egypt, Israel and Turkey. For Montenegro, Turkey and Israel 2010 data refer to 2011 or 2012; data for Egypt and Israel refer to 2011 and 2017 instead of 2019.
Source: Authors' calculations based on ILO 2020, *Labour force by sex, age and place of birth (dataset)*, https://www.ilo.org/shinyapps/bulkexplorer4/?lang=en&segment=indicator&id=MST_TEAP_SEX_AGE_CBR_NB_A.

Emigration for economic purposes has been a structural feature of Southern Mediterranean and Balkan countries for decades. Due to geographical, political and social ties, as well as a growing demand for low-skilled labour in the industrial sector in Europe, migration outflows from the Southern Mediterranean, and in particular from North Africa, have historically been directed towards Western European countries. Today, persistently high unemployment rates and lack of training and job opportunities in most Southern Mediterranean and Balkan countries continue to be an important driver of sustained emigration towards the EU. However, while potential economic gains from working abroad constitute an important factor which motivates people to migrate, migrants are also attracted by other reasons such as education and training opportunities, family reunification, marriage, or better public services in more economically developed countries. Survey results on the motivations of working-age migrants in Morocco and Bosnia and Herzegovina, presented in Box 4.2, suggest significant heterogeneity in motivations across gender, age, and country. This sheds light on the complexity of factors shaping propensity to migrate in the UfM region, which relates not only to the destination country's attractiveness but also to potential emigrants' willingness to move, linked to their subjective appreciation of their situation in their country.

Accordingly, the foreign-born labour force in destination countries includes different categories of immigrants, many of whom had not come primarily for work-related reasons or with a work visa. In particular, family migrations continue to represent a major feature of migration patterns in the UfM (namely from Southern Mediterranean to EU countries) and contribute significantly to the constitution of a foreign-born labour force in destination countries. Nearly one-half of incoming family migrants from Southern Mediterranean countries are in their prime working age (between 20 and 50 years old) and therefore likely to search for work opportunities upon arrival in their destination countries (Alcidi et al., 2019[28]). Historical links between countries, through the family migration channel, thus contribute to facilitating migrations in the context of increasingly restrictive migration policies. This is highlighted in Box 4.3 which provides an overview of the trends in migrations between Morocco and France, one of the most important cross-

Mediterranean migration patterns in the UfM region. It showcases how long-standing migration pathways can be sustained despite changes in the economic conjuncture, namely through the enduring role of family links.

Box 4.2. Motivation of working-age migrants

Motivations of intentional and current emigrants in Morocco

Results from a recent national survey by Morocco's High Commission for Planning (2020) on migration propensity and motivations for emigration among Moroccan prospective and current emigrants shed light on the important role played by economic motives in decisions and/or intentions to emigrate. Among prospective emigrants, 60.3% reported wishing to emigrate for employment purposes and 15.5% stated reasons related to studies and training, while 8.2% put forward costs and standard of living as the main driver behind their desire to emigrate. Moreover, being unemployed seems to constitute an important factor shaping migration intentions, as just over 50% of unemployed respondents reported wanting to emigrate, compared to only about 22% of those employed.

Similar findings were found regarding the reasons that pushed current emigrants to leave Morocco. More than half (53.3%) of Moroccans currently living abroad emigrated for economic motives, mainly related to employment and improvement of working conditions. Education and training constitute the second most frequently reported reason for emigrating (23.4%), followed by family reunification and marriage (19.9%).

The survey also points to significant variations in motivations behind migration across socio-demographic groups. Economic motives are more prevalent among men than women, with close to two-thirds of current male migrants but only 26% of current female migrants reporting employment opportunities, improvement of working conditions and/or living standards as the primary reason for having emigrated. A similar, if somewhat smaller, gender gap was also found among prospective migrants (economic reasons were cited as the main driver behind the desire to emigrate by 81.8% of men, compared to 58.7% of women). Conversely, educational motives were more frequently reported as drivers of emigration by women than men, both among prospective and current migrants. Family motives were significantly more important for female (41.4%) than male (9.2%) emigrants.

Determinants of youth migration from Bosnia and Herzegovina

A recent empirical study on emigration from Bosnia and Herzegovina uses data from USAID's 2017 National Survey on Citizens Perception (NSCP) to shed light on different factors affecting Bosnians' propensity to leave their country, with a focus on youth. Results indicate that economic factors come into play, with unemployed respondents 13% more likely than those employed to consider emigrating.

At the same time, a number of non-economic factors are identified as playing an important role in shaping migration propensity. For example, the level of satisfaction with public services and institutions significantly affected respondents' likeliness to consider emigration.

While this suggests that quality of and trust in national institutions may affect one's decision to emigrate, interestingly, the study does not find any evidence of a link between overall satisfaction with life and propensity to emigrate.

Source: (Haut-Commissariat au Plan, 2020[29]), (Begović et al, 2020[30]),

Box 4.3. Focus: Labour migrations between Morocco and France

After Spain, France is the second most popular destination for Moroccan emigrants, with an average of 27 300 permits delivered each year by France to Moroccan nationals between 2010 and 2019.

While historically, labour migration from Morocco to France was essentially composed of low-skilled workers, important shifts have occurred over the past two decades. Morocco has consistently been a major provider of seasonal workers in France, and the first non-EU provider. According to Eurostat, out of the 5,594 first-time resident permits issued to non-European seasonal workers in 2018, approximately half (2,611) were issued to Moroccans (Eurostat, 2020[31]). Most of these seasonal migrants work in the agriculture sector. At the same time, the past decade has witnessed an acceleration in other types of labour migrations from Morocco. Among first permits granted by France to Moroccan nationals for work reasons between the early 2010s to 2019, permits for seasonal work increased by 270%, while other work permits increased by close to 400%.

Moreover, migration patterns have been characterised by a growing interest towards immigration of highly qualified youth, which has manifested in several bilateral agreements concluded between France and Morocco to foster mobility of young Moroccan professionals seeking job experience in France. An initial agreement was concluded in 2001 to implement the “young professionals” framework, which provides for the immigration of 300 Moroccans every year, for a period of 3 to 18 months. This framework has since then expanded to give the possibility for young professionals to obtain a renewable 4-year resident permit, under the “Talent Passport” framework created in 2016. This applies to highly qualified professionals, artists, and those looking to create their company and/or invest in France. In 2019, according to data published by the French Ministry of Interior, 19,366 permits had been delivered under the “Talent Passport” framework; however, lack of country-disaggregated data does not allow estimating the number of Moroccan beneficiaries from this scheme.

A significant evolution in recent migration patterns between the two countries concerns the fast-growing trend of student migrations. This category of migrants more than doubled between 2008 and 2018. The number of first-time student resident permits issued to Moroccans increased from 4,919 to 11,229 over the period, making Morocco the top non-EU provider of student migrants in France. In turn, France represents the top destination for Moroccan students, hosting over 29 000 out of the 51 000 Moroccan students abroad.

This trend is relevant with regard to labour migrations, as most students remain and search for employment in France after obtaining their degrees. Indeed, data collected in the framework of the MIREM (Return Migration to the Maghreb) project study suggests that, from 2005 to 2008, only 12.5% of Moroccan migrant students returned to Morocco after completing their studies. However, it must be noted that, since the beginning of the 2000s, Moroccan emigration to France has been marked by a decreasing share of labour emigration. Family reunification now represents the most important feature of Moroccan emigration to France, which explains in large part the relative stability in migration flows between Morocco and France over the past few decades.

Source: (Eurostat, 2020[31]), (Lacroix, 2018[32]), (UNESCO, 2020[33]) , (Bel-Air, 2016[34]), (Bouoiyour el al, 2014[35]).

Over the past years, labour market integration of migrants from non-EU UfM countries in the EU have been marked by differentiated trends. Regardless of qualification level, in virtually all EU countries, employment rates of non-EU immigrants were lower than that of immigrants from other EU countries, indicating integration gaps between non-EU and intra-EU immigrants. In particular, studies found that in EU countries, workers originating from North Africa had lower employment rates than migrants from other regions – including outside of the UfM. In 2018, employment rates for North African immigrants averaged

50.3%, compared to 65% for total foreign-born workers in the EU (OECD, 2020[6]). Moreover, in contrast to most other migrant groups, labour market outcomes of migrants born in the Middle East have not significantly improved in recent years, with more than one in five migrants from this region living in the EU unemployed in 2018, essentially the same as in 2013 (OECD, 2019[36]).

Similarly, employment rates for non-EU young migrants (20-34 years) not in education or training were lower than for other subpopulation groups (Eurostat, 2019[37]). In contrast, among all young employees (aged 15-34 years) in the EU, those who were non-EU-born consistently had high rates of temporary employment, increasing from 46% in 2010 to 56% in 2019. Despite the fact that temporary employment could be associated with underemployment and other risks and vulnerabilities, it has the potential to provide important opportunities for migrant youth, who are generally more inclined to undertake temporary migration – and who are often not motivated solely by economic gain, but also by a desire for personal development, among other reasons (UN, 2013[38]).

Meanwhile, recent years have witnessed a nascent trend of highly skilled migration from UfM countries towards the EU, reaching 20% among emigrants aged 18-34 in 2017 (Alcidi, 2019[14]). Non-EU UfM countries are providing a growing pool of young, skilled potential workers searching for opportunities abroad. Emigration for education purposes has also been growing, although it still represents only a minority of migration outflows (Bardak, 2015[13]). This could represent a driver of greater socio-economic integration among these migrants, as their education may significantly improve their employment prospects in the country.

Indicator M2: Visa requirements

Visa policy is an important factor that can facilitate circulation of people between countries. Heavy visa requirements, limitations in duration of stay, and difficulties in obtaining work permits, can significantly hinder mobility in the UfM region.

The Henley Passport Index, which ranks countries based on the number of destinations their citizens can access without a prior visa, reveals that there is considerable scope for softening visa requirements within the UfM region, between EU and non-EU countries as well as within the Southern Mediterranean sub-region.

Visa requirements between EU and non-EU countries

The visa requirements between EU and non-EU countries within the UfM region as of 2020 are shown in (Table 4.3 and Table 4.4), respectively for non-EU citizens travelling to EU countries and for EU citizens travelling to non-EU countries. Of note:

- Progress made in terms of visa liberalisation has Albania, Bosnia and Herzegovina and Montenegro to join the list of visa-exempt countries in 2010. For all other countries except Israel, significant entry requirements to the EU remain in place.
- The share of visas not issued (out of the total visa applications) for nationals of Southern Mediterranean countries remains high (Schenghen Visa Info, 2019[39]). Also, compared to 2014, the rate of not-issued visas has increased for nationals of all Southern Mediterranean countries over the past five years.

Table 4.3. Visa requirements in the UfM: non-EU citizens travelling to EU countries

	Country of origin												
Country of destination		ALB	DZA	BIH	EGY	ISR	JOR	LBN	MRT	MNE	MAR	PSE	TUN	TUR
	AUT													
	BEL													
	BGR													
	HRV													
	CYP													
	CZE													
	DNK													
	EST													
	FIN													
	FRA													
	DEU													
	GRC													
	HUN													
	IRL													
	ITA													
	LVA													
	LTU													
	LUX													
	MLT													
	NLD													
	POL													
	PRT													
	ROU													
	SVK													
	SVN													
	ESP													
	SWE													

Note: Green cells indicate visa-free access. Light red cells indicate that incoming citizens require a prior visa to enter the country.
Source: Henley & Partners 2020, *Henley Passport Index*, https://www.henleypassportindex.com/passport.

It is interesting to note that restrictions are not reciprocated. Only Algeria requires EU nationals to obtain a prior visa to enter the country, while in other countries, travellers holding an EU passport can either travel visa-free or obtain a visa upon arrival. These provisions facilitate tourist arrivals from the European Union, due to the importance of the tourism industry in several Southern Mediterranean economies (see Indicator M3, on the contribution of tourism to GDP and employment).

Table 4.4. Visa requirements in the UfM: EU citizens travelling to non-EU countries

Country of origin	Country of destination	ALB	DZA	BIH	EGY	ISR	JOR	LBN	MRT	MNE	MAR	PSE	TUN	TUR
	AUT													
	BEL													
	BGR													
	HRV													
	CYP													*
	CZE													
	DNK													
	EST													
	FIN													
	FRA													
	DEU													
	GRC													
	HUN													
	IRL													
	ITA													
	LVA													
	LTU													
	LUX													
	MLT													
	NLD													
	POL													
	PRT													
	ROU													
	SVK													
	SVN													
	ESP													
	SWE													

Note: Green cells indicate a visa-free access. Yellow cells indicate a visa-on-arrival policy. Light red cells indicate that incoming citizens require a prior visa to enter the country. An asterisk indicates citizens require a prior visa, but can obtain it through an electronic visa application.
Source: Henley & Partners 2020, *Henley Passport Index*, https://www.henleypassportindex.com/passport.

Visa requirements within the Southern Mediterranean sub-region

Important barriers remain to human mobility within countries in the Southern Mediterranean. As Table 4.5 shows, travel between countries requires a prior visa in most cases. In fact, the Southern Mediterranean countries' ranking in the Henley Passport Index has deteriorated over the past decade, ranging from 74th for Tunisia to 102nd for Lebanon (where the highest rankings are for countries whose citizens benefit from visa-free access to the largest number of countries).

At the same time, significant variations exist across Southern Mediterranean countries regarding citizens' options for travelling visa-free to other countries in the sub-region:

- Tunisian citizens need a prior visa to travel to only two countries (Egypt and the Palestinian Authority);
- Lebanese and Palestinian nationals need a prior visa for all but three and two countries of the sub-region, respectively.

- Reciprocal visa waivers exist between certain countries, such as between Algeria, Morocco and Tunisia; Egypt and Jordan; or Jordan and Lebanon.

Table 4.5. Visa requirements between Southern Mediterranean countries, 2020

		Country of origin								
Country of destination		DZA	EGY	JOR	LBN	MRT	MAR	PSE	TUN	DZA
	DZA									
	EGY									
	JOR									
	LBN									
	MRT									
	MAR									
	PSE									
	TUN									
	TUR									

Note: Green cells indicate a visa-free access. Yellow cells indicate a visa-on-arrival policy. Light red cells indicate that incoming citizens require a prior visa to enter the country.
Source: Henley & Partners 2020, Henley Passport Index, https://www.henleypassportindex.com/passport.

Visa requirements and trade in services

The development of trade in services has contributed to the emergence of new forms of cross-border mobility as a means to supply such services. The cross-border movement of people may not account for a large share of services trade (4% of imports and exports of trade in services in the EU with non-EU partners), but is essential for international business operations.

"Movement of natural persons" constitutes one of the four modes (Mode 4) of supplying internationally tradable services in the General Agreement on Trade in Services (GATS). This refers to "the [temporary] presence of persons of one WTO member country in the territory of another for the purpose of providing a service"[3]. Different categories of workers can fall under this scope: i) intra-corporate transferees; ii) business visitors; iii) contractual service suppliers; iv) independent professionals. The duration of the temporary stay abroad can vary – from a few days or weeks in the case of business visitors, to several years for intra-corporate transferees – as long as the purpose of the stay remains services supply. While service suppliers at all skill levels are covered by the GATS, in practice movement of labour in the framework of trade in services mainly concerns highly skilled professionals, managers and business executives.

Restrictions on Mode 4 can take the form of restrictive work visa requirements, which also hinder temporary movement of service providers between UfM countries.

Measuring trade in services is challenging and data do not allow a comprehensive analysis of intra-UfM trade in services through Mode 4. All UfM member countries have made commitments under the GATS, and via bilateral Euro-Mediterranean association agreements (EMAAs) signed between the EU and non-EU Mediterranean countries, as the Barcelona Declaration also contain commitments relative to the liberalisation of trade in services. However, the inclusion of commitments on the movement of natural persons in these agreements has not been systematic. Indeed, the OECD's Services Trade Restrictiveness Index (STRI) suggests that restrictions to movement of temporary services providers are more significant compared to restrictions to other modes in most countries[4].

The EU-North Africa agreements essentially reaffirm both parties' general obligations under the WTO GATS. The agreements with Morocco and Tunisia include commitments on non-discrimination with respect

to working conditions and social security for their nationals legally working in the EU. Only the agreements with Algeria and Jordan include a specific provision on the temporary movement of workers in the context of services trade. In the case of Jordan, for instance, the agreement enables Jordanian companies established in an EU country to host Jordanian intra-corporate transferees that are considered 'key personnel'. Negotiations on Deep and Comprehensive Free Trade Agreements (DCFTAs) between the EU and Morocco were launched in 2013, followed by negotiations with Tunisia launched in 2015. Several rounds of negotiations involved the important topic on movement of natural persons. Moreover, the Trade in Services Agreement (TiSA) is currently being negotiated by 23 members of the WTO, including the EU, Israel and Turkey. The EU emphasised, similar with other EU trade agreement, the commitments to highly skilled professionals.

Indicator M3: Contribution of tourism to GDP and employment

International travel and tourism depends on the ability of people to travel freely from where they live to their destination, crossing borders and entering other countries. However, a range of factors influence travel mobility and limit the free movement of people, with adverse consequences for tourism and economic growth. Safety and security, customs and immigration, access infrastructure and aviation regulations are just some of the issues which can influence the freedom to travel (OECD, 2014[40]). Travel facilitation focuses on reducing these impediments and making travel simple and straightforward.

Visa and entry policies which control the movement of people across national borders have a significant impact on travel and tourism. There is considerable potential for smarter approaches to supporting tourism and economic growth, while simultaneously maintaining the integrity and security of national borders.

The UfM region is among the most important tourism destinations worldwide. According to the World Tourism Organisation, the Mediterranean region alone attracted 342 million tourists in 2014, representing 30% of all international tourist arrivals (UNWTO, 2019[41]). While most of these tourist flows remain directed towards Mediterranean European countries (71%), some Southern Mediterranean and South-East Europe economies have emerged as growing tourism destinations in the Mediterranean. Intra-regional tourists make up the majority of tourist flows towards UfM countries, although important gaps remain between European and non-European countries' position in intra-regional tourist flows. In 2010, 81% of tourist arrivals to the Mediterranean originated in Europe, while only 6% of tourists came from the Middle East. Moreover, the importance of intra-regional tourism in total tourism varies significantly across countries: in 2006, tourists originating from Southern Mediterranean countries represented 46% of tourist arrivals in the Levant but only 9% in North Africa.

Over the past decade, the aftermath of the Arab Spring led to a partial redistribution of tourist flows in the UfM region, with Southern Mediterranean countries losing 12 million tourist arrivals between 2010 and 2014, while tourist flows towards Mediterranean European countries increased significantly – and disproportionately – during the same period. However, more recent years have been marked by a revival in tourist arrivals in MENA destinations, which grew by 10% between 2017 and 2018 to reach 87 million, mainly from Europe and other MENA countries (World Travel and Tourism Council, 2019[42]).

This revival was particularly felt in Egypt, Jordan, Morocco and Tunisia.

Figure 4.8 and Figure 4.9 give an overview of the contribution of the travel and tourism sector to GDP and employment in UfM member states, highlighting the growing importance of this sector since 2000 in most countries. This importance is particularly marked in a few Southern and Eastern Mediterranean countries, In 2019, when considering both direct contributions as well as indirect and induced impacts, tourism accounted for over 15% of GDP in several countries and as much as 32% in Montenegro. The tourism sector also plays an important role in job creation in the region, accounting for over 10% of total employment in most Southern and Eastern Mediterranean economies. Notable exceptions to this trend are

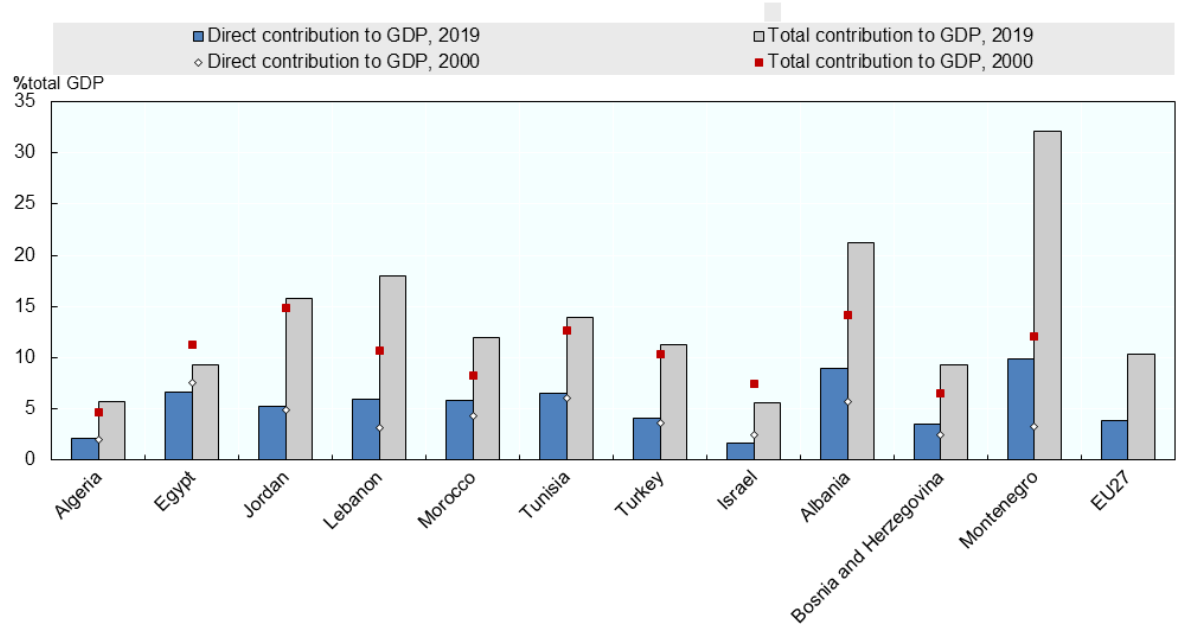
Israel, which has seen the weight of tourism in its economy decline sharply over the past two decades, and Egypt, to a lesser extent.

The importance of tourism to many UfM countries' economies reaffirms the considerable stakes of facilitating travel in the region. Reducing barriers to international travel between UfM countries can significantly contribute to countries' socio-economic development and support greater Euro-Mediterranean integration.

The importance of tourism to many UfM countries' economies reaffirms the considerable stakes of facilitating travel in the region. Reducing barriers to international travel between UfM countries can significantly contribute to countries' socio-economic development and support greater Euro-Mediterranean integration.

Figure 4.8. The weight of tourism in UfM economies: contribution to GDP

Direct and total contribution of the tourism and travel sector to GDP, 2000 and 2019

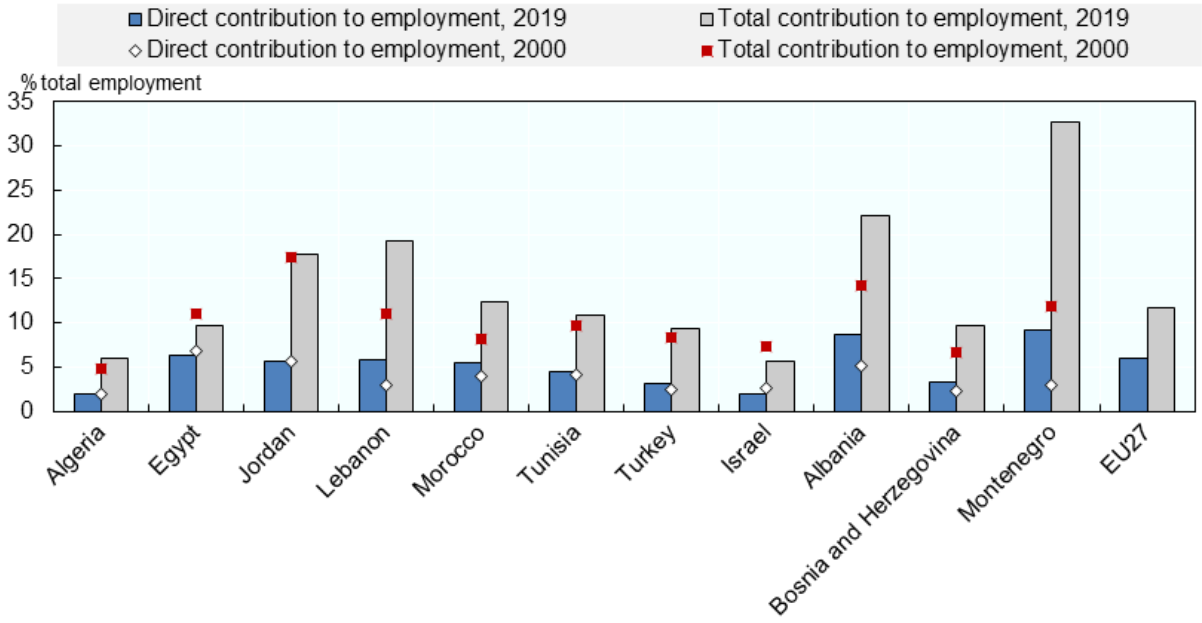


Note: Total contribution to GDP refers to the share of GDP generated directly by the Travel and Tourism sector, plus its indirect and induced impacts. Data for EU27 is from 2018.
Source: (World Travel and Tourism Council, 2019[42]); Eurostat, 2018.

StatLink https://stat.link/dvmp7g

Figure 4.9. The weight of tourism in UfM economies: contribution to employment

Direct and total contribution of the travel and tourism sector to employment, 2000 and 2019



Note: Total contribution to employment refers to the share of jobs generated directly by the Travel and Tourism sector, plus the indirect and induced contributions. Data for EU27 is from 2018.
Source: (World Travel and Tourism Council, 2019[42]); Eurostat, 2018.

StatLink https://stat.link/6zecm7

Indicator M4: Bilateral and regional agreements between UfM countries

This section gives an overview of recent developments in bilateral and regional agreements on mobility between UfM countries, which play an important role in fostering and framing patterns of human mobility at the regional level.

Mobility Partnerships between EU and third countries

Mobility Partnerships were launched by the European Commission in 2007 as a new tool to "provide the overall framework for managing various forms of legal movement between the EU and third countries" (European Commission, 2007[43]). Recognising both the importance of mobility of persons for regional integration between the EU and neighbouring countries as well as the need to enhance cooperation with partner countries to counter irregular migration, Mobility Partnerships aim at: i) expanding legal migration opportunities towards the EU; ii) supporting countries in enhancing their migration management capacities, namely through financial and/or technical assistance; iii) addressing the risk of brain drain by promoting circular and return migration; and iv) facilitating the issuance of short-term visas to nationals of non-EU partner countries.

Several Mobility Partnerships have been signed between EU and non-EU UfM countries since the launch of the instrument, starting with Morocco in 2013 and followed by Tunisia and Jordan in 2014.

These bilateral agreements can constitute an important step forward facilitating circulation of people across the region and, in particular, labour and education mobility. In fact, one of the objectives underlined in the

Mobility Partnerships was to increase qualified labour migrations from the three countries to the EU, namely by improving mutual recognition of professional and university qualifications and enhancing information provision regarding education, training and employment opportunities in the EU.

At the same time, the reluctance of other Southern Mediterranean countries, such as Egypt and Algeria, to engage in a Mobility Partnership with the EU sheds light on the limits of these instruments as an efficient framework for facilitating movement of people in the UfM region. The strong conditionality attached to the Mobility Partnerships – which require third countries to commit to the European Union's security policy on irregular migration, including by concluding readmission agreements and reinforcing border management – may constitute a barrier to the establishment of a balanced, and mutually beneficial policy tool to foster mobility. Moreover, despite ongoing negotiations on visa facilitation agreements with Morocco and Tunisia, improvements in the conditions and opportunities for both temporary travel and permanent migrations to the EU for Moroccan and Tunisian citizens are questioned by some researchers (Abderrahim, 2019[44]).

Regional and bilateral agreements between Southern Mediterranean countries

Within the Southern Mediterranean sub-region, mobility of people has been the object of several regional and bilateral agreements. Realising free movement is a key component of intra-Arab regional integration frameworks:

The League of Arab States (LAS) adopted multiple agreements to guarantee, among others, free movement of people between its member countries. These include ambitious treaties such as the Economic Unity Agreement (1957) and the Charter for National Economic Action (1980), which both envisaged the creation of a regional space that would ensure full freedom of movement for Arab citizens, including freedom of residence and employment. However, unlike in the domain of trade, where an Inter-Arab Trade Facilitation Agreement was signed in 1981, no contractual framework was signed to implement the principles of these treaties with regard to movement of people. Instead, a non-binding declaration of principles was adopted. As a result, despite efforts, in particular at the bilateral level, to lift barriers to the circulation of people in the region, implementation of concrete steps to foster full mobility of people remains lagging (UNESCWA, 2014[45]).

The Founding Treaty of the Arab Maghreb Union (AMU) in 1989 foresees the free circulation of people between its five member countries (Algeria, Libya, Mauritania, Morocco and Tunisia). However, despite efforts in this direction, shortcomings remain in the concrete implementation of measures enabling freedom of movement. Unlike other regional economic communities in Africa, the AMU has not yet adopted a Protocol on Freedom of Movement that would lay the foundations for full mobility of citizens in the sub-region. The AMU's performance on the "Free Movement of People" dimension of the Africa Regional Integration Index remains particularly weak (at 0.438 on a scale of 0 to 1) compared both to other regional economic communities in Africa and to its performance on other dimensions of integration such as macroeconomic and infrastructural integration[5].

Several Southern Mediterranean countries have adopted bilateral agreements aimed at promoting human, and more specifically labour, mobility. Table 4.6 gives an overview of the bilateral agreements on human mobility signed between Southern Mediterranean countries in the past two decades. Box 4.4 provides a more detailed account of the long-standing bilateral cooperation between Egypt and Jordan to enhance movement of labour between the two countries.

Table 4.6. Bilateral agreements on human (labour) mobility signed between Southern Mediterranean countries since 2000

Year	Signatory countries	Type
2002	Mauritania, Morocco	Agreement to promote exchanges and cooperation in vocational training
2004	Algeria, Jordan	Agreement on labour force

Year	Signatory countries	Type
2004	Algeria, Mauritania	Labour agreement
2006	Morocco, Tunisia	Agreement on residence and movement of workers
2007	Egypt, Jordan	Memorandum of understanding regarding the organisation of the migration of Egyptian labourers to work in the Hashemite Kingdom of Jordan
2012	Egypt, Jordan	Memorandum of understanding
2016	Egypt, Jordan	Labour agreement

Box 4.4. In-depth: bilateral cooperation between Egypt and Jordan on labour mobility

The multiple agreements on labour mobility signed between Egypt and Jordan offer an example of a long-standing cooperation to foster movement of people at the bilateral level. This cooperation dates back to an initial agreement signed in 1985 between the Egyptian Ministry of Manpower and Migration and the Jordanian Ministry of Manpower and Social Solidarity to facilitate and frame unskilled labour migrations from Egypt to Jordan. A subsequent memorandum of understanding (MoU) was signed in 2007, followed in 2009 by a set of regulations regarding migration for family reunification purposes. A second MoU was signed in 2012 laying out the conditions for status adjustment of Egyptian migrants of irregular status. The last labour agreement between the two countries dates back to 2016 and creates a uniform legal and administrative framework for Egyptian migrant workers in Jordan. The agreement also touches on the question of migrant workers' socio-economic integration, namely by specifying their rights and minimum wage, as well as conditions for family reunification (Zohry et al, 2020[46]). These bilateral agreements have contributed to a continuous increase in labour migration flows from Egypt to Jordan over the past decades.

Source: (IOM, 2010[19]), *Intra-Regional Labour Mobility in the Arab World*, https://publications.iom.int/system/files/pdf/alo-iom_intra-regional_labour_mobility_en.pdf

Enhancing mutually beneficial cross-border mobility

Programmes and initiatives to foster migrations

The 2000 Lisbon Strategy highlighted the key role of migrations in helping achieve the objective of making the EU "the most competitive and dynamic knowledge-based in the world" (European Commission, 2009[47]). This has supported a positive approach to migration that regards the settlement of migrants from third countries as an opportunity to address labour shortages in key economic sectors. In light of labour market needs in European countries, this discourse thus stresses the importance of enhancing the EU's attractiveness in order to leverage the potential of third-country highly qualified workers. It must however be noted that the fulfilment of this approach has been largely constrained in practice by the growing importance of a security discourse focusing on the fight against irregular migration in EU migration policy.

Nonetheless, a number of programmes and initiatives to support labour migrations both at the regional and national levels can be highlighted. At the regional level, the main instrument is the **EU Blue Card Scheme**, a harmonised and fast-track procedure to obtain an EU-wide resident permit for non-European professionals taking up highly qualified employment in an EU member state (with the exception of Denmark and Ireland). This scheme provides strong incentives for highly skilled migrants to settle in European

countries, including simplified administrative procedures for migrants and their families and equal social security benefits as host country nationals. Since its launch in 2012, the significance of the Blue Card among all work permits granted to immigrants has increased. Blue Cards accounted for 11% of all work permits in 2017 (Alcidi et al., 2019[28]), and nearly 30% of work permits issued to highly skilled workers in 2018, up from 14% in 2014 (Eurostat, 2020[48]). However, the scope of this scheme in intra-UfM migrations has so far been limited. Only three UfM countries (Egypt, Tunisia and Turkey) are among the top ten countries whose citizens were granted EU Blue Cards between 2015 and 2018, and, in absolute terms, the total number of Blue Cards issued to non-EU UfM nationals since the launch of the initiative remains low (ibid).

At the same time, some EU countries have also been developing national schemes to foster labour migrations with the Western Balkans and Southern Mediterranean countries. An example is Germany's simplification of procedures for delivering residence permits for employment purposes to nationals of the six Western Balkan countries. In 2015, the German government introduced a specific migration scheme[6] through which migrants from the Western Balkans could obtain a residency visa for a limited period until the end of 2020 without any pre-requisite other than having a valid job offer in Germany (Bither and Ziebarth, 2018[49]). In a challenging context marked by a surge in asylum seeker applications and a growing demand for foreign labour in Germany, this new scheme contributed to facilitating legal migration to fill labour market shortages, both in low- and high-skilled employment. Between 2016 and 2017, over 117 000 pre-approvals were issued under this scheme, including about half in the "helper" (low-skilled) category and 45% in the "skilled workers" category (ibid). Over a quarter (26.1%) of all visas issued in 2015-17 were issued in Bosnia and Herzegovina, while Albania and Montenegro accounted for a much smaller share, respectively 9.1% and 3.5% (Hoffmeyer-Zlotnik, 2019[50]). Although the number of long-term visas effectively issued under this scheme was lower than the number of pre-approvals, this new channel for labour migration offers an interesting illustration of how countries could promote positive labour mobility in the UfM region.

Making circular migration schemes work for all parties

Since the early 2000s, the European position on migration has seen renewed interest towards labour migration, including low-qualified, in a period of economic rebound combined with an increasingly ageing population creating significant labour needs. At the same time, the growing tensions and concerns over international migration have led to a progressive tightening of European migratory policies towards a security-oriented approach focusing on the fight against irregular migration. In this context, the concept of circular migration has gained attention as a migration policy tool to reconcile the economic imperative of labour migration with a public opinion concerns about open migration policies.

Circular migration is defined by the International Organisation for Migration as "a form of migration in which people repeatedly move back and forth between two or more countries" (IOM, 2019[5]). This cross-border circularity is not time-bound and can take place both through seasonal migrations (less than a year) as well as in the context of more long-term forms of entry; however, circular migration is by definition temporary migration and therefore implies the return of migrants to their country of origin.

The underlying assumption behind circular migration is that of a "win-win-win" situation for origin and destination countries as well as for the migrants themselves, who should benefit from better employment prospects and higher wages. The notion of return that is inherent to the concept of circular migration allows for the possibility for migrants to fill in labour shortages in destination countries during a given period, without spurring concerns of permanent settlement. At the same time, circular migration offers a solution to the issue of "brain drain" from developing countries, as human capital will be transferred back to sending countries through the return of migrants. It could even represent a "brain gain", if additional skills and competences were acquired during migration. Indeed, evidence on return migration in the Southern Mediterranean region points to significant benefits accruing to the labour markets of countries of origin,

including higher shares of entrepreneurial activity and higher levels of productivity among returning migrants (European Commission, 2010[51]).

However, it should be noted that the higher propensity to start a business among return migrants may also be due to their inability to find a formal salaried job as their time away is likely to have weakened their local social network, which is crucial for job search in many developing and emerging economies. While seasonal patterns of migration have always existed in the UfM region, the past two decades have witnessed a growing phenomenon of managed or regulated circular migrations. Regulated migrations – as opposed to "embedded" migrations, which refer to self-sustained, grassroots migration patterns – occur within the framework of institutionalised, top-down mechanisms of selection and monitoring of circular migrants (Cassarino, 2008[52]). Regulated circular migrations are to be understood as part of broader cooperation patterns between countries that are often characterised by strong differentials in terms of education, skills, labour market dynamics and development, and have a mutual interest in facilitating back-and-forth mobility of the labour force. The narrative behind managed circular migration is that of better sharing the benefits of migration between migrants by enabling a *turnover* in migrants, thus benefitting a greater number of migrants.

Since the early 2000s, circular migration programmes with Southern and Eastern Mediterranean countries have progressively been incorporated into the EU's migration management approach. In 2007, the European Commission issued a Communication on circular migration[7], recognising the potential of circular migration as a "credible alternative to illegal migration" and "contributing to a more efficient allocation of available resources and to economic growth". The Communication also sets the definition and framework for the type of circular migrations it wishes to facilitate with third countries. In this view, the EU has initiated different instruments aimed at establishing a general framework conducive to circular migrations in the UfM region, such as through the Mobility Partnerships (see earlier section on regional and bilateral agreements). In addition, bilateral circular migration projects have been developed between several EU and non-EU countries in the UfM region, in most cases targeted towards low-skilled, seasonal migrants, and largely concentrated in a few sectors such as agriculture and construction.

While circular migration programmes offer important opportunities for development, there are shortcomings in the way these schemes have been implemented in practice that limit their attractiveness on several levels. First, for employers in destination countries, hiring foreign workers in the framework of circular migration schemes represents additional costs associated with the higher turnover in workers (namely hiring and training costs). Moreover, migrants themselves have little say regarding the choice of job, employer and timing of return, exposing them to risks of exploitation and poor working conditions in host countries. This is one of the main issues with the way in which circular migration schemes are currently implemented, due to the high levels of vulnerability they entail for circular migrants – particularly for low-skilled migrants. Finally, the wins of circular migrations programmes for migrants largely depend on the availability of good economic prospects in origin countries to make return desirable, a condition often not met in many Southern and Eastern Mediterranean countries.

A number of improvements could be introduced to circular migration schemes in order to enhance their attractiveness for all parties, and for migrants in particular. Allowing longer periods of stay and/or repeated migrations by the same individual can enable employers to retain seasonal workers over an extended period, thus increasing return on the costs of hiring and training foreign workers, while providing more security and stability for the migrants themselves. An example in this regard is multi-annual seasonal work permits, such as those issued by France to enable foreign workers with a seasonal contract of at least three months to obtain a work visa that is both valid for three years and renewable. Other areas for improvement include provisions for training and upskilling of low-skilled circular migrants; portability of social security benefits; and better support services for migrants, including information on rights at work and working conditions. Greater emphasis could also be placed on providing support to migrants' re- integration in their home country at the end of their periods abroad, to incentivise return and reduce cases of illegal overstay (Wickramasekara, 2011[53]).

While the bulk of circular migration programmes in the UfM region continues to involve low- to mid-skilled seasonal workers from Southern and Eastern Mediterranean countries responding to seasonal needs in EU countries, in recent years some schemes of circular migration programmes targeting more-qualified individuals have also been implemented. These concern young professionals or higher education students, with modalities often linked to training systems. While these schemes remain limited in scope relative to other forms of migration, they provide some insights into good practices that would gain from being more widely adopted. Examples include:

- A circular migration project between Belgium and Tunisia[8] aimed at enhancing Tunisian youth employability by creating internship and apprenticeship opportunities in Belgian companies for Tunisian university students and/or graduates. The project, launched in 2018 in partnership with the International Organization for Migration (IOM) for a duration of 18 months, enabled 31 young Tunisians to work in a Belgian company (whose activities are similar to those of a comparable company in Tunisia) for a period of six months, thus gaining valuable professional experience and developing their skills and qualifications. At the end of their internship or apprenticeship, participants receive financial support for a period of five months to find employment in a Tunisian company. This initiative falls within the mutually beneficial approach of circular migration because participants, while contributing to fill labour needs in Belgium, are meant to enhance their employability in their home country, in line with the Tunisian government's broader strategy of addressing the issue of unemployment in the country. This particular aspect is key as, too often, a lack of opportunities for migrants to use their newly acquired skills in their home country limits incentives to return, thus blocking potential benefits of these circular migration schemes (OECD, 2018[54]).
- The High Opportunity for Mediterranean Executive Recruitment (HOMERe) project[9] is aimed at promoting internship mobility between countries of the UfM region for young graduates and future graduates. These internship opportunities are offered by companies operating in at least two UfM countries or with development prospects across the region. In this sense, they give youth the opportunity to acquire experience and skills that will support them in finding employment matching their qualifications in their country of origin, thereby promoting circulation of knowledge and skilled labour in the region. Nine UfM countries are currently involved in the project: Algeria, Egypt, France, Greece, Italy, Lebanon, Morocco, Spain and Tunisia. Since 2008, the project has benefitted nearly 500 UfM students, in the context of either South-North, South-South or North-South mobility.

These programmes could be replaced by a framework of Skills Mobility Partnerships (SMPs), which seek to associate migration and skills development for the mutual benefit of origin countries and host countries, as well as the migrants themselves (OECD, 2018[54]). SMPs can be translated into a large range of models, but always within the scope of organised migration channels in which the costs of training and matching are shared between the sending and receiving countries (and/or employers). Approaching circular migration schemes through the prism of SMPs can contribute to enhancing cooperation on skills development in a way that reconciles origin-country demand and destination-country demand to incentivise return and make mutually beneficial circularity a reality.

This approach to migration would benefit from being further strengthened in order to truly leverage the potential of circular migration, in particular for countries of origin, by ensuring that the latter reap some benefit of skills acquisition. Currently, circular migration schemes targeting students and young professionals remain a minor phenomenon benefitting only a limited number of individuals. In order to scale up these initiatives, further cooperation between UfM member countries is needed – as is greater involvement by employers, training institutions and regulatory bodies in the design and implementation of programmes. There is important scope to foster a framework for circular migrations that will be conducive to greater regional integration and long-term economic gains for both sending and receiving countries.

Supporting re-integration of return migrants

In order to promote sound circular migration schemes in the UfM region, a major challenge relates to the re-integration of return migrants. Adopting measures to support returnees' temporary and permanent re-integration in their countries of origin – measures that were identified as key early on in discussions around circular migration (Cassarino, 2008[55]) – continues to be a necessary condition for the successful implementation of such schemes in a way that benefits all parties.

Re-integration of returnees in the Western Balkans

The re-integration of Albanian returnee citizens is facilitated through "migration counters", as set out in the *Strategy on Re-integration of Returned Albanian Citizens 2010-15*. From 2011 to 2015, nearly 5 000 Albanian citizens approached the migration counters for social assistance on housing, vocational training, employment, entrepreneurship, and legal assistance (Vathi and Zajmi, 2017[56]).

Although recent comprehensive data on profiles of return migrants in Albania are relatively lacking, a 2013 survey conducted by the Albanian Institute of Statistics and IOM shed some light on the profile of migrants returning to Albania. It revealed that the main reasons for returning were linked to job opportunities (loss of job in country of immigration or better opportunities in Albania) and family ties. It also confirmed the importance of re-integration services in influencing returnees' decision to remain or to re-emigrate (although economic reasons prevail over social and administrative ones) and identified some limitations of the migration counters, including lack of visibility and quality of services (Albanian INSTAT/IOM, 2013[57]).

Based on the limitations, the Albanian government, with the support of IOM, has developed training modules to better identify the needs of returned migrants and provide relevant reintegration support or referral services. Information leaflets have been disseminated to increase the public's awareness on pre-departure counselling and reintegration services. Albania also reported in 2019 that the law governing the migration of Albanian citizens for employment purposes was under revision, and that the country plans to refine the services offered by the migration counters to improve their function (CMW, 2019[58]). In addition, the recent development of migration counters will also be evaluated.

The establishment of such mechanisms illustrates the country's efforts to increase the sustainability of return migration by institutionalising the re-integration process for returnees, as highlighted in the National Strategy for Development and Integration (2015-20). Meanwhile, as important as tailored re-integration services are, they are not the sole reason returnees decide to stay. Overall economic conditions in a country and level of access to health system, for example, also heavily influence return migrants' intention to re-emigrate, which implies the necessity to enhance the overall economic competitiveness of the country in a holistic way.

Re-integration of returnees in North Africa

While recent data on return migration to North Africa remains scarce, the latest available evidence from Tunisia points to relatively favourable socio-economic outcomes of return migrants. In 2014, according to OECD data, the employment rate of Tunisian returnees was higher than that of the overall population (47% against 39%), and they were slightly less affected by unemployment (12% against 15%) (OECD, 2018[59]). Moreover, previous studies had found that North African returnees were more likely to invest and/or start a business in their country upon their return, compared to their propensity for entrepreneurship before their initial emigration (Cassarino, 2008[55]). However, this may also be attributed to the over-qualification of highly-skilled returnees and/or a lack of suitable salaried employment opportunities in their country of origin, driving returnees who have the necessary resources to turn to entrepreneurship as an alternative to unemployment.

Important discrepancies exist between the socio-economic re-integration of qualified, well-off migrants, the majority of whom have returned of their own free will, and less privileged, low-skilled migrants whose return

was often compelled. This in part reflects differentiated levels of public assistance for re-integration of different categories of return migrants. Indeed, institutional support often takes the form of support for returnees' economic investments and business projects, hence primarily targeting "productive returns", to the detriment of the needs of the more marginalised category of returnees (CIFOIT/FIERI, 2019[60]).

Overall, the institutional framework on re-integration in North Africa has traditionally been limited, mostly based on bilateral social security agreements with major countries of emigration to guarantee portability of social benefits. Study conducted between 2005 and 2008 had identified a lack of institutional mechanisms to support return migrants' re-integration in North Africa. Among return migrants surveyed in Algeria, Morocco and Tunisia, less than 10% on average had reported having benefitted from public assistance upon their return (Cassarino, 2008[55]).

While efforts have since been made to enhance support for re-integrating return migrants, significant scope for improvement remains. In Morocco, funds have been made available to support returnees' productive investments in certain key economic sectors; however, these instruments apply only to certain categories of return migrants, and the number of returnees who have effectively benefitted from financial support under these funds remains extremely limited (CIFOIT/FIERI, 2019[60]). A more comprehensive framework exists in Tunisia, where several institutions have targeted schemes for return migrants. For example, the Agency for Promotion of Industry and Innovation and the Agricultural Investment Promotion Agency offer financial and fiscal benefits to Tunisian returnees investing in the country.

However, in both countries, surveys conducted with return migrants and institutional stakeholders revealed that re-integration of return migrants is not perceived as an important question at the national level. While much consideration is given to leveraging resources from the diaspora, a comprehensive and structural framework to support the re-integration of return migrants still appears to be lagging.

Finally, in the last decade important migration flows in the MENA region have been associated to situations of conflict, with concerned goverments implementing initiatives to improve employment opportunites of refugees (Box 4.5).

Box 4.5. Immigrant integration in Jordan in the context of a refugee crisis

The labour market outcomes of Jordanians, migrant workers and refugees are very much tied to each other. Jordan has historically been an important destination for migrant workers from the Southern Mediterranean, especially for low-skilled Egyptian workers. The onset of the refugee crisis in 2011 has exacerbated the complexity of labour market conditions. It is estimated that Jordan hosts 1.3 million refugees, almost 90% of whom reside outside refugee camps, competing for jobs alongside Jordanians and migrants. Within the private sector, many occupations have become dominated by specific nationalities of migrant workers in informal employment. According to official statistics (which tend to underestimate the number of non-Jordanian workers), Jordanians comprised nearly three-quarters of construction workers in 2017, with Egyptian migrants and Syrians accounting for most of the remaining quarter, filling mainly labour-intensive jobs.

The Business and Human Rights Resource Centre has documented a range of rights violations against migrants and refugee workers in the construction sector, including longer working hours; unsafe working conditions; late or non-payment; limited or no worker representation, freedom of association or access to remedy; and extortion and fraud in the context of recruitment for work.

In order to improve opportunities for formal employment and promote decent work for all in the construction sector, the Jordanian government has taken important steps with the support of the international community. The Ministry of Labour signed a Memorandum of Understanding with the Construction Contractors Association in 2017 to waive the quotas for hiring Jordanian labour in the sector. The MoU also provides Syrian employees with the flexibility to change employers, allowing for

greater mobility in sectors where occupations are seasonal or of limited duration. This privilege, however, has not yet been extended to other migrant workers, which maeate further stratification in the already segmented sector. To enhance the employability of Syrians (and Jordanians) in construction, the National Employment and Training Company and the ILO have established skill-certification programmes to upgrade participants' professional expertise and help them obtain accredited skill certificates.

With regard to support for migrant workers, in line with Jordan's commitment to the 1998 ILO Declaration on Fundamental Principles and Rights at Work and its Follow-up, the ILO will support the negotiation of new collective bargaining agreements in the construction sector in the Decent Work Country Programme (2018-22), regulating working hours, occupational safety and health in the work place, and dispute- settlement procedures. The General Federation of Jordanian Trade Unions plans to amend its bylaws to allow migrants to vote and become full members; this will allow migrant workers to lobby for equal rights and non-discrimination in the workplace, including on wage discrimination.

Source: (Razzaz S, 2017[22]) (ILO, 2018[61]) (Acaps, 2020[62])

Enhancing youth employability in the UfM region

Despite significant progress in terms of educational outcomes, challenges related to youth employability in Southern Mediterranean countries continue to constitute an important barrier to movement of people in the UfM region. As the world's second-youngest region, the Southern Mediterranean sub-region faces great challenges in providing quality employment opportunities for its young labour force, especially young women. Although in several countries (Egypt, Jordan, Tunisia) women now outnumber their male counterparts in terms of tertiary education graduates, they remain disproportionately affected by unemployment (OECD/ILO/CAWTAR, 2020[63]).

While higher educational attainment is traditionally associated with a higher probability of migrating, this is not always the case in the MENA region, where most educational systems emphasise credentials (i.e. academic or educational qualifications) rather than skills and their portability. In general, portability of skills enhances graduates' chances of finding employment outside of their countries' public sectors (World Bank, 2020[64]). However, evidence from Morocco and Tunisia points to a tendency towards increased educational attainment among migrants. As an illustration, in 2015/2016, among Tunisian migrants who had been living in an OECD host country for less than five years, 40% were higher-education graduates, compared to only 21% of those who had been settled in the country for over five years (OECD, 2018[59]).

Enhancing youth employability by equipping young graduates with the necessary skills to perform in a globalised economy, is key to enhancing labour mobility in the region and facilitating integration of young migrants in receiving countries. Transferrable skills that can serve both destination and origin countries' labour markets can enable greater participation of Southern Mediterranean youth in mobility schemes between UfM countries. This calls for enhanced investment and cooperation between countries in the area of skills development, with a particular focus on the jobs and skills of the future. Linking migration and training policies will allow the region to move towards more efficient mobility of its workers. In this view, the implication of the private sector is key to defining the professional profiles and skills that are of interest and aligning the training offer with concrete needs on the ground.

Over the past decade, efforts have been undertaken by several UfM countries to support youth employability. An example is the Mediterranean New Chance (MedNC) project[10], which aims to enhance cooperation between institutions and organisations working towards the socio-professional integration of youth across the region. Through its network of stakeholders, the project implements capacity-building activities and promotes the exchange of best practices and innovative educational and training methods to improve youth employability, in particular of women and NEETs (those who are not in education,

employment or training). Eight countries are taking part in the initiative: Algeria, Egypt, France, Lebanon, Morocco, Portugal, Spain and Tunisia.

Moving forward, it will also be important to enhance cooperation in the area of skills recognition. Indeed, mobility in the UfM region is currently hampered by the absence of regional frameworks for skills recognition that would support workers in integrating with a variety of labour markets and give employers access to a larger pool of potential candidates. Existing tools at the EU level – such as the European Qualifications Framework (EQF)[11], a translation tool that makes different national qualifications comparable in view of supporting cross-border mobility of learners and workers – are an example of good practices which would benefit from being reproduced at the UfM regional level. Bilateral agreements for mutual recognition of qualifications could also serve as possible starting points for moving towards greater harmonisation of national qualifications frameworks in the region.

Conclusions and policy considerations

Movement of people for migration in the UfM region has significantly increased over the past 25 years, with the number of intra-UfM migrants almost doubling to reach 37.1 million persons in 2019. This constituted 4.5% of the regional population, exceeding the ratio of international migrants to the global population. While in numerical terms progress of migration has been impressive, it must be noted that patterns of migration have not significantly changed. The EU continues to play a central role in migration patterns, including labour migrations, in the UfM region. The EU alone attracted more than one-half of immigrants from other UfM countries in 2019, with North Africa and the Western Balkans providing the lion's share of migrants, when excluding intra-EU migrations.

- The Western Balkans remain a massive emigration sub-region, with now 30% of its population migrating to a neighbouring EU country. Continuous efforts have been made in the region to encourage migrants and emigrants, a sizable share of whom are working-age youth, to return.
- Family migrations remain a major feature of migration patterns in the UfM, in particular between Southern Mediterranean and EU countries. Family reunification, which is relatively insensitive to the economic conjuncture, is an important factor behind the relative stability of migration patterns in the region over the past 25 years.
- France remains the most important destination for North African emigrants, due to historical ties with the sub-region. It is followed by Spain and Italy, which have witnessed significant increases in migration inflows from North Africa since 1995 as a result of geographical proximity and labour needs. A trend – more or less recent, depending on the country – of highly skilled migration from North Africa should nonetheless be noted and has contributed to a moderate diversification in migration trajectories, with countries such as Sweden, Finland and Luxembourg emerging as new destinations.

Progress has been made in terms of facilitating movement of people across the UfM region, although this has not benefitted all countries in the same way.

- Over the past 25 years, several visa facilitation agreements have been signed to enable visa-free travel, in particular between EU and Balkan countries, as a necessary – although insufficient – condition for movement of persons. However, there remains considerable scope for softening visa requirements between EU and Southern Mediterranean countries, as well as within the Southern Mediterranean sub-region.
- Several bilateral agreements have been signed between EU and non-EU UfM countries, including in the framework of Mobility Partnerships, serving as an important step forward in facilitating labour and education mobility across the Mediterranean Sea. Some Southern Mediterranean countries

have adopted bilateral agreements aimed at promoting labour mobility, within the intra-Arab regional integration frameworks.

- Since the early 2000s, the EU has been promoting circular migrations as a tool to address both labour market needs in destination countries and a number of sensitive issues linked to permanent settlement of migrants. While the design of circular migration programmes has been driven by a "triple win" narrative for origin and destination countries as well as migrants themselves, their implementation has often been detrimental to migrants' rights and working conditions, especially in the case of low-skilled, seasonal workers in sectors such as agriculture or construction. In order to address these shortcomings, countries should review the design of circular migration schemes in a way that puts migrants' rights at the centre and ensures the attractiveness of circularity for all parties – origin and host countries, employers, and migrants.
- At the same time, recent years have seen a nascent trend of mobility schemes targeting new categories of migrants including tertiary education students and young, highly skilled professionals. However, the number of migrants actually recruited through these schemes remains anecdotal among total migrations, calling for greater cooperation between countries to expand the reach of these initiatives. Expanding and integrating such programmes in the framework of Skills Mobility Partnerships can contribute to enhancing youth employability, in particular in Southern Mediterranean countries. The important challenge remains of developing sustainable mobility patterns that also support return migrants in re-integrating into the labour market in their origin countries.

Addressing the question of youth employability is crucial to diversifying patterns of migration in the UfM region. In order to make mobility schemes work in practice, and to ensure that the benefits of these schemes also accrue to origin countries, consideration should be given to policies aimed at increasing the quality of education systems and labour market opportunities in Southern Mediterranean countries. Greater recognition of skills and competencies at the regional level can also significantly contribute to enhancing mobility by making qualifications more readable and understandable across different systems in the region. In this view, UfM member countries should take steps to move towards greater harmonisation of national qualifications frameworks, building on existing tools at the EU level or on bilateral agreements for skills recognition.

- Existing programmes and schemes focusing on development and transferability of migrants' skills provide a good illustration of how EU and non-EU UfM member states are cooperating to encourage mobility of workers and learners in the region. Expanding and generalising such schemes will allow for diversification away from the predominantly low-skilled, seasonal character of labour migrations between the two shores of the Mediterranean and toward the development of new forms of labour mobility from Southern Mediterranean countries in particular. In this regard, the involvement of the private sector is key to defining the professional profiles and skills that are of interest and aligning the training offer with concrete needs on the ground. Linking migration and training policies should enable greater participation of Southern Mediterranean youth in mobility schemes between UfM countries, and more efficient mobility of workers in the region in general.
- International travel is another important form of movement of people in the UfM region. The Mediterranean region is among the most important tourism destinations worldwide, with intra-regional tourists making up the majority of tourist flows towards the region. Tourism is also a significant contributor to growth and employment in UfM countries, with particularly important weight in several Southern and Eastern Mediterranean economies. However, a range of factors linked to security and safety as well as visa and entry policies influence travel mobility and limit the free circulation of people in the region. In light of the considerable importance of tourism to the region, countries should take steps to facilitate travel between UfM countries. There is considerable potential for smarter approaches to supporting tourism and economic growth while simultaneously maintaining the integrity and security of national borders.

- One of the challenges in assessing and understanding the mobility of persons in the UfM region is the lack of comparable data over time and across the region. In particular, important gaps remain regarding data on migration by type and country of origin – as well as sex- and age-disaggregated data and data on employment by occupations and skills, working conditions and wages. Data on return migration are also lacking. Southern Mediterranean and Western Balkan countries would gain from significantly strengthening their capacity for migration-related data collection, analysis and dissemination.
- Moving forward, data collection is essential to monitoring progress in the forms of human mobility countries are seeking to promote. In particular, new indicators should be developed to assess the effectiveness of policies aimed at facilitating positive mobility patterns. As new mobility schemes are being implemented in the region, specific indicators could be developed relating to the number of programmes implemented and/or the number of individuals migrating within the framework of such programmes.

[1] The Southern Mediterranean region includes Algeria, Egypt, Jordan, Israel, Lebanon, Mauritania, Morocco, Palestinian Authority, Tunisia and Turkey.

[2] The MENA region includes Algeria, Bahrain, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Palestinian Authority, Qatar, Saudi Arabia, Syria, Tunisia, United Arab Emirates and Yemen.

[3] On GATS Mode 4, see: https://www.wto.org/english/tratop_e/serv_e/mouvement_persons_e/mouvement_persons_e.htm.

[4] See https://www.oecd.org/trade/topics/services-trade.

[5] Africa Regional Integration Index, https://www.integrate-africa.org/rankings/regional-economic-communities/amu.

[6] Section 26, sub-section 2 of the Employment Regulation (*Beschäftigungsverordnung* or *BeschV*).

[7] European Commission (2007), Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on circular migration and mobility partnerships between the European Union and third countries", COM(2007)248 final

[8] Project "Enhancing Tunisian youth employability through professional internships in Belgian companies" between Belgium and Tunisia, in partnership with the IOM. Project factsheet available at: https://belgium.iom.int/sites/default/files/Gallery/Factsheet%20Enhancing%20Tunisian%20Youth%20Employability_EN.pdf.

[9] Information on the HOMERe project is available at: https://ufmsecretariat.org/project/homere-high-opportunity-for-mediterranean-executive-recruitment.

[10] Information on the MedNC project is available at: https://ufmsecretariat.org/project/mediterranean-new-chance-mednc/#:~:text=The%20Mediterranean%20New%20Chance%20(MedNC,in%20particular%20second%20chance%20schools.

[11] Information on the European Qualifications Framework is available at: https://europa.eu/europass/en/european-qualifications-framework-eqf.

Annex 4.A. Intra-UfM migration statistics

Annex Table 4.A.1. Size of migrants and migrant-to-population ratios by countries/sub-regions, 1995-2019

Intra-UfM immigrants and emigrants (in thousands)

	UfM	BAL	EU	LEV	NA	ALB	ALG	BOS	EGY	ISR	JOR	LEB	MAU	MON	MOR	PA	TUN	TUR
1995																		
Intra-UfM immigrants	22015.1	101.3	16615.5	2086.3	194.2	58.2	45.9	43.1	83.5	669.8	1379.8	535.8	2.8	0.0	33.2	170.7	28.8	853.9
Intra-UfM emigrants	22015.1	1401.7	11679.9	1909.8	3737.8	412.0	940.1	919.4	525.5	148.0	88.0	162.7	15.8	70.4	1802.2	1659.1	454.3	2486.7
Intra-UfM immigrants to population ratio	3.2%	1.3%	3.9%	19.4%	0.1%	1.9%	0.2%	1.1%	0.1%	12.7%	30.1%	15.2%	0.1%	0.0%	0.1%	6.5%	0.3%	1.5%
Intra-UfM emigrants to population ratio	3.2%	18.5%	2.7%	17.8%	2.9%	13.2%	3.3%	24.0%	0.8%	2.8%	1.9%	4.6%	0.7%	11.3%	6.7%	63.4%	5.0%	4.3%
2005																		
Intra-UfM immigrants	27716.1	82.2	21157.9	2589.4	243.4	52.8	30.0	29.4	149.9	619.1	1818.1	616.8	2.9	0.0	35.8	154.6	24.8	921.1
Intra-UfM emigrants	27716.1	1785.9	14868.2	2538.0	5002.9	825.7	1528.7	902.6	560.1	143.8	91.1	187.3	24.8	57.7	2343.8	2259.7	545.5	2396.9
Intra-UfM immigrants to population ratio	3.7%	1.1%	4.9%	18.4%	0.2%	1.7%	0.1%	0.8%	0.2%	9.5%	31.5%	13.1%	0.1%	0.0%	0.1%	4.3%	0.2%	1.4%
Intra-UfM emigrants to population ratio	3.7%	23.9%	3.4%	18.1%	3.3%	26.7%	4.6%	24.0%	0.7%	2.2%	1.6%	4.0%	0.8%	9.4%	7.7%	63.2%	5.4%	3.5%

	UfM	BAL	EU	LEV	NA	ALB	ALG	BOS	EGY	ISR	JOR	LEB	MAU	MON	MOR	PA	TUN	TUR
2019																		
Intra-UfM immigrants	37149.0	118.5	28305.4	2941.8	312.8	40.1	37.9	22.4	171.0	587.5	2233.9	567.9	3.0	56.0	69.7	140.0	31.2	1302.9
Intra-UfM emigrants	37149.0	2089.1	21769.2	3133.0	5965.2	1010.7	1820.2	1015.1	538.4	148.3	103.3	239.7	34.8	63.3	2919.2	2790.0	652.6	2703.9
Intra-UfM immigrants to population ratio	4.5%	1.7%	6.4%	13.4%	0.2%	1.4%	0.1%	0.7%	0.2%	6.9%	22.1%	8.3%	0.1%	8.9%	0.2%	2.8%	0.3%	1.6%
Intra-UfM emigrants to population ratio	4.5%	30.7%	4.9%	14.3%	3.0%	35.1%	4.2%	30.8%	0.5%	1.7%	1.0%	3.5%	0.8%	10.1%	8.0%	56.0%	5.6%	3.2%

Note*:* This table only considers intra-UfM migration, thus migration only among the UfM member states. Ratios for UfM, BAL, EU, LEV, NA are weighted averages. BAL refers to Western Balkans, EU refers to 27 European Union, LEV refers to Levant, NA refers to North Africa.
Source*:* Authors' calculation, based on UN DESA 2019, *International Migrant Stock* (database), https://www.un.org/en/development/desa/population/migration/data/estimates2/estimates19.asp.

Notes

5 Research and Higher Education

This chapter presents the current state of regional integration in research and higher education in the Euro-Mediterranean region and discusses indicators for monitoring integration and collaboration. It is based on data on research funding (including from abroad), scientific personnel, scientific co- publications, co-inventions, student and researcher mobility stocks and flows, and the internationalisation of higher education and research institutions and infrastructure. The chapter makes the case for a more holistic approach that links international co-operation in higher education and research with national reforms to connect, at the national level, the higher education and research systems of countries with industry as a way to enhance the quality of research and knowledge spill-overs for the benefit of society and the economy. Finally, it draws attention to the need to invest in, and grant access to, digital education and research infrastructures in order to accelerate regional integration through research and higher-education policies.

Key takeaways

- Regional cooperation in research and higher education can help improve the quality of skilled labour as well as promote the diversification of economic activities. It can also help provide solutions to shared problems such as security, energy, transport and tele-communications infrastructures, clean water, and sustainable agriculture and fisheries.
- Regional integration in research and higher education requires pre-conditions to be met. Countries on both sides of the Mediterranean must invest in their own national science and technology capacities to be able to absorb foreign technology, and exchange knowledge and technologies. Building strong linkages between research, education and industry at the national level– the knowledge triangle - plays an important role in attracting higher value added foreign investments by multinational firms and in enabling international co-operation.
- Key indicators for monitoring regional integration in higher education and research show that integration in the Euro-Mediterranean region has increased unevenly in line with the growing but unequal capacity in research and higher education in Southern Union for the Mediterranean (UfM) countries and the Western Balkans.
- The intensity of research co-operation is characterized by North-South interactions and less by South-South collaboration although there are exceptions (e.g. Egypt-Saudi Arabia, Morocco-Israel). Most research co-operation is organised around physical sciences and chemistry, as well as life sciences, areas which are important to industrial development. Scientific co-operation in the environmental sciences is less strong both in the Southern Mediterranean countries and EU countries compared to other disciplines.
- Mobility of students is an important channel for regional integration in research and higher education. Mobility to EU shows a sustained increase from Southern Mediterranean countries.
- Based on co-patenting data, France and Germany are the main partners in innovation for Southern Mediterranean countries.
- Several UfM countries have increased their investments in research and development (R&D) over the past decade in particular Israel, Egypt and Algeria.
- An important challenge in monitoring regional integration and co-operation in the area of research and higher education in the Euro-Mediterranean region is the lack of data in countries that have historically low levels of investment in research and higher education.

Introduction

Recent changes to the global economy – in particular, the digital transformation that has accelerated following the COVID-19 pandemic – are modifying global production and affecting the ability of countries to follow regional integration strategies based on trade and foreign investment policies. Changes in trade patterns, the increased use of automation in manufacturing, and a trend toward regional re-shoring in sectors pose several challenges to the ability of Euro-Mediterranean and Western Balkan countries to move up the value chain and increase participation in the global economy. With the drop in trade and foreign direct investment (FDI) flows, countries must look towards structural reforms to reshape their economies (World Bank, 2020[1]). Promoting structural change in the economies of the region through regional co-operation in higher education and science will be critical to the ability of countries to seize opportunities in this changing global context.

The areas of research and higher education are not *prima facie* a direct focus of regional integration policies that aim to reduce divisions and market barriers to trade and exchange. However, as this chapter argues, complementary policies are also needed in research, higher education and innovation to accompany efforts to integrate national economies at the regional level.

Regional integration in research and higher education requires pre-conditions at the national level. For one, it requires that countries share a vision and commitment to research and education as a source of their own country's economic and social development. Without the *internal* integration of research and higher education, with industry, including manufacturing and services, within national economic systems, there is a risk that regional collaboration among scientists and universities advances scientific knowledge and strengthens educational linkages but does not contribute sufficiently to the economic development of countries in the region. As argued by (Fagerberg, 1990[2]), a science-push approach has little impact on market structure. In contrast, innovation, which comes from the interaction of science and education with the market, creates learning processes between the users and producers of knowledge and technologies, leading to productivity increases and economic growth.

It follows then that integration in the Euro-Mediterranean region requires not only removing barriers to the movement of goods, ideas and people. It also requires investment in national capabilities for science and technology, including higher education and researcher training, the development of national research funding agencies, large-scale research infrastructures, and joint research centres and laboratories – as well as research mobility programmes, dedicated national research funds for collaborative research, and R&D platforms to match supply and demand for technical services. Embracing digitalisation in research will be equally important. These investments must be significant enough to help countries solve problems through domestic research, but also sufficient to enable international co-operation in higher education and research, help attract foreign investment, and foster knowledge exchange.

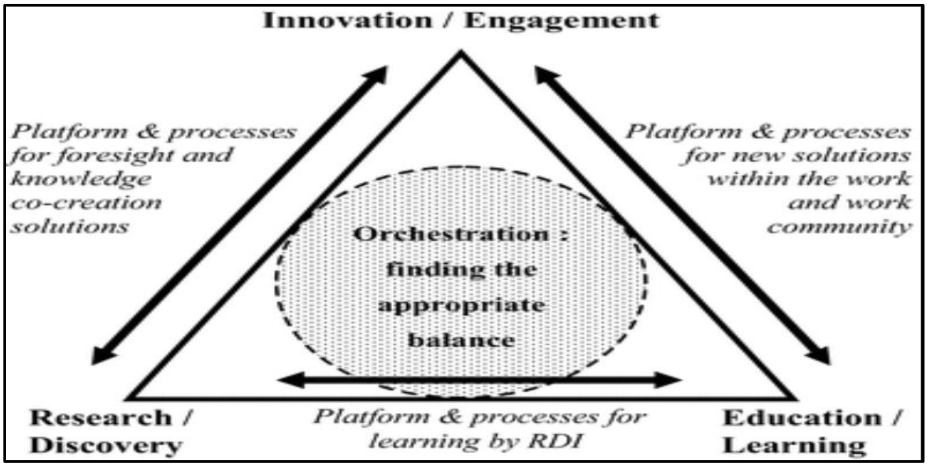
Promoting regional integration through stronger linkages between business, research and higher education: the Knowledge Triangle

Knowledge generated by education and research institutions has the potential to help local firms move up the value chain and diversify production, bringing about structural change. For this to happen, certain pre-conditions must be met. First, research and higher education must be strongly connected *within countries* at the policy level, the institutional level, and the place-based or economic geography level. This internal integration is known as the "Knowledge Triangle" (KT) (Figure 5.1). The KT concept relates to the need to improve the impact of investments in three areas – education, research and innovation – through systemic and continuous interaction. Its main idea is that creating new knowledge from research and higher education is in itself not enough to generate economic growth; rather, a constant interaction between the main actors of the KT is needed to make economically viable innovation possible. In other words, research

should be mobilised through relations with the larger society, including businesses but also entrepreneurs to transform this knowledge into tangible innovation.

The KT concept places a specific focus on entrepreneurship as a channel to diffuse knowledge and innovation generated and to foster greater societal engagement. Higher education institutions (HEIs) are being encouraged not only to educate and train entrepreneurs to apply knowledge but also to locate entrepreneurial activities on campus. This is a rational development as entrepreneurship is a main channel through which knowledge developed at HEIs find their way into innovation.

Figure 5.1. The Knowledge Triangle approach



Source: (Sjoer, Nørgaard and Goosens, 2011[3]).

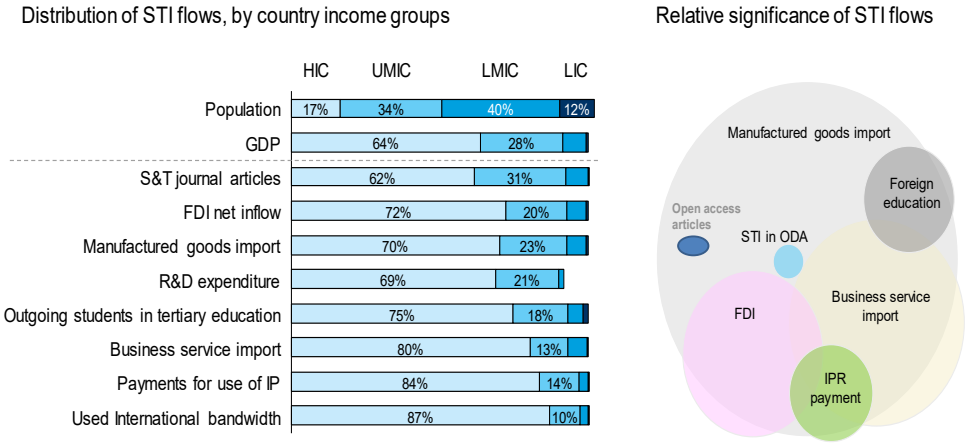
HEIs are the main backbone of the KT, because they provide key inputs for each corner of the KT but also because – depending on their specific portfolio regarding the provision of education, research and innovation – they often institutionally incorporate the KT in their internal organisation and missions.

The KT framework is not a silver bullet for integrating domestic production with research and higher education. There are both potential complementarity and potential conflicts between research, education and innovation policies. To mitigate against potential conflicts in the missions and focus of higher education and research institutions, co-ordination and dialogue is essential between the different ministries, funding agencies and institutions as well as place-based actors such as local governments (Cervantes, 2017[4]).

Internationalisation of knowledge and technology: A multifaceted phenomenon moving at different speeds

It is useful to place the internationalisation of higher education and research in the Euro-Mediterranean region in a broader context. The main channels through which knowledge and technology are diffused globally are market-based channels: net foreign direct investment (FDI) inflows, imports of manufactured products, imports of ICT and business services, payments for the use of intellectual property rights, and tertiary education abroad. Data show that even when adjusting for the technology content, imports of manufactured products are by far the largest mode of technology transfer to lower income countries (Figure 5.2). Business service imports and FDI are the second- and third-largest sources of technology flows, although FDI is less important for low-income countries. Similarly, while payments for the use of intellectual property rights (IPR) are important for high-income and upper-middle-income countries, they are much less so for low-income countries (United Nations, 2020[5]).

Figure 5.2. Distribution and significance of STI flows to advanced and developing countries



Note: HIC (high-income countries), UMC (upper-middle-income countries), LMIC (lower-middle-income countries) and LIC (low-income countries) are defined according to the World Bank Classification. STI = science, technology and innovation. GDP = gross domestic product. S&T = science and technology. FDI = foreign direct investment. R&D = research and development. IP = intellectual property, ODA = official development assistance.
Source: OECD, adapted from (United Nations, 2020[5]).

Furthermore, the literature on the internationalisation of business R&D shows that higher education and research conditions in the host countries play an important role in the location decisions of multinational firms. Supply-side factors, such as the host country's technological infrastructure, the presence of local universities and skilled personnel with links to local companies, are important drivers of R&D internationalisation among businesses (OECD, 2008[6]) (OECD, 2017[7]) (Box 5.1).

Box 5.1. The Partnership for Research and Innovation in the Mediterranean Area (PRIMA)

International co-operation in public research is generally based on mutual interest, sharing the costs of research infrastructure, and improving the quality of research publications and the training of researchers. Although co-operation in scientific networks is driven primarily by the "bottom up" priorities of individual researchers, universities and research organisations, governments provide "top down" priorities for collaboration, especially when it comes to funding for scientific and economic diplomacy such as the PRIMA programme between EU and Mediterranean countries.

PRIMA represents a major EU effort at science diplomacy – using R&D projects to try to build bridges across the Mediterranean and thereby strengthen political relations. PRIMA consists of EU member states (Horizon, 2020[8]). Associated Countries and Mediterranean Partner Countries on an equal footing basis (co-ownership, co-management and co-funding), with the participation of the European Commission. The focus of PRIMA-funded research is to help countries in the region jointly tackle environmental and social changes brought about by climate change, such as depletion of agro-food systems and water resources. The increased complexity and multidimensionality of such social, economic and environmental challenges can be tackled only through common efforts and resources with a research and innovation approach. The partnership is financed through a combination of funding from PRIMA Participating States (currently €274 million) and a €220 million contribution from the EU through (ibid). The 19 participating countries are: Portugal, Spain, France, Italy, Malta, Slovenia, Croatia, Greece, Cyprus, Turkey, Lebanon, Jordan, Israel, Egypt, Tunisia, Algeria, Morocco, Germany and Luxembourg.

Source: PRIMA (2020), http://prima-med.org.

In contrast to market flows of knowledge, flows from higher education and research are less important globally. While the percentage of students studying abroad at the tertiary level is important among upper middle and high-income countries, the share from low- and middle-income countries is much smaller than their share of gross domestic product (GDP) or population (United Nations, 2020[5]).

Education reforms in many countries that encourage accountability and autonomy, as well as competition for students and research funding, have enforced institutions to better differentiate themselves and their education market offerings. The reforms to universities have also incentivised them to develop internationalisation strategies to boost their attractiveness to foreign students.

Meanwhile, research policies over the past decade have focused on increasing the contribution of research to innovation through legislative reforms and the establishment of hard and soft infrastructure in the form of technology transfer offices or other interfaces between public research and industry. Moreover, collaboration with public research, whether in the form of science – the "push" transfer of public research results to industry or "demand-pull" initiatives such as public-private partnerships – has become the dominant discourse and a key focus of innovation policies. More recently, with the advent of digital technologies that enable co-operation, the promotion of collaborative platforms that involve a broader range of actors – not just business and public research – has become a focus of research policies, particularly in OECD countries (Box 5.2).

Box 5.2. Increasing productivity and job benefits from collaboration in research, education and innovation

Collaborative platforms are emerging forms of public-private and private-private partnerships in which participants co-develop new technologies that might have significant potential for innovation and for improving well-being. Many governments – along with partners in industry, start-ups, and civil society – are developing experimental forms of these collaborative platforms to provide better linkages between research and innovation, and to promote commercialisation.

New kinds of collaborative platforms are arising in response to a number of key trends, and there has been shift of national and international research and development programmes to more open and participatory modes. These developments in innovation policy reflect a growing awareness of the creative potential of being more inclusive not only in reaping the benefits, but also along the process of innovation itself.

Connecting across multiple jurisdictions requires different kinds of collaboration. Collaboration and data sharing across national boundaries face several difficulties due to different perspectives, disparate geography, and ethical and legal issues. Common frameworks need to set out common practices of research and data sharing (OECD, 2017a[9]). This includes the development of information technologies to promote discoverability of data and sharing, and the promotion of regulatory approaches – in close coordination with policy makers, industry, and often civil society if privacy is at stake. Policy can support public-private partnerships by providing guiding principles on ethical, legal and IT-related matters.

To address this issue, in 2011 UNESCO launched a regional initiative called NECTAR – the Network for Expanding Converging Technologies (nanotechnology, biotechnology, ICTs) in the Arab Region – which is intended to strengthen national innovation systems by promoting partnerships between academia, research and industry. It also aims to stimulate an entrepreneurial culture that links basic and new sciences and their conversion into wealth. NECTAR is meant to identify regional science, technology and innovation priorities and help member countries fulfil them.

Collaborative platforms complement regulatory approaches. They can bridge national regulatory boundaries by setting internationally agreed standards surrounding the use of emerging technologies,

and provide guidance for risks associated with their application. Collaborative arrangements can be more flexible than state regulation (Ansell and Gash, 2007[10]) (Folke et al, 2005[11]). In the context of emerging technologies, where change is fast and often unpredictable, platform-based models are flexible arrangements that can spur data-sharing and the discussion of norms around the use of converging technologies – while also supporting the development of markets and playing a role in shaping them (Gawer, 2014[12]).

Source: (OECD, 2021[13]).

Monitoring regional co-operation and integration in research and higher education

An important challenge in monitoring regional integration and co-operation in the area of research and higher education in the Euro-Mediterranean region is the lack of indicators in countries that have historically low levels of investment in research and higher education. Some UfM economies, including those that are also members or Participants in the OECD, have put in place systems for collecting, compiling, and publishing detailed data about their research and higher education efforts. Many countries in the Western Balkans, Africa, the Middle East and elsewhere have made progress in participating in the international data collection efforts of the World Bank, UNESCO or the EU, but data coverage remains incomplete, especially as regards longitudinal data (i.e.data that track the same sample at different points in time). These limitations make it difficult to measure not only the inputs and outputs of national research and innovation systems but also the linkages within and between national innovation systems.

Several countries have intensified their international activities, including explicit international co-operation strategies, and have improved data collection to assess the efficiency of co-operation. Other countries have regular indicator systems in place to map internationalisation of their national science, technology and innovation (STI) system. For example, in France, the specialist public institute Science and Technology Observatory (OST) provides regular reports on STI activities and performance, both within France and globally. The institute also publishes indicators on international co-publication on a regular basis, and issues specific, one-off studies on the co-publication profile of their research community. However, this practice is neither uniform across countries nor is it widespread and systematic. Other countries, such as Germany, have commissioned *ad hoc* studies on the internationalisation of research by looking at mobility and co-publication patterns as well as data on institutional strategies and patterns. This reflects a will to underpin strategy development process with empirical data on the individual and the institutional level (Edler and Flanagan, 2008[14]).

In terms of internationally comparable statistical indicators, the OECD and UNESCO lead the world in the production of indicators in the area of science and technology, monitoring investments in knowledge assets such as R&D, higher and vocational education, and ICTs. OECD databases also cover collaboration at the national level and internationally. The number of scientific articles co-authored by researchers affiliated with institutions located in different countries; co-invention or co-patents by inventors located in different countries – these indicators demonstrate the output, intensity and direction of the international co-operation. These indicators underpin efforts to monitor policy targets against input and output indicators. The key indicators used in this chapter are presented in Table 5.1. It should be noted that some of these indicators can be combined with other data, such as population data, to create additional indicators of efficiency – for example, the share of publications, patents, or co-authored publications per population.

Table 5.1. Key Indicators for monitoring integration and co-operation in public research and higher education

Indicator	Description	Coverage	Frequency
Indicator R1. Gross expenditure on tertiary education as a share of GDP.	It covers public and private expenditure on tertiary education as a share of GDP. Source: OECD Education Database and UNESCO	UNESCO covers most UfM member states	Annual, last available 2018
Indicator R2. Gross expenditure on R&D as share of GDP	This indicator is based on the Frascati manual definition of R&D and covers government, higher education, business and foreign funding. Source: OECD STI database UNESCO	UNESCO covers all UfM member states OECD covers northern Mediterranean UfM plus Israel	Annual, last available July 2020
Indicator R3. Gross expenditure funded from abroad	These indicators measure the share of gross expenditures on R&D (BERD) coming from international sources. Indicators are available as share of GERD or business R&D (BERD). Source: OECD MSTI indicators	OECD and Partner countries	Biannual, last available year 2018
Indicator R4. R&D personnel	This indicator covers the share of R&D personnel per population. R&D personnel are represented in full-time equivalent units. Source: OECD STI database and UNESCO Institute of Statistics	OECD and Partner countries, UNESCO covers UfM member states	Annual, last available July 2020
Indicator R5. Co-publication	This indicator measures how many scientific publications were co-authored by researchers affiliated with institutions in different countries. Data are also available by scientific field of co-operation. Source: OECD STI database Nature Index Scopus Web of Science	Partial coverage of all UfM member states	Annual, last available July 2020
Indicator R6. Co-patenting	This indicator measures the number of patent applications co-submitted by inventors in different countries. Source: OECD PATSTAT; EPO; WIPO	All UfM member states	Annual, last available year 2018
Indicator R7. Tertiary-level mobility	This indicator measures the participation of tertiary-level students in a country's education system. Source: OECD Education Statistics, UNESCO OECD international migration database	All UfM countries	Annual, last available year 2018
Indicator R8. Researcher mobility programmes	This indicator measures the number of researchers receiving mobility grants from the Marie Curie Skodowska Action (MSCA) Programme, by origin and destination. Source: EU Marie Curie Programme database	EU member states EU Associates Third Countries	Annual, last available year 2018
Indicator R9. Funding and participation in Horizon 2020 Programmes	This indicator measures the amount of funding from Horizon 2020 programmes received by associate and third countries as well as the number of countries participating in specific research co-operation programmes. Source: EU	EU member states EU Associates Third Countries	Annual , last available year 2019

* *Meso level* refers to indicators between *macro* and *micro* levels.

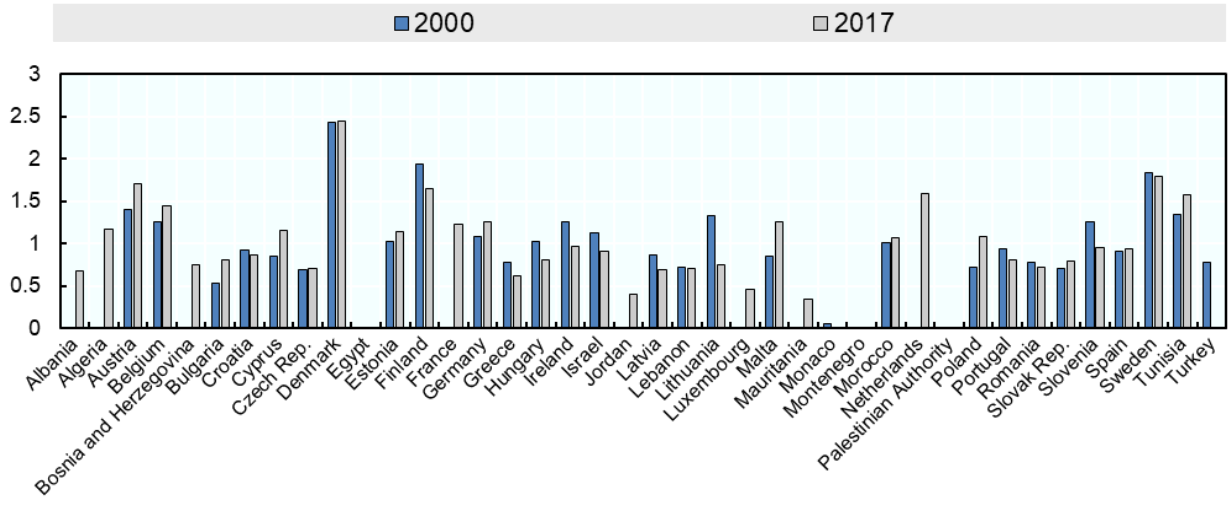
Indicator R1. Government expenditure on tertiary education as a share of GDP

Gross expenditure on tertiary education is important as it yields private and social returns. Individuals with tertiary education have higher employment outcomes and enjoy higher wages. Society benefits from higher

education as workers engage in knowledge-based activities in business, government and public research sectors, to name a few. UfM countries vary greatly in their effort to invest in tertiary education (Figure 5.3). Some countries such as Morocco and Tunisia invest a relatively high share of GDP on tertiary education. While not a direct measure of regional integration, this indicator illustrates the ability of a country to provide tertiary education to domestic and international markets. As countries become wealthier, they can invest more in higher education. At the same time as education levels rises, the potential for the emigration and mobility of tertiary level students increases, especially towards high-income countries that have established selective immigration policies to attract foreign talent.

Figure 5.3. Government expenditure on tertiary education as a percentage of GDP

Total tertiary education (ISCED 2011 levels 5 to 8), 2000 and 2017



Note: ISCED (2011) is the International Standard Classification of Education 2011; see http://uis.unesco.org/en/topic/international-standard-classification-education-isced.
Source: UNESCO Institute for Statistics (UIS.Stat) (2020), http://data.uis.unesco.org.

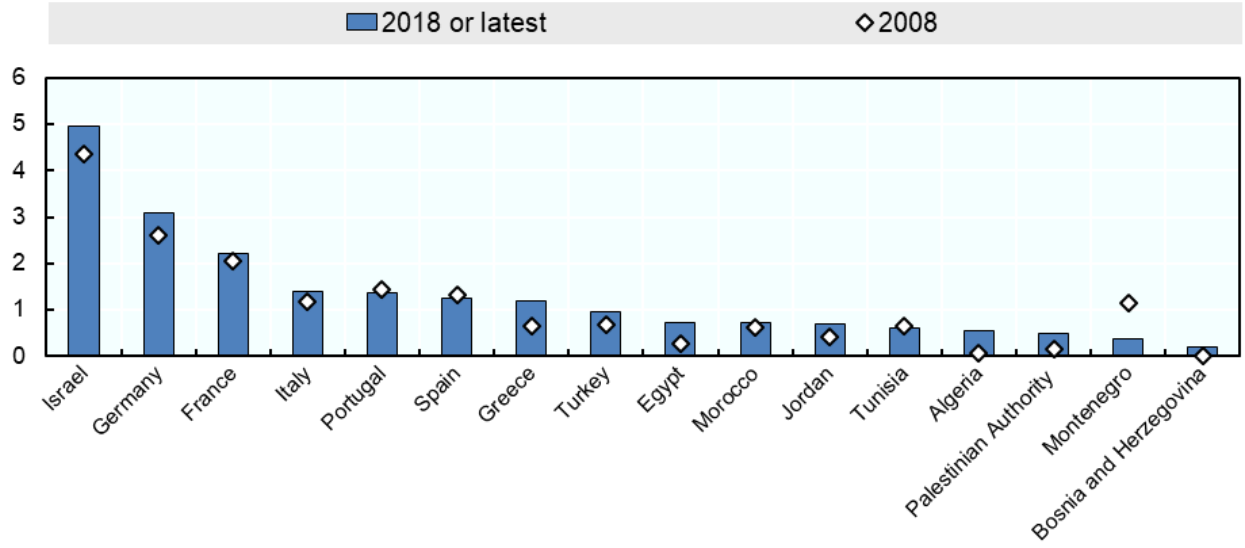
i StatLink https://stat.link/mjpn9r

Indicator R2. Gross expenditure on R&D as share of GDP

Gross domestic expenditure on R&D (GERD) is defined as the total expenditure (current and capital) on R&D carried out by all resident companies, research institutes, university and government laboratories, etc. in a country. Research is original investigation undertaken to acquire new knowledge; experimental development builds upon research to produce new or improved products or processes. OECD data on gross domestic spending on R&D are primarily collected through surveys of R&D performing organisations according to guidance in the OECD Frascati Manual. Expenditure is identified as relating to (basic or applied) research or experimental development; this can be challenging in some cases – particularly for expenditure on capital inputs to R&D or certain sectors (notably higher education) – and can cause the breakdown to be unavailable in part or in full. Data coverage in OECD STI databases is limited to UfM countries that are OECD members and participants, therefore among Southern Mediterranean countries, only Israel is covered. Figure 5.4, drawn on data collected by UNESCO's Institute for Statistics, shows that several UfM countries have increased their investments in R&D over the past decade, in particular Israel, Egypt and Algeria. In contrast, Montenegro has fallen back.

Figure 5.4. Gross domestic expenditure on R&D (GERD)

As a percentage of GDP, 2008 and 2018, selected UfM economies



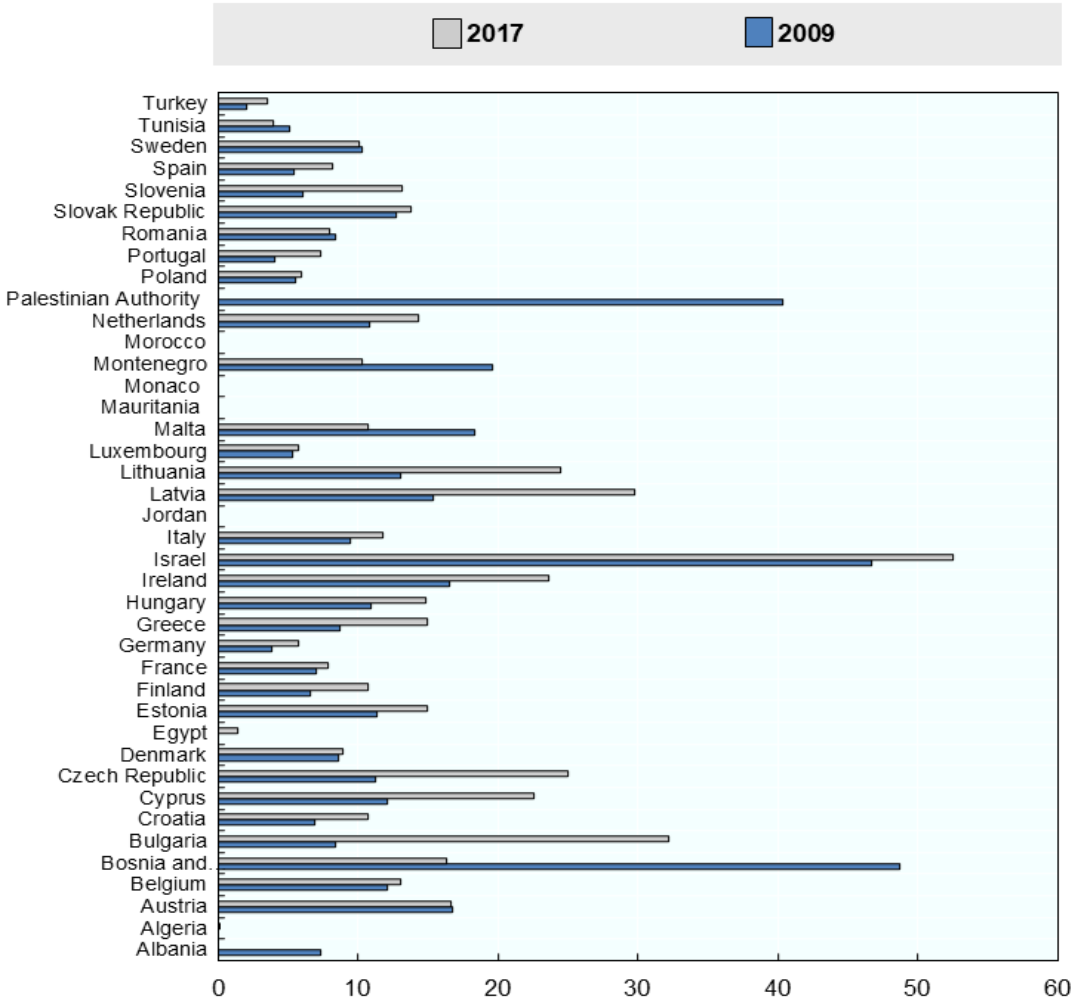
Note: For Turkey, data refer to 2008 and 2017. For Morocco, data refer to 2006 and 2010. For Jordan, data refer to 2008 and 2016. For Algeria, data refer to 2005 and 2017. For Palestinian Authority, data refer to 2013. For Montenegro, data refer to 2007 and 2018.
Source: The UNESCO Institute for Statistics (2020), UIS.Stat, http://data.uis.unesco.org.

StatLink https://stat.link/ap8grf

Indicator R3. Gross expenditures on R&D from abroad

Another indicator that can be used to monitor the co-operation between different countries in the context of regional integration concerns the share of funding coming from abroad. Figure 5.5 shows the share of R&D funded from abroad; this includes R&D performed by subsidiaries of foreign-owned companies, R&D undertaken under contract on behalf of companies based abroad, and research grants from international organisations. On average, funding from abroad plays quite an important role in the funding of business R&D. In EU countries it represents between 5 and 10% of total expenditure. In Southern UfM economies, with the exception of Israel and the Palestinian Authority, foreign funding accounts for 5% or less. The weight of foreign multinationals in the economy and in the domestic production of technology matters: in Austria and Ireland funds from abroad represented close to 15% or more of total GERD; in Israel, over 40%.

Figure 5.5 Percentage of GERD financed by the rest of the world (2009 and 2017)



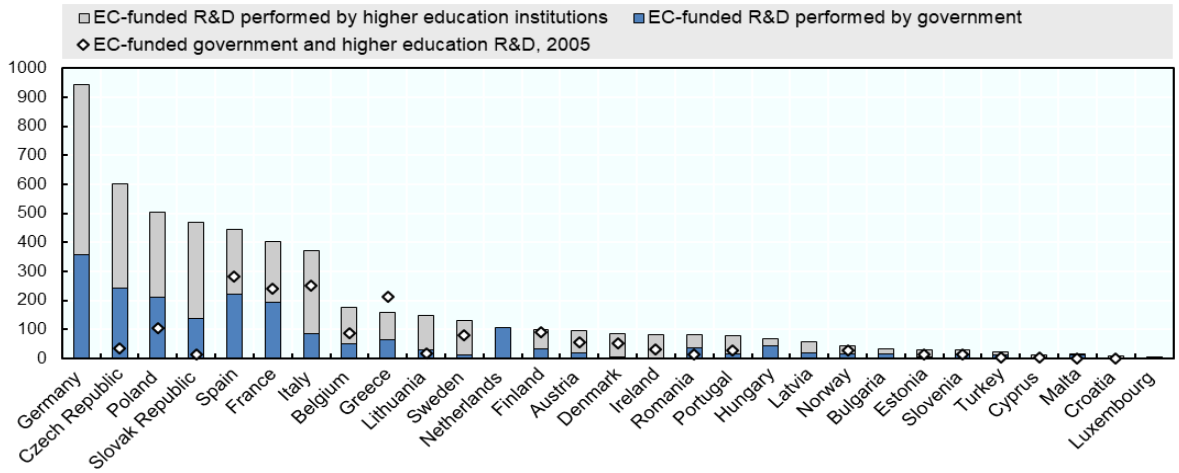
Note: 2009 data are missing for Egypt; 2017 data are missing for Albania and Palestinian Authority. Data for Jordan, Mauritania and Morocco are missing. Data for Algeria are available but the values are very low and not shown.
Source: UNESCO Institute for Statistics (2020), http://data.uis.unesco.org.

StatLink https://stat.link/munhd3

Especially important for R&D performed by higher education institutions and government research organisations are funds provided by the European Commission, the largest sums of which flow to Germany and the United Kingdom. These play a more important role in the United Kingdom, underpinning 7.4% of higher education and government R&D, compared to 3.9% in Germany – a share larger than that of any other Western European country, apart from Greece or Ireland (Figure 5.6). Indicators of large-scale international programmes – such as the EU Horizon Programmes, EUREKA or COST, and Joint Programming Initiatives (JPIs) – may also be open to associate and third countries and contain data on linkages between institutions in different countries.

Figure 5.6. European Commission funding of government and higher education R&D in Europe, 2015

EUR million PPPs, 2010 prices



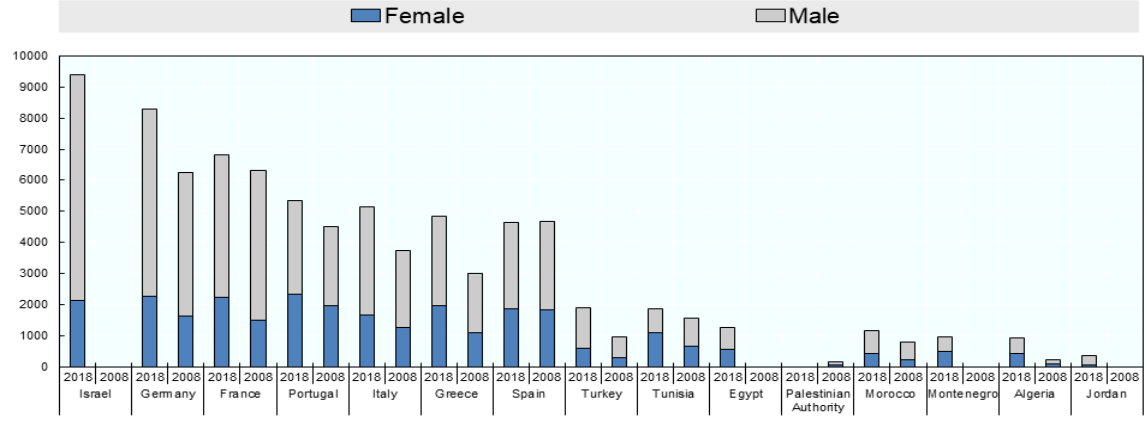
Source: OECD Research and Development Statistics Database, http://oe.cd/rds; Eurostat, Statistics on Research and Development; Eurostat, PPPs for ESA 2010 aggregates, 2018.

StatLink https://stat.link/304mql

Indicator R4: R&D personnel

Research and development (R&D) personnel include all persons employed directly in R&D activities, including technicians and support staff as well as researchers. Researchers are defined as professionals engaged in the conception or creation of new knowledge. R&D personnel are represented in full-time equivalent units defined as the ratio of working hours actually spent on R&D during a specific reference period (usually a calendar year) divided by the total number of hours conventionally worked during the same period by an individual or a group. Figure 5.7 provides a measure of the importance of the research workforce in the economy. With a few exceptions, male researchers are predominant across countries of the UfM region.

Figure 5.7. Total R&D personnel per million inhabitants, by sex, 2008 and 2018, in selected UfM economies



Note: For Israel, data refer to 2012. For Greece, data refer to 2007 and 2018. For Turkey, data refer to 2008 and 2017. For Tunisia, data refer to 2009 and 2018. For the Palestinian Authority, data refer to 2008 and 2013. For Morocco, data refer to 2008 and 2016. For Algeria, data refer to 2005 and 2017. For Jordan, data refer to 2015.
Source: UNESCO Institute for Statistics (2020), http://data.uis.unesco.org.

StatLink https://stat.link/8ctuw6

Indicator R5: Co-publication

International co-authorship of scientific publications is defined at the institutional level. A scientific document is deemed to involve an international collaboration if there are institutions from different countries or economies are present in the list of affiliations reported by single or multiple authors. Most estimates come from private databases such as Scopus[1] and the Web of Science[2]. The analysis typically comprises the absolute numbers as well as the share of international co-publications out of all publications and out of all co-publications. Co-publication analysis shows the relative importance of international collaborations that lead to tangible outputs (publications) and the nature of these collaborations in terms of countries and disciplines. Some research fields, however, are more prone to co-publication than others. Indeed, some scholars have postulated that subject-specific cultures affect collaboration patterns and spatial dependencies (Henneman et al, 2012[15]).

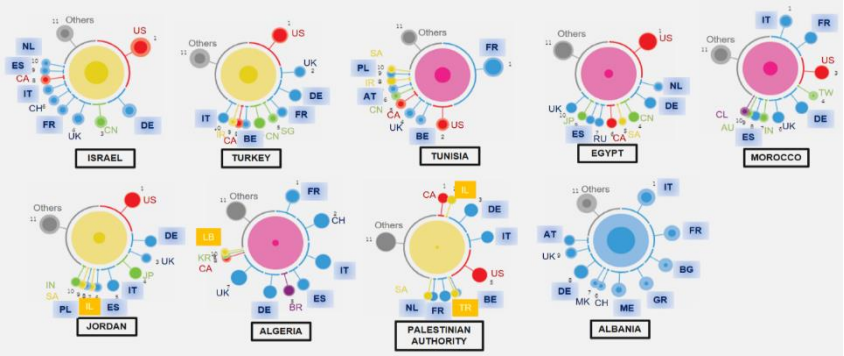
Co-authorship measures are robust, probably more so than simple output figures (e.g. number of publications, either in absolute or in relative measures). Nonetheless, bibliometric indicators raise many questions, such as the relationship between co-authors and their institutions. Many scientists hold multiple affiliations, for example.

An analysis of co-publishing based on the Nature Index shows that scientific co-operation is characterised by North-South interactions and less by South-South collaboration, although there are exceptions (Egypt-Saudi Arabia, Morocco-Israel). Most scientific co-operation is organised around physical sciences and chemistry, as well as life sciences, areas that are important to industrial development (in particular the chemicals and petroleum industries). Scientific co-operation in the environment is less pronounced in both the Southern Mediterranean countries and EU countries compared to other disciplines (Figure 5.8). The data also show that, amongst UfM economies, Southern Mediterranean economies collaborate with four to seven other UfM economies out of their top ten collaborators: Albania (8); Israel (6); France and Germany (8 out of 9 southern UfM economies) followed by Italy (7) and Spain (5). In particular, in the field of chemistry, Algeria and Tunisia collaborate with France and Jordan collaborates strongly with Germany and the Czech Republic. In the earth and environment fields, Tunisia collaborates mainly with France. In the life sciences, Morocco collaborates mostly with France while Albania collaborates mainly with Germany and the United Kingdom. A breakdown for the physical sciences shows that Tunisia collaborates mainly with France.

Although scientific collaboration is strongly correlated with scientific and technological specialisations in countries, this does not mean that specialisations are static (OECD, 2017[7]). Indeed, publication data show that between 1981 and 2014 the disciplinary focus in chemical and petroleum engineering in Southern Mediterranean Middle East and North Africa (MENA) countries has waned, while there has been modest growth in the life sciences (Afreen S et al, 2016[16]). Although changing specialisations require time and investment in research equipment, institutions and human capital, the experience of OECD and former developing countries such as Korea show that specialisation patterns are shaped by higher education, research, and innovation policies, including those that encourage international scientific co-operation.

Figure 5.8. Top 10 overall collaborators among Southern Mediterranean UfM economies and European UfM countries

1 July 2019 to 29 June 2020

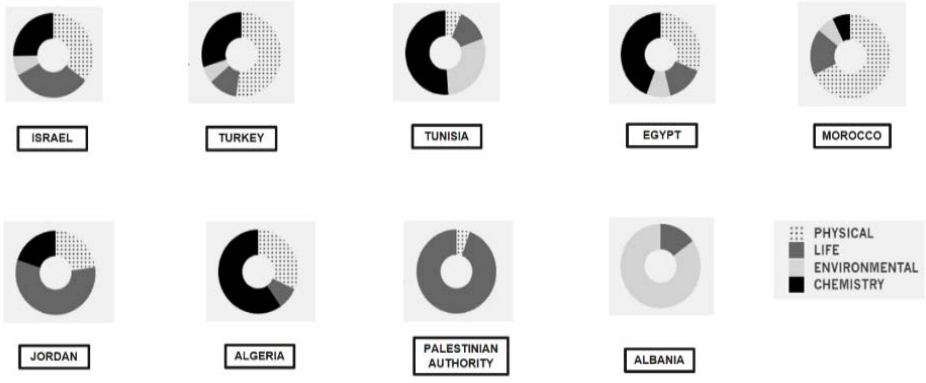


Note: Outside each circle, UfM countries are identified using coloured boxes.
Source: OECD based on NatureIndex.com, https://www.natureindex.com/institution-outputs/france/organisation-for-economic-co-operation-and-development-oecd/53a254c1140ba0165d00000a

Co-publication data can also be analysed by field of study. Figure 5.9 and Figure 5.10 show the co-publication profiles of countries in the Southern and Northern UfM economies, respectively. Generally, profiles reflect the comparative advantage of countries in scientific production, which is itself correlated with research priorities and industrial specialisations or niche strengths. Countries such as Albania, Algeria, Egypt and Tunisia have a strong co-publication focus in chemistry. Morocco and Tunisia also have strong pharmaceutical and food industries that rely on inputs from chemistry. Israel, Italy, Morocco and Turkey co-publish in the physical sciences; the Palestinian Authority and Jordan co-publish in the life sciences. Northern UfM economies have a more diversified pattern of co-publication and a greater share of co-publication in the life sciences, reflecting the growing share of research funding in the health sciences in many EU and OECD countries. Co-publication figures broken down by subject for the Southern UfM countries show that physical sciences are proportionally higher in Israel, Morocco and Turkey, while the earth and environmental sciences are high in Albania and chemistry is high in Algeria, Egypt and Tunisia.

Figure 5.9. Main areas of co-publication of Southern UfM countries, by subject

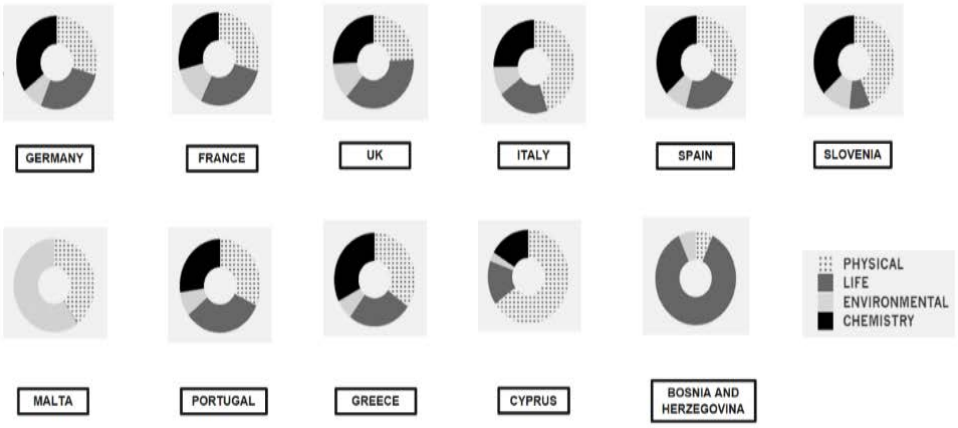
1 July 2019 to 29 June 2020



Note: These charts show collaboration with all countries (not only with Southern UfM countries).
Source: OECD based on NatureIndex.com, https://www.natureindex.com/institution-outputs/france/organisation-for-economic-co-operation-and-development-oecd/53a254c1140ba0165d00000a

Figure 5.10. Main areas of co-publication of Northern UfM countries, by subject

1 July 2019 to 29 June 2020



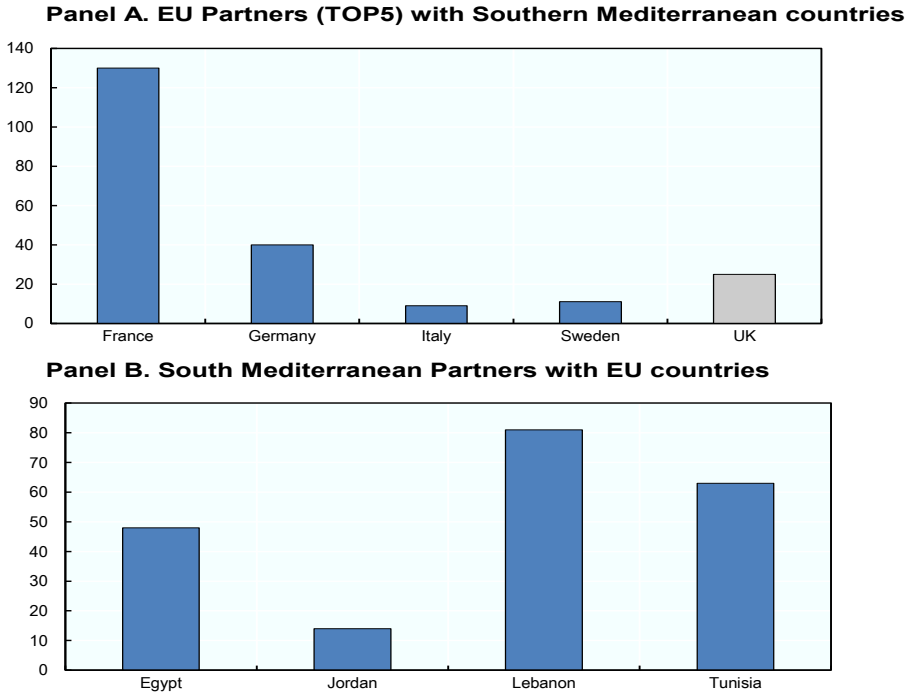
Note: These charts show collaboration with all countries (not only with Southern UfM countries).
Source: OECD based on NatureIndex.com , https://www.natureindex.com/institution-outputs/france/organisation-for-economic-co-operation-and-development-oecd/53a254c1140ba0165d00000a

Other indicators try to capture the relations established between different fields and between different institutions. These cognitive and relational indicators are usually more complex (Morini C et al, 2013[17]). Using co-publication data allows the development of network maps to illustrate the intensity of collaboration among partners. For instance, (Research Trends, 2010[18]) showed the relative strength of the collaboration among countries of the Organisation of Islamic Countries (OIC) during the period 2004-2008. Egypt appeared clearly as a hub connecting outliers. The network map also showed that OIC nations collaborated along geopolitical lines. Importantly, network maps also reflect the important role that individual researchers play (rather than governments and scientific organisations) in co-operation.

Indicator R6. Co-patenting

Co-patent analysis has been used to characterise the growth of international cooperation and patterns of partnerships (Guellec, D. and van Pottelsbergehe, 2001[19]). Patents are an indicator of inventive activity and a proxy for innovation. The number of patents per population in a country is indicative of its position in the global innovation ecosystem and the status of its knowledge economy. Countries with comparatively high intensity of patents per population are better able to take advantage of globalisation. International co-patents are measured as the share of patent applications with at least one co-inventor located in a different economy in total patent applications submitted domestically. Data on international co-patenting can be sorted by sectors, technical fields and by firm size (i.e. SMEs). Figure 5.11 shows that the main EU partners collaborating with Southern Mediterranean countries on inventions are France, the United Kingdom and Germany. The main co-inventing partners in the Southern Mediterranean countries for EU countries are Lebanon, Tunisia and Egypt, where co-inventions in the chemical and oil industries, light manufacturing, and business services are important.

Figure 5.11. Co-inventions between European and Southern Mediterranean countries, PCT (2008-16)



Note: During the period covered by these data, the UK was a member of UfM and the EU and is presented as such in this graph Panel A shows number of PCT co-application, between Southern Mediterranean countries (Egypt, Jordan, Lebanon and Tunisia) and each of EU countries: France, Germany, Italy, Sweden, and UK. Panel B shows number of PCT co-applications between EU countries: France, Germany, Italy, Sweden and UK, and each of Southern Mediterranean countries.
Source: OECD Patent Database (2020). https://www.wipo.int/pct/en

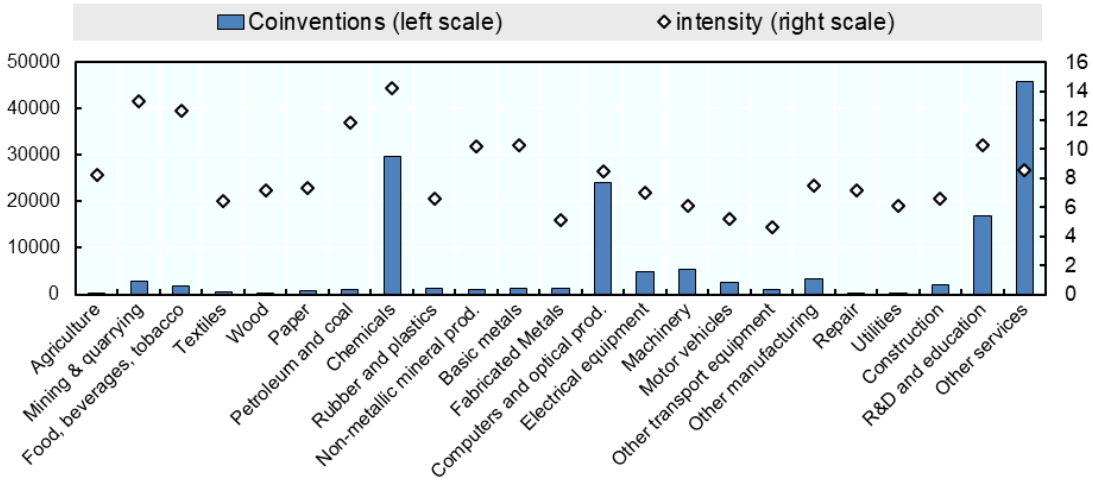
StatLink https://stat.link/nqogz0

Important differences in co-invention exist across industries, reflecting the fact that some industries show a higher propensity to patent and a higher proportion of international co-invention (Figure 5.12).

Generally, a large number of international co-inventions are observed in industries such as chemicals, electronics and business services (Debacker k and Flaig D, 2017[20]). Other industries with a significant number of international co-inventions are machinery, whole/retail trade, hotels and restaurants. Intensities (international co-inventions as a percentage of PCT patents) show a somewhat different pattern, with high intensities in a number of industries that have a relatively small number of PCT patents (e.g. agriculture, mining, food and financial intermediation). For the other industries, the intensity varies between 4 and 10%.

Figure 5.12. International co-invention across industries, absolute numbers and intensity

1995-2019



Note: Intensity is measured as the number of international co-inventions expressed as percentage of the total number of PCT applications.
Source: Calculations based on OECD, STI Micro-data Lab: Intellectual Property Database, http://oe.cd/ipstats, and ORBIS©, version 2.2020, Bureau van Dijk, May 2021.

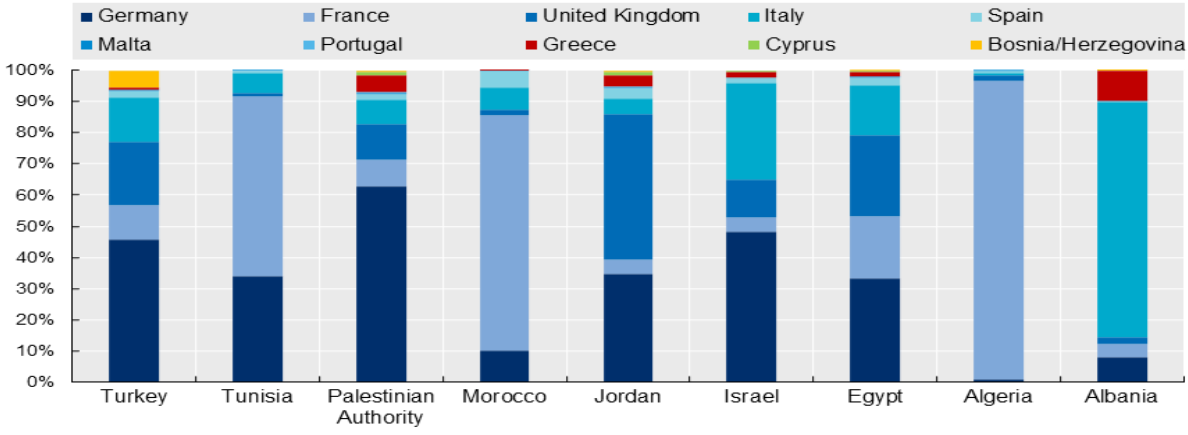
StatLink https://stat.link/lgfu1i

Indicator R7. Tertiary-level mobility

Data from UNESCO show that, amongst UfM countries sending 10 000 students, Albania sends most of its students to Italy; Algeria, Morocco and Tunisia send most to France; and Turkey sends most to Germany. Figure 5.13 shows that, amongst UfM countries receiving more than 10 000 students, France receives most of its foreign students from Morocco and Algeria, Italy receives most from Albania, and Germany receives most from Turkey and Tunisia. The United Kingdom receives most from Morocco, Egypt and Jordan (Figure 5.14).

Figure 5.13. International mobility of tertiary level students by country of destination, from Southern UfM to Northern UfM countries

As a percentage share of the total number, 2018

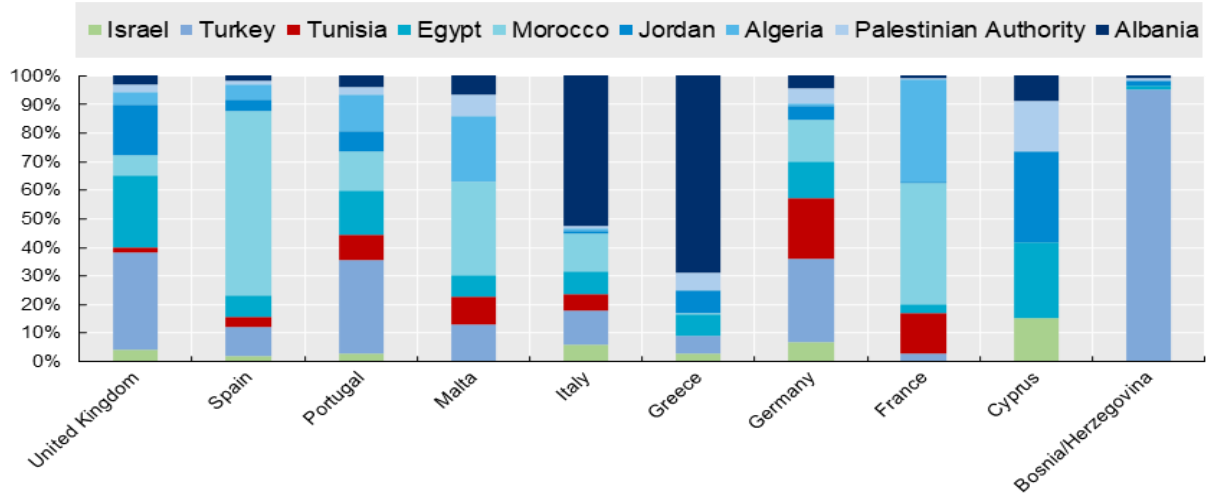


Note: During the period covered by the data, the UK was a member of the UfM and the EU, and is presented as such in the graph.
Source: OECD, based on UNESCO data "Global Flow of Tertiary-Level Students", http://uis.unesco.org/en/uis-student-flow.

StatLink https://stat.link/sx7unm

Figure 5.14. International Mobility of Tertiary Students by origin from Southern UfM to North UfM countries

As a percentage share of the total number, 2018

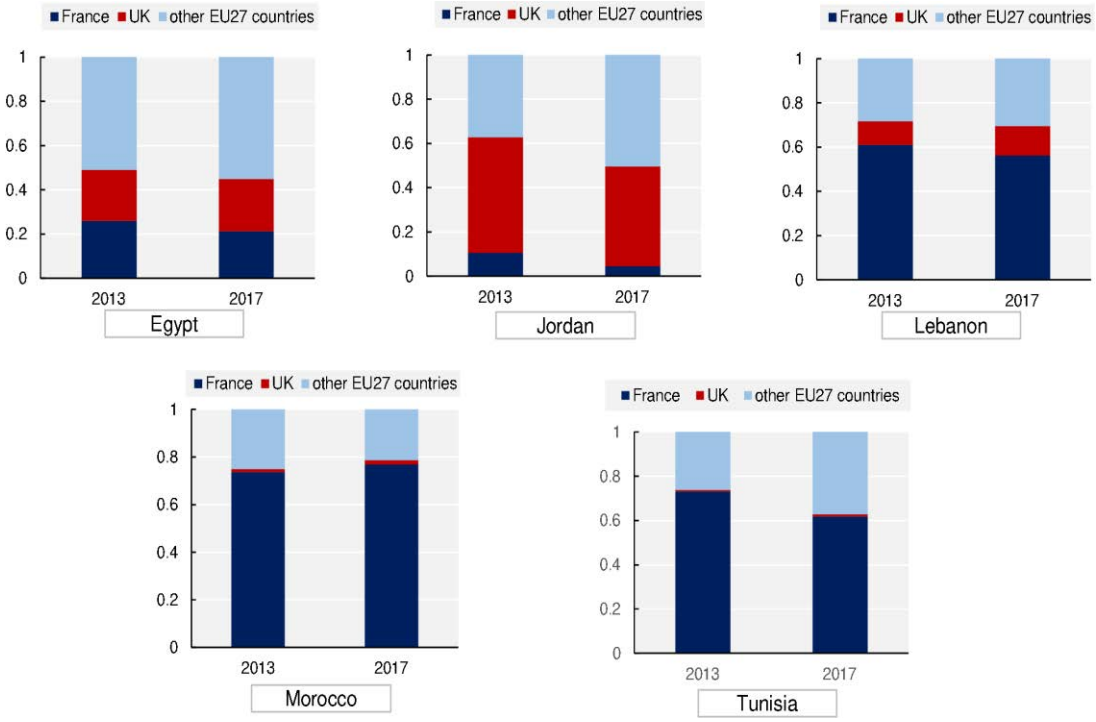


Note: During the period covered by the data, the UK was a member of the UfM and the EU and is presented as such in the graph.
Source: OECD, based on UNESCO data "Global Flow of Tertiary-Level Students", http://uis.unesco.org/en/uis-student-flow.

StatLink https://stat.link/

Figure 5.15 shows the ratio of students into the United Kingdom or France to the total of Europe in 2013 and 2017. Amongst five southern UfM countries (Egypt, Jordan, Lebanon, Morocco and Tunisia), the ratio of the United Kingdom dropped in Jordan from 2013 to 2017. Similarly, that of France dropped in Tunisia, Egypt and Lebanon. In contrast, that of France increased for Morocco. In France and the United Kingdom, the ratio of the Southern UfM countries except Morocco fell from 2013 to 2017.

Figure 5.15. The ratio of students from five UfM countries in France or the United Kingdom to the total of Europe



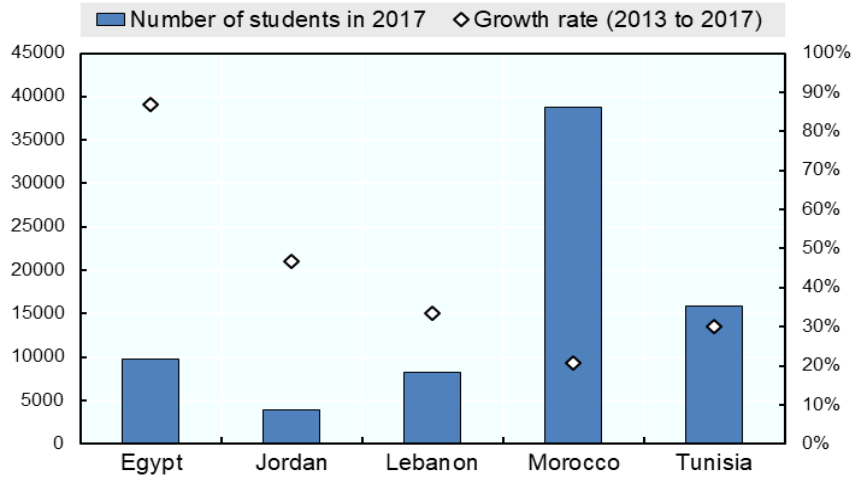
Note: During the period covered by the data, the UK was a member of the UfM and the EU and is presented as such in the graph. Europe includes EU27 countries. Total of Europe = 1
Source: OECD.Stat 2020, https://stats.oecd.org,

StatLink https://stat.link/s2mg3l

Figure 5.16 shows that among students from five UfM countries (Egypt, Jordan, Lebanon, Morocco and Tunisia) in Europe in 2017, the largest share came from Morocco (40 000). Egypt experienced the highest growth rate between 2013 and 2017 (more than 150%) following the economic and political changes in the country.

Figure 5.16. Number of students enrolled in different education programmes of Europe, by country of origin

Number of students and growth rate 2013-17



Note: Europe includes the United Kingdom and the following EU countries: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Netherlands, Poland, Portugal, Slovak Republic, Spain, Sweden, Estonia, Latvia, Lithuania, and Slovenia.
Source: OECD.Stat 2020, (https://stats.oecd.org),

StatLink https://stat.link/5kgb9s

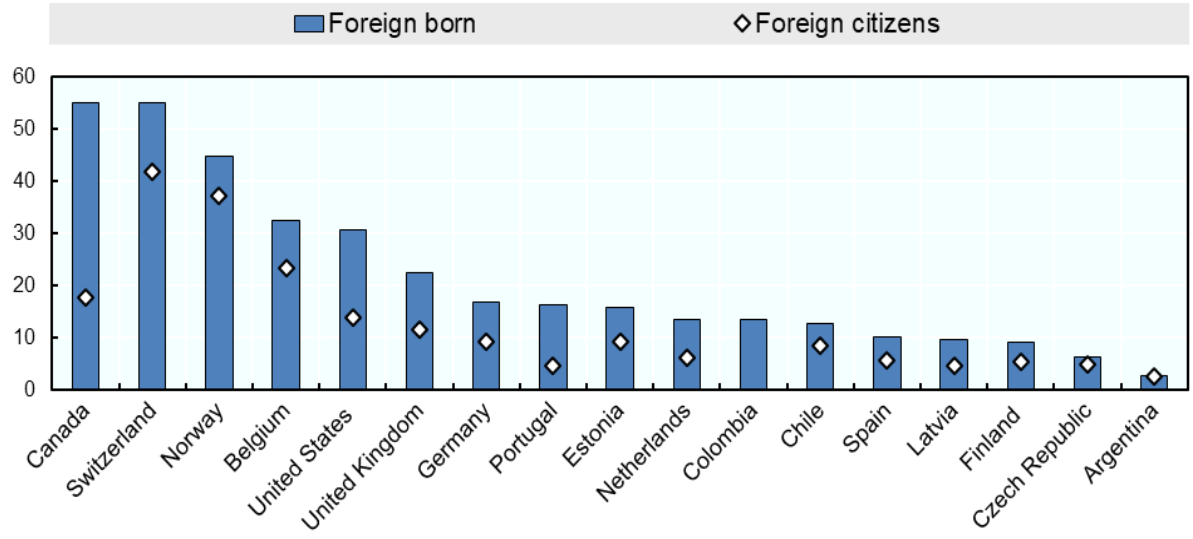
Careers of Doctorate Holders

In many countries, indicators of "researchers" remain sparse because researcher are not a unique statistical category. The **OECD Careers of Doctorate Holders** project began collecting indicators to map the stocks and flows of PhDs. These indicators include (i) the circulation of doctoral researchers within the population of OECD countries and (ii) inflows of non-OECD researchers into the OECD (country of origin of non-OECD doctoral candidates in OECD universities; ratio of third-country to non-OECD doctoral candidates; etc.) (Auriol L et al, 2013[21]). At the national level, several countries (e.g. France, Portugal, Spain and the United States) conduct ad hoc surveys of their PhD holders.

A new survey of doctorate holders in France, for example, supports the notion of circular mobility of PhDs. Approximately 56% of PhDs who earned their doctorate in France in 2014 were employed in Europe (outside France) while 30% were employed in Africa in 2017, suggesting circular migration following doctoral education received in France (MESRI, 2020[22]).

Data from the OECD Education Directorate in Figure 5.17 show the share of doctoral students who are foreign-born or foreign citizens in a selected number of OECD and partner countries. This is an indicator of the stock rather than the flows of international PhD mobility; however, the coverage is limited to OECD countries and a select number of Partners. Many factors at the individual, institutional, national and global levels drive patterns of international PhD mobility. These include personal ambitions and lack of PhD programmes at home. This was the case, for example, in Korea in the 1980s and 1990s, when many students went abroad for PhD training in the United States.

Figure 5.17. Share of foreign-born and foreign citizen doctorate holders in the population, selected OECD and partner countries, 2016



Note: Data for Chile, Latvia and the United States refer to 2015. data refer to 2015; Finland data refer to 2014. data refer to 2014; Netherlands data refer to 2013 data refer to 2013.
Source: OECD data collection on Careers of Doctorate Holders (2017), http://oe.cd/cdh

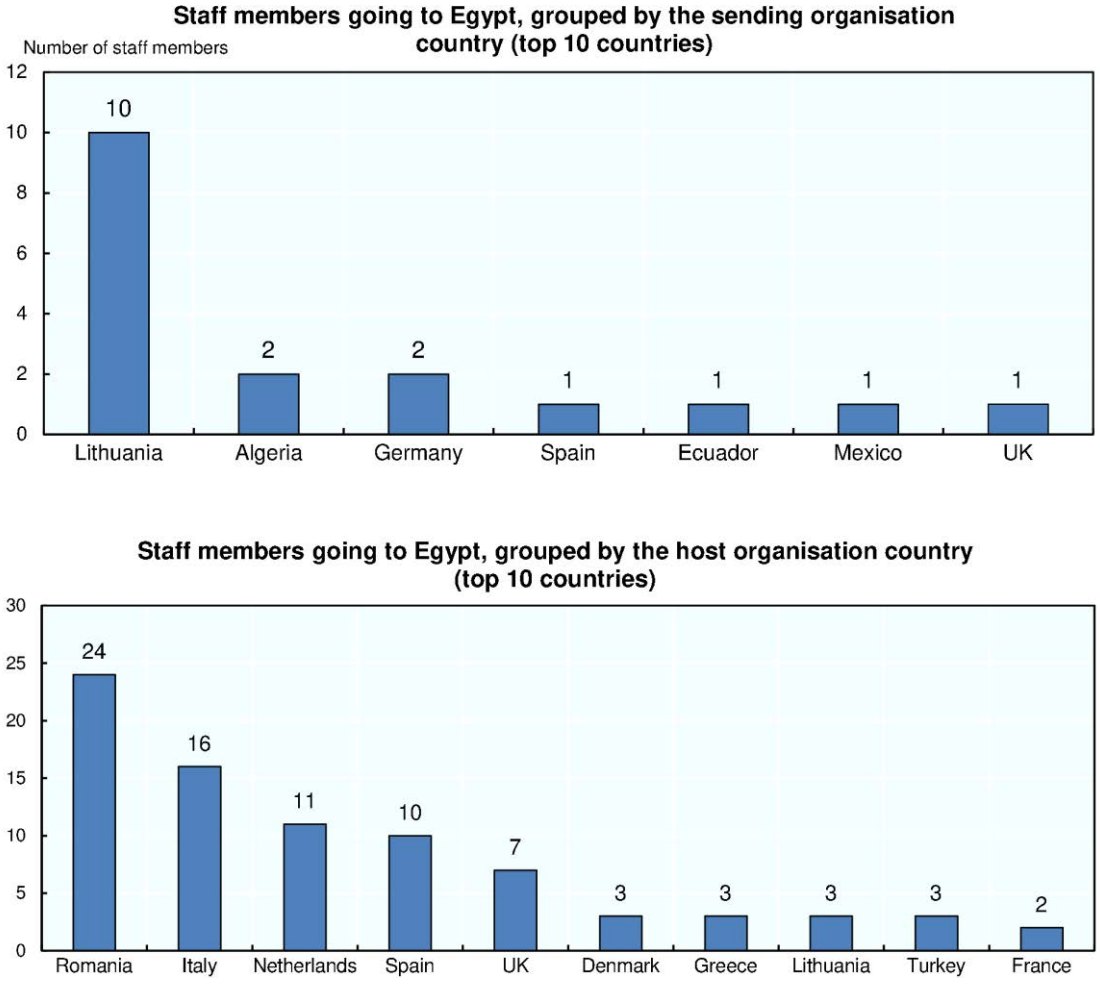
StatLink https://stat.link/btc6ig

Indicator R8. Researcher mobility programmes

Regional integration and co-operation can also be observed through researcher mobility programmes. However, researcher mobility, in contrast to the mobility of highly skilled migration, is a smaller-scale phenomenon (Box 5.3). Some OECD countries have special visas for scientists and researchers, including for scientists fleeing conflict zones. Meanwhile, data for many UfM countries are inadequate.

One of the largest and most emblematic research mobility schemes is the EU's Marie Skłodowska-Curie Actions (MSCA), a mobility fellowship that supports researchers at all stages of their careers, regardless of age and nationality. Researchers working across all disciplines are eligible for funding. The MSCA also supports co-operation between industry and academia and innovative training to enhance employability and career development. MSCA fellowships are open to UfM countries that participate as "Affiliate" or "Third Country" members. The data from the MSCA can be longitudinal or cross-sectional. Figure 5.18 illustrates the mobility of MSCA professional staff fellows between Egypt and other countries participating in the MSCA.

Figure 5.18. Research and Innovation Staff Mobility between Egypt and other countries in the Marie Curie Fellowship Programme in 2019



Source: European Commission, H2020 MSCA Country Fact Sheet for Egypt, https://ec.europa.eu/research/mariecurieactions/sites/mariecurie2/files/msca-country-profile-egypt-2019_en.pdf.

StatLink https://stat.link/hmsong

Box 5.3. Mobility of Highly Skilled Workers

While mobility of highly skilled workers is covered in Chapter 4 of this report, the issue remains relevant for monitoring knowledge networks of entrepreneurs. Existing research has largely focused on the analysis of specific categories of highly skilled migrants, such as those in human resources in science and technology (HRST); it finds evidence of the benefits of foreign HRST migrants for receiving countries in the OECD area (Guellec D. and Cervantes, 2008[23]).

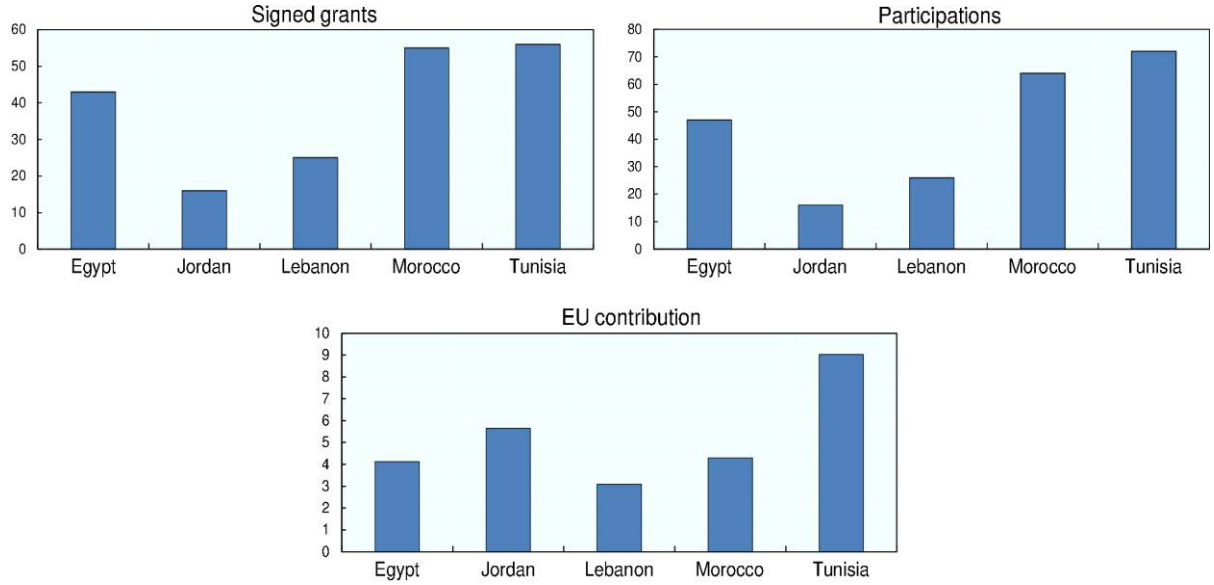
In addition, several studies find that migrant entrepreneurs have a positive impact on trade between the home and host countries. Estimated effects vary considerably, ranging between 0.1% and 3.5% of increased trade due to a 10% increase in total migrant stock in the host country (Hatzigeorgiou A, 2010[24]). In another study, (Mahroum S et al., 2013[25]) finds that a migrants from MENA countries made significant contributions to science and engineering in the United States. Based on the data of 2,500

MENA individuals with patent documents from the World International Property Organization (WIPO), the study finds that the share of inventors in total US inventive activity with a MENA background has increased considerably in the last 20 years. MENA inventors in the United States concentrate in California and tend to specialise in computers, communication and software, as well as in medical and veterinary sciences. The study concludes that some countries, such as Saudi Arabia and Turkey, have contributed more to patenting activities than other nationalities such as Iran, which have a higher number of migrants in the United States, for historical reasons.

Conventional wisdom holds that the transfer of highly educated people from one country to another (commonly referred to as "brain drain") will lead to a loss of productive and innovative capacity of the sending country. More recently, the concept of "brain circulation" has attracted policy attention since the temporary and circulatory migration between home and abroad may be beneficial to the sending countries. Individuals may transfer the knowledge they acquire to their home country and maintain networks abroad; they often return to the home country after a period abroad and will likewise transfer knowledge. In order to maximise the benefits from brain circulation, countries need to implement policies that ensure sufficient absorptive capacity. In particular, returning highly skilled professionals should be able to integrate into the local labour market at a level that is appropriate for their skills and knowledge.

Figure 5.19 presents, for Southern UfM countries, the various levels of funding of and participation in international EU collaborative research projects. Due to the SESAME infrastructure, Jordan and Morocco receive a significant amount of funds from the EU; however, participation in EU projects is higher among Egypt, Morocco and Tunisia.

Figure 5.19. Participation of Southern UfM countries in EU funding programmes, 2014-20



Source: Horizon Dashboard, https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/horizon-dashboard.

StatLink https://stat.link/v0m7le

Research infrastructures play an important role in scientific co-operation at the regional and national levels. Shared infrastructures are an effective mechanism for advancing knowledge when the costs of infrastructure exceed those that can be borne by a single country, or when the research problem is global

(e.g. climate change, health, energy development or resource efficiency). Moreover, investment in international R&D infrastructure is essential to attracting international flows of R&D, human resources, and related high value-added activities. Among other advantages, the fruits of such investments are somewhat less internationally mobile than are the results of technology development programmes supported by public funds – indeed, there are strong and lasting regional agglomerations of technological expertise and economic impacts. In the Euro-Mediterranean region, the development of the Synchrotron-light for Experimental Science and Applications in the Middle East (SESAME) represents a watershed for international scientific co-operation in the region (Box 5.4). Whilst the focus of SESAME is on basic science, it has many applications that can be used to address global and regional challenges such as clean water, low-carbon energy and pollution.

Box 5.4. Synchrotron-light for Experimental Science and Applications in the Middle East (SESAME)

Located in Allan, Jordan, SESAME is the first major international scientific centre in the Middle East. SESAME was established through co-operation between the European Union and Southern Mediterranean countries. The idea of an international science effort in the Middle East was born in the mid-1980s, when physicist Abdus Salam, a Pakistani Nobel laureate, suggested establishing a synchrotron radiation facility in Bahrain. Current members are Cyprus, Egypt, Iran, Israel, Jordan, Pakistan, the Palestinian Authority and Turkey. Current observers are Brazil, Canada, the People's Republic of China, the European Organization for Nuclear Research (CERN), the European Union, France, Germany, Greece, Italy, Japan, Kuwait, Portugal, Russian Federation, Spain, Sweden, Switzerland, the United Kingdom and the United States. SESAME is a remarkable example of how scientists can unite in the pursuit of knowledge, even among nations with longstanding political tensions.

Synchrotron light sources generate an intense light beam that can reveal the atomic structure of matter, making them a prized tool in biology, chemistry, archaeology and other disciplines. This potential for innovative research in diverse fields makes a synchrotron light source the ideal basis of the Middle East's first major cooperative scientific facility. At SESAME, researchers from all member states have begun carrying out experiments which have the potential to promote the development of varied scientific fields in their home countries.

Source:Sesame, https://www.sesame.org.jo.

Conclusions and policy considerations

The main findings of the chapter include:

- Changes in global trade patterns, the increased use of automation in manufacturing, and a trend toward re-shoring and near shoring in manufacturing and service sectors pose several challenges to the ability of Euro-Mediterranean countries to move up the value chain and increase participation in the global economy.
- Complementary policies are needed in research, higher education and innovation to accompany efforts to promote economic diversification at the national level as well as regional economic integration.
- Regional integration in research and higher education requires that countries share a vision and commitment to science, technology and innovation (STI), as a source of their own country's economic and social development. In practice, this means that countries must establish pre-

conditions to regional integration in higher education and research. They must invest in R&D and related knowledge-based assets to be able to absorb foreign technology, contribute to trade and exchange ideas through regional and international co-operation.

- Available key indicators for monitoring regional integration in higher education and research show that integration in the Euro-Mediterranean region has increased unevenly in line with the growing but unequal capacity in education and research in Southern UfM countries and the Western Balkans. Several UfM countries have increased their investments in R&D over the past decade in particular Israel, Egypt and Algeria. In contrast, Spain, Greece, Tunisia and Montenegro have stagnated or fallen back.
- Cross-border funding for R&D is an important indicator of international linkages. It represents between 5 and 10% of total expenditure in EU countries. In Southern UfM economies, with the exception of Israel and the Palestinian Authority, foreign funding accounts for 5% or less. The weight of foreign multinationals in the economy and in the domestic production of technology matters: in Austria and Ireland funds from abroad represent close to 15% or more of total GERD; in Israel, they represent over 40%.
- The intensity of scientific co-operation in the Euro-Mediterranean region is characterised more by North-South interactions than by South-South collaboration, although there are exceptions (e.g. Morocco-Israel).
- Most scientific co-operation is organised around physical sciences and chemistry as well as life sciences, areas that are important to industrial development. Although scientific co-operation in the environmental sciences is less strong in the Southern UfM countries, there is growing demand for research collaboration in this area given the potential regional impact of climate change on the region's water, food and agricultural systems.
- Indicators of co-publication and co-patenting show that historical relations and industrial/economic structure shape co-operation patterns. France and Germany are also the main partners in innovation for Southern Mediterranean countries based on co-patenting data. Specialisation and partnership patterns are not static and can be shaped by investments in funding, talent and research infrastructures that can generate new specialisations and broaden the range of potential partners.
- Student mobility to the European Union shows a sustained increase for Southern Mediterranean countries. Morocco, Tunisia and Lebanon send the most students to EU countries. France and the United Kingdom attract most of the tertiary level students from the Southern Mediterranean. Despite the disruption to student mobility caused by the COVID-19 pandemic, digital technologies offer new opportunities for broadening participation in regional and international education.
- Participation in international research collaboration can take many forms, from bilateral programmes to international collaborative programmes such as the European Union's Horizon 2020. Besides offering a vehicle for sharing costs and improving the quality of scientific research and training, international research programmes are also a way to direct research towards common problems. Tunisia and Morocco lead in participation in EU Horizon programmes but Tunisia and Jordan lead in terms of the value of financing.
- Research infrastructures play an important role in embedding technology in local economic production systems. National investments in national labs and in international R&D infrastructures such as SESAME can attract international flows of R&D, human resources, and related high-value-added activities. Infrastructures such as distributed research labs also have the potential to act as nodes or part of global research networks, fostering virtual mobility and "brain circulation" as an alternative to brain drain.
- This is particularly important for countries in the Western Balkans such as Albania and Bosnia-Herzegovina, which have experienced high levels of scientific emigration. It is also relevant to

promote brain circulation in countries like Greece and Italy that have historically suffered intra- European brain drain.

Innovation systems are only as strong as their weakest link. This applies to both national and regional/international innovation systems. Strengthening regional co-operation in the Euro- Mediterranean region will require action in several policy domains but especially policies to strengthen national systems so that domestic research and education can be linked with national production, i.e. “the knowledge triangle”. It will also require strengthening connections internationally, including through digitalisation of higher education and research infrastructures and greater use of open science/open data platforms (Figure 5.20). New funding programmes such as PRIMA offer an opportunity to internationalise the knowledge triangle in UfM countries and to focus research and education on concrete societal challenges related to the environment and the Sustainable Development Goals (SDGs). However, place-based policies or regional economic policies that strengthen the contribution of international collaborations to local development and entrepreneurship will be crucial to creating a virtuous cycle that reinforces the local and international attractiveness of regional knowledge and innovation hubs.

Figure 5.20. Priority domains of policy action to strengthen links between economy, research and higher education in the context of integration in the Euro-Mediterranean region

Note: *Moocs* refer to online education programmes.
Source: Authors,

Digital technologies such as open science platforms (e.g. the European Science Cloud or the African Open Science Platform) can accelerate the digitalisation of education and research to enable countries to take advantage of new opportunities for regional co-operation, especially in the current context of the COVID-19 pandemic, and should not be underestimated. Online learning can complement or substitute mobility programmes, in particular for short learning courses. Digital training in vocational education can also equip young people to engage in digital trade in services. Scientific research is increasingly data-driven, and it will be important to ensure that research personnel are equipped with the digital skills necessary to engage with peers around the world.

Rethinking regional co-operation in higher education and research in the context of its contribution to economic development in the Euro-Mediterranean region will also require a reflection on new measures and indicators. Key international statistical indicators focus mainly on proxies for the inputs and outputs of higher education and research collaboration and do not cover relational, institutional, scientific or business

networks that would normally provide information on the relative importance of framework conditions and specific education and research policies. Especially in countries where comprehensive indicators of higher education and research are lacking, these relational indicators, based on non-administrative data (e.g . surveys or internet data scraping) could provide rapid insights to policy makers.

Many of the indicators that OECD countries have developed have sought to measure the contribution of international activities to enhancing the national quality of research, as well as the contribution of foreign high-skilled researchers and mobility to innovative start-ups and high-skilled employment. They have been designed from an internal perspective, i.e. from the standpoint of a ministry or funding agency seeking to monitor the impact of funding for international research co-operation. Therefore, while indicators of co- publication are important, they are insufficient for monitoring integration or cooperation on critical development challenges common to MENA countries – for example, water, agriculture or energy research.

There is a need for new, impact-oriented indicators that measure the concrete outcomes/outputs of scientific co-operation, not just accounting for who co-operates with whom or in what field. If the goal of the co-operation is to increase aggregate agricultural productivity as opposed to scientific productivity, the number of co-publications or co-patents in agriculture will not provide that. At best, they can provide a proxy for the intensity or quality of international research, but they cannot measure the contribution of investments in knowledge to solving specific regional problems.

Finally, there are significant gaps in existing key indicators regarding the contribution of international co-operation in research and higher education to place-based economic development – in terms of the places where new business are established or where the patents are applied to generate economic impacts. Research funding and mobility data grouped by gender or firm size is also patchy in a number of countries. Greater engagement between the national statistical systems of UfM countries, Eurostat and the OECD on statistics for science, higher education and innovation would benefit all parties involved in the monitoring of regional integration and in the design and assessment of higher education and research policies.

References

Afreen S et al (2016), *Scientific Wealth in Middle East and North Africa: Productivity, Indigeneity, and Specialty in 1981–2013*, https://doi.org/10.1371/journal.pone.0164500. [16]

Ansell and Gash (2007), *Collaborative Governance in Theory and Practice. Journal of Public Administration Research and Theory, 8, 543-571.*, http://dx.doi.org/10.1093/jopart/mum032. [10]

Auriol L et al (2013), "Careers of Doctorate Holders: Analysis of Labour Market and Mobility Indicators"*, OECD Science, Technology and Industry Working Papers*, No. 2013/4, OECD Publishing, Paris, https://dx.doi.org/10.1787/5k43nxgs289w-en. [21]

Busck, N. (ed.) (1990), *Innovation, Competitiveness and Economic Integration.*. [2]

Cervantes (2017), *Higher Education Institutions in the Knowledge Triangle*, https://foresight-journal.hse.ru/data/2017/07/02/1171234391/2-Cervantes-27-42.pdf. [4]

Debacker k and Flaig D (2017), *The Future of Global Value chains, Business as usual or "a new normal"?*, https://doi.org/10.1787/d8da8760-en. [20]

Edler and Flanagan (2008), *Drivers of policies for STI collaboration and indicators. Background Report 1: Key Themes from the Literature. Report to European Commission, DG Research,*, https://www.research.manchester.ac.uk/portal/files/50598821/FULL_TEXT.PDF. [14]

Folke et al (2005), *ADAPTIVE GOVERNANCE OF SOCIAL-ECOLOGICAL SYSTEMS*, https://doi.org/10.1146/annurev.energy.30.050504.144511. [11]

Gawer (2014), *Bridging differing perspectives on technological platforms: Toward an integrative framework*, https://doi.org/10.1016/j.respol.2014.03.006. [12]

Guellec D. and Cervantes, M. (2008), *International Mobility of Highly Skilled Workers: From statistical analysis to policy formulation*, http://hdl.voced.edu.au/10707/98764. [23]

Guellec, D. and van Pottelsbergehe (2001), ""The internationalisation of technology analysed with Patent Data", *Research Policy*, Vol. No. 30, pp. pp. 1253-1266, https://doi.org/10.1016/S0048-7333(00)00149-9. [19]

Hatzigeorgiou A (2010), *"The contribution of migrants in enhancing foreign trade", in: OECD, Open for Business: Migrant Entrepreneurship in OECD Countries (pp. 273-270), Paris: OECD Publishing.*, https://www.oecd.org/els/mig/Part%20II_Entrepreneurs_engl.pdf. [24]

Henneman et al (2012), "The Myth of Global Science Collaboration : Collaboration in epistemic communiities", *Journal of Informetrics*, Vol. (2(, pp. 217-225, https://ideas.repec.org/a/eee/infome/v6y2012i2p217-225.html. [15]

Horizon (2020), *The EU Framework Programme for Research and Innovation.*, https://ec.europa.eu/programmes/horizon2020/. [8]

Mahroum S et al. (2013), "Careers of Doctorate Holders: Analysis of Labour Market and Mobility Indicators"*, OECD Science, Technology and Industry Working Papers*, No. 2013/4, OECD Publishing, Paris, https://dx.doi.org/10.1787/5k43nxgs289w-en. [25]

MESRI (2020), *Enquete IPDOC 2017 (MESRI/SIES)*, https://www.data.gouv.fr/fr/datasets/insertion-professionnelle-des-diplomes-de-doctorat-par-ensemble-universitaire/. [22]

Morini C et al (2013), *Assessing international scientific cooperation in the Mediterranean region.*, https://www.documentation.ird.fr/hor/fdi:010061108. [17]

OECD (2021), *Science, Technology and Innovation Outlook 2021*, OECD Publishing, Paris, https://doi.org/10.1787/75f79015-en. [13]

OECD (2017), *Science, Technology and Industry Scoreboard*, https://doi.org/10.1787/20725345. [7]

OECD (2008), *Open Innovation in Global Networks*, OECD Publishing, Paris, https://doi.org/10.1787/9789264047693-en. [6]

OECD (2017a), *National Treatment for Foreign-Controlled Enterprises.,*, https://www.oecd.org/daf/inv/investment-policy/national-treatment-instrument-english.pdf. [9]

Research Trends (2010), *Elsevier*, https://www.researchtrends.com/issue21-january-2011/a-rebirth-of-science-in-islamic-countries/. [18]

Sjoer, E., B. Nørgaard and M. Goosens (2011), *Implementing Tailor-made CEE in theory and in practice - The Knowledge Triangle as a Conceptual Tool;*, https://www.semanticscholar.org/paper/Implementing-Tailor-Made-CEE-in-theory-and-in-The-a-Sjoer-N%C3%B8rgaard/fef83cd86a9251dff06ffd184993063fa60c9b51. [3]

United Nations (2020), *Guidebook for the preparation of STI for SDGs Roadmaps*, https://sustainabledevelopment.un.org/content/documents/26001Guidebook_STI_for_SDG_Roadmaps_First_Edition_clean0323.pdf. [5]

World Bank (2020), *Trading together: Reviving Middle East and North Africa Regional Integration in the Post Covid Era*, http://dx.doi.org/DOI: 10.1596/978-1-4648-1639-0. [1]

Notes

[1] See https://www.elsevier.com/en-gb/solutions/scopus.

[2] See https://clarivate.com/webofsciencegroup/solutions/web-of-science.

Regional Integration in the Union for the Mediterranean

PROGRESS REPORT

Regional Integration in the Union for the Mediterranean: Progress Report monitors major trends and evolutions of integration in the Euro-Mediterranean region. The Report examines five domains of regional integration, namely trade integration, financial integration, infrastructure integration, movement of people, as well as research and higher education. It presents an original analysis of the patterns and challenges of integration in the Euro-Mediterranean region, which highlights the interdependence of the areas examined – e.g. how to increase regional trade without affordable transport connectivity? The Report offers new insights, based on specific quantitative and qualitative performance indicators that are monitored over time. Almost 100 graphs and tables in the report cover data for the 42 member countries of the Union for the Mediterranean and, when relevant, for partners of the region. The Report includes key takeaways and policy recommendations on how to foster regional integration in each of the five domains.

PRINT ISBN 978-92-64-54442-0
PDF ISBN 978-92-64-50462-2