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Seven Years after the Crisis: Intersecting Perspectives

Policy Report



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List of Abbreviations

ADB	African Development Bank
ANPME	Agence Nationale Pour La Promotion De La Petite Et Moyenne Entreprise
ASEAN	Association of Southeast Asian Nations
BIT	Bilateral Investment Treaty
CES	Constant Elasticity of Substitution
CT	Countries in Transition
DVA	Domestic Value Added
EADS	European Aeronautic Defence and Space Company
EBRD	European Bank for Reconstruction and Development
EIB	European Investment Bank
EIDS	Egypt Industrial Development Strategy
ENP	EU Neighbourhood Policy
ERSAP	Economic Reform and Structural Adjustment Program
EU	European Union
FDI	Foreign Direct Investment
FEMIP	Facility for Euro-Mediterranean Investment and Partnership
FEMISE	Forum Euro-Méditerranéen Des Instituts De Sciences Economiques
FTA	Free Trade Agreement
FVA	Foreign Value Added
GATS	General Agreement on Trade in Services
GCC	Gulf Cooperation Council
GDP	Gross Domestic Product
GEP	Global Economic Prospects
GVC	Global Value Chains
GWh	Gigawatt Hour
HCP	Haut-Commissariat Au Plan
HS	10-Digit Harmonized System
IDS	Industrial Development Strategy
IIF	Institute of International Finance
ILO	International Labor Office
IMF	International Monetary Fund
ISI	Import Substitution Industrialization
ISIS	Islamic State of Iraq and Syria

KSA	Kingdom of Saudi Arabia
LDCs	Least Developed Countries
LNG	Liquefied Natural Gas
MENA	Middle East, North Africa
MMM	Métiers Mondiaux Du Maroc
MP	Mediterranean Partners
MSP	Mediterranean Solar Plan
NBER	National Bureau of Economic Research
NIF	Neighborhood Investment Facility
OECD	Organization for Economic Co-operation and Development
PAFTA	Pan-Arab Free Trade Area
PISA	Programme for International Student Assessment
PNEI	National Pact for Industrial Emergence
PPP	Public-Private Partnership
PPP	Purchasing Power Parity
R&D	Research and Development
ROO	Rules of Origins
SIC	2-Digit Standard Industrial Classification
SMCs	Southern Mediterranean Countries
SME	Small and Medium-Sized Enterprise
TFP	Total Factor Productivity
TIMSS	Trends in International Mathematics and Science Study
TREC	Trans-Mediterranean Renewable Energy Cooperation
TSUSA	7-Digit Tariff Schedule for the United States Annotated
UAE	United Arab Emirates
UfM	Union for the Mediterranean
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNHCR	United Nations High Commissioner for Refugees
US	United States
VA	Value Added
WDI	World Development Indicators
WTO	World Trade Organization

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About The OCP Policy Center

The OCP Policy Center is a Moroccan policy-oriented think tank striving to promote knowledge sharing and to contribute to an enriched reflection on key economic and international relations issues. By offering a southern perspective on major regional and global strategic challenges facing developing and emerging countries, the OCP Policy Center aims to provide a meaningful policy-making contribution through its four research programs: Agriculture, Environment and Food Security, Economic and Social Development, Commodity Economics and Finance, Geopolitics and International Relations. On this basis, we are actively engaged in public policy analysis and consultation while promoting international cooperation for the development of countries in the southern hemisphere. In this regard, the OCP Policy Center aims to be an incubator of ideas and a source of forward thinking for proposed actions on public policies within emerging economies, and more broadly for all stakeholders engaged in the national and regional growth and development process. For this purpose, the Think Tank relies on independent research and a solid network of internal and external leading research fellows.

www.ocppc.ma

FOREWORD

We are very pleased to present this joint publication, which collects the papers produced as part of the first collaboration between Bruegel and the OCP Policy Center. Within the theme of “Seven Years after the Crisis: Intersecting Perspectives” our two organisations launched a “Platform for Advanced & Emerging Economies Policy Dialogue” in Rabat on 1 April 2016.

The aim is to establish an ambitious, yet timely, platform for policy dialogue between emerging MENA economies and advanced economies. The cooperation between Bruegel and the OCP Policy Center constitutes the main pillar of this platform. We aim to be the driving force for a content-based dialogue which can lead to concrete analytical output.

With a strong conviction that fruitful policy dialogue should be primarily anchored on sound policy research, Bruegel and OCP Policy Center researchers have tackled through their papers issues of utmost importance to all shores of the Mediterranean basin.

In the first paper, “Youth Unemployment in the Mediterranean Region and its Long term Implications”, written by Nuria Boot, Karen E. Wilson and Guntram B. Wolff, the focus is on the correlation between youth unemployment in the Mediterranean region and the problems that this leads to in Europe as a whole. While the authors agree that tackling youth unemployment in the Mediterranean region should be of utmost importance, they also recommend prudence in how this is done.

The second paper, “Energy Across the Mediterranean: A call for Realism”, by Simone Tagliapietra and George Zachmann, advises the European Union to draw lessons from two decades of unproductive regional cooperation attempts. They argue that the EU should shift its focus towards new bilateral approaches with Mediterranean partners when dealing with the issue of energy policy.

Karim El Aynaoui, Uri Dadush, Karim El Mokri and Rim Berahab contribute the paper “The Unmet Challenge of Interdependence in the EU-MENA space: A View from the South”. They examine bilateral relations between Europe and the Arab world, especially as they relate to trade, migration, investment, and energy. Although the perspective from which they write is definitely the Southern Mediterranean, the issues and the critical policy recommendations are not. This paper focuses just as much on the constraints that affect Europe as those which affect the MENA region. The policy recommendations reflect how linkages between the two regions, as well as between Arab countries, can be fostered and grown in a way that is beneficial to all parties involved.

In “Industrial Policy, Structural Change and Global Value Chains Participation: A Case Study of Morocco, Tunisia and Egypt”, Abdelaaziz Ait Ali and Yassine Msadfa use two methods to analyse the pace of structural transformation (the positive change in manufacturing capability) in Morocco, Tunisia and Egypt. Their first method explores labour reallocation between five sectors of the economy and assesses the extent to which a causation-correlation effect exists

between labour reallocation and overall productivity growth. The second method concerns the development of new measures for export performance, quality and variety dimensions. The paper concludes by providing policy recommendations, both overlapping and specific, on industrial policy in the three countries.

Karim El Aynaoui,
Managing Director of OCP Policy Center

Guntram B. Wolff,
Guntram B. Wolff, Director of Bruegel

Chapter 1

Youth unemployment in the Mediterranean region and its long-term implications

Nuria Boot, Karen E. Wilson and Guntram B. Wolff

Youth unemployment in the Mediterranean region has consequences for the whole of Europe. Tackling youth unemployment in the region must continue to be a high policy priority.

Europe's Mediterranean neighbourhood has become a focal point of attention due to the refugee crisis. With over a million people arriving in Europe in the course of 2015, the question of how to address the growing immigration pressures has become a central political issue.

Countries around the Mediterranean are also under scrutiny due to mounting security concerns in Syria, Libya and elsewhere. A range of economic literature links conflicts to demographic conditions and poor economic opportunities for young people. Countries undergoing "demographic transition", resulting in very youthful populations, are especially vulnerable to conflict, in particular when economic opportunities are scarce (Homer-Dixon 1999; Kelley & Schmidt 2001; Urdal 2004; Kahl 2006).

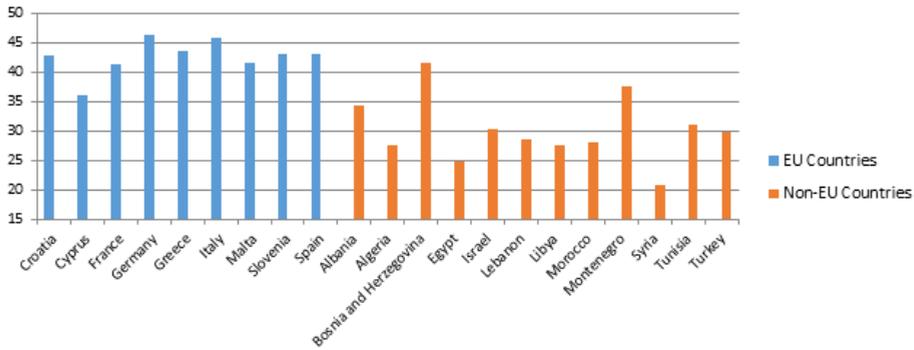
Youth unemployment is an urgent issue in many countries across the Mediterranean region, where 25.4 million people are unemployed, of whom 7-8 million are aged 15-24. (World Bank 2014; United Nations World Population Prospects 2015). 490 million people live in the region, of which 192 million are part of the 8 EU member states.

The proportion of young people not in education, employment or training has increased since the financial crisis, and in many countries youth unemployment rates are higher than unemployment in the older working age population. The figures available may even underrepresent the true level of unemployment due to non-participation in the labour market.

The growth in youth unemployment is particularly worrying. It can have long-lasting effects on productivity and potential growth, often excluding young people from the labour market for an extended period of time, lowering their productivity and affecting their job prospects for life (Arulampalam 2001; Gregg and Tominey 2005).

The demographic structures of Mediterranean countries vary widely, as can be seen in Figure 1. Median ages in non-EU Mediterranean countries are generally lower than in EU Mediterranean countries. The two most populous non-EU Mediterranean countries, Turkey and Egypt, both have median ages well below any EU country.

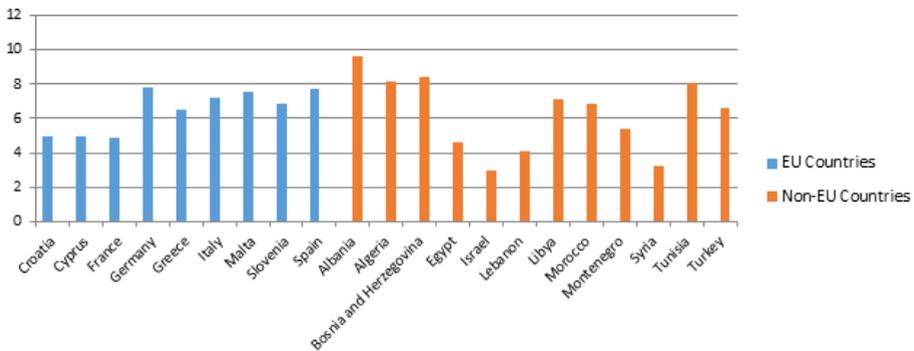
Figure 1: Median age of the population in Mediterranean countries and Germany (2015). Data is not available for Monaco



Source: United Nations World Population Prospects: The 2015 Revision.

Around the Mediterranean, the median age has increased substantially over the past two decades, but with significant differences across countries.

Figure 2: Change in median age of the population between 1995 and 2015 in Mediterranean countries and Germany (2015). Data is not available for Monaco



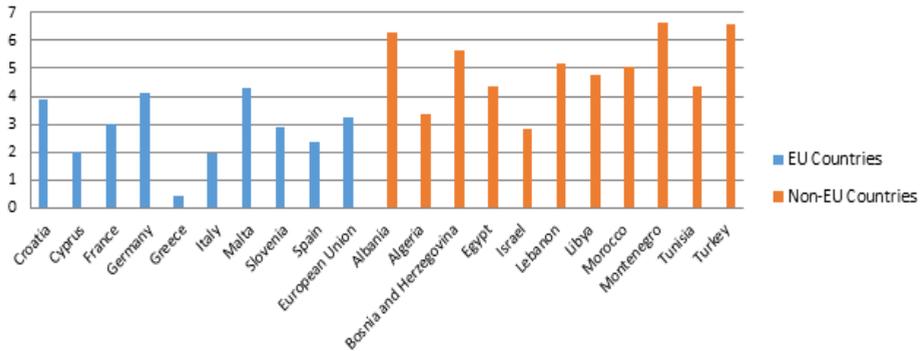
Source: United Nations World Population Prospects: The 2015 Revision.

Over the past decade, growth per capita was higher for the non-EU Mediterranean countries. Figure 3 shows the average annual GDP per capita growth of the last ten years, based on purchasing power parities.

The low growth figures in the EU reflect the deep scars left by the euro-area crisis. Growth

in non-EU countries was relatively robust in comparison, suggesting some income convergence, although from a low per-capita level.

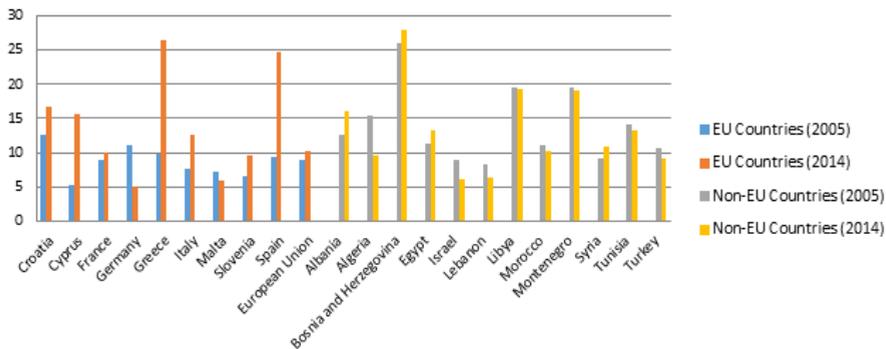
Figure 3: Average GDP based on purchasing power parity (PPP) per capita growth (2005-2014) in Mediterranean countries and Germany. Data is not available for Monaco and Syria. Limited data is available for Malta where a 2005-2013 average has been used



Source: World Bank.

Unemployment rates in the Mediterranean rose more sharply for EU member states than for non-EU Mediterranean countries over the past 10 years, again reflecting the economic crisis. Unemployment rates at least doubled between 2005 and 2014 for Cyprus, Greece and Spain, with the highest increase in Cyprus where the unemployment rate nearly tripled from 2005 to 2014. Unemployment rates also increased for four non-EU Mediterranean countries (Albania, Bosnia and Herzegovina, Egypt and Syria).

Figure 4: Unemployment rates in Mediterranean countries and Germany. Data is not available for Monaco

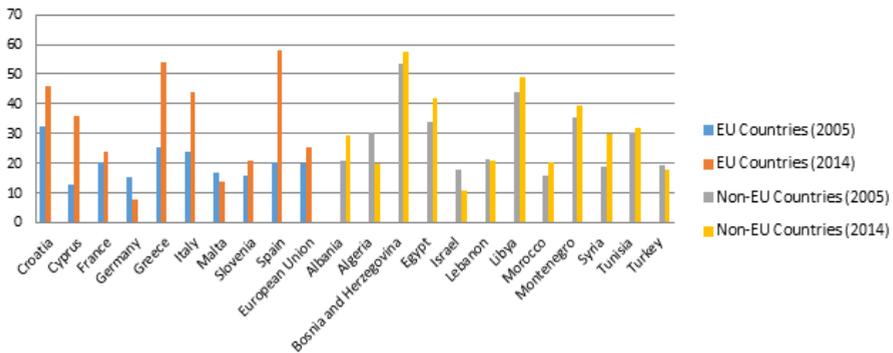


Source: World Bank.

Youth unemployment rates, defined as the share of the labour force aged 15-24 without work but available for and seeking employment, increased much more than overall unemployment rates in most Mediterranean countries from 2005-2014.

Youth unemployment rates in Croatia, Cyprus, Greece, Italy, Slovenia and Spain rose more sharply than the EU average. Youth unemployment rates in the non-EU Mediterranean countries have also increased over the past ten years, including in those with already high youth unemployment rates such as Bosnia and Herzegovina, Egypt, Libya, Montenegro, Syria and Tunisia.

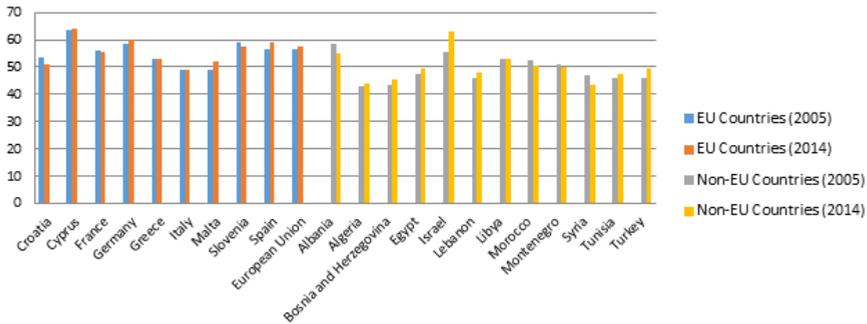
Figure 5: Youth unemployment rates in Mediterranean countries and Germany. Data is not available for Monaco



Source: World Bank.

Labour force participation rates have remained similar to levels ten years ago although participation dropped in some EU countries including Croatia, France and Slovenia as well as in the non-EU countries Albania, Morocco, Montenegro and Syria. Israel's labour force participation rate changed most, with an increase of almost 8 percentage points compared to a decade ago.

Figure 6: Labour force participation rates in Mediterranean countries and Germany. Data is not available for Monaco

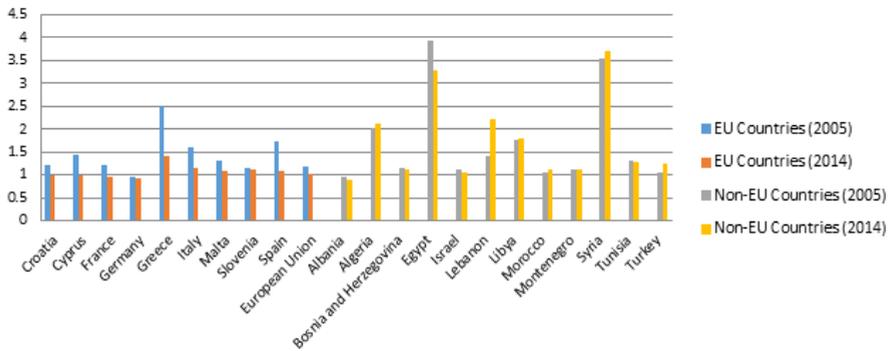


Source: World Bank.

In a number of the Mediterranean countries, female unemployment is much higher than male unemployment, but this is likely distorted by the significant differences in participation rates of men and women. In the non-EU Mediterranean countries, female unemployment rates in Algeria, Egypt, Lebanon, Libya and Syria are at least 1.5 times as high as male unemployment rates, and, with the exception of Egypt, the difference has increased in the past ten years.

For most EU Mediterranean countries, male and female unemployment rates were similar in 2014, with lower female unemployment rates compared to male unemployment rates in Croatia, Cyprus, France and Germany. Notably, gaps between female and male unemployment rates – which used to be substantial - lessened in Greece, Italy and Spain between 2005 and 2014.

Figure 7: Female to male unemployment rates in Mediterranean countries and Germany. Data is not available for Monaco



Source: World Bank.

The Mediterranean faces a crisis of unemployment and youth unemployment that matters not only for the countries individually but also has wider implications, including for the EU as a whole. Initiatives in the region have failed to prevent high levels of youth unemployment (European Commission; European Training Foundation 2015; Koenig 2016).

Meanwhile, demographic pressures and immigration flows suggest that unemployment rates could increase further in the years to come. Tackling youth unemployment in the region should continue to be a high policy priority, but the focus must be on programmes that have demonstrated results. In addition, the EU's neighbourhood policy needs to be given greater priority and should include some countries, such as Libya and Syria, which are currently at the margins of the partnership.

Chapter 2

Energy across the Mediterranean: a call for realism

Simone Tagliapietra and Georg Zachmann

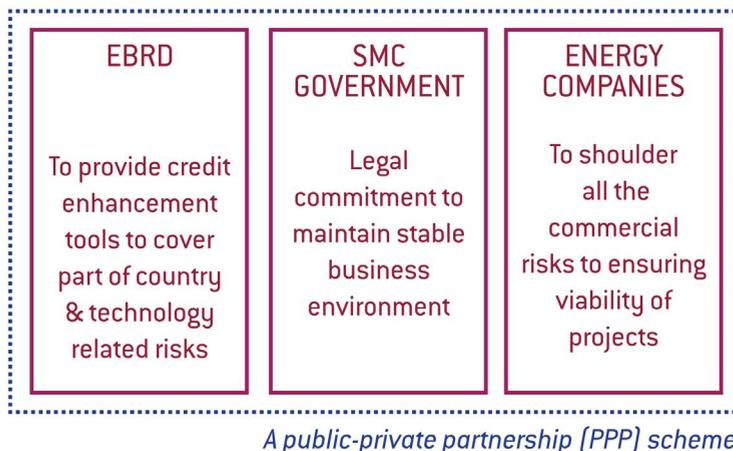
I. The Issue

Political instability in the southern Mediterranean countries have highlighted the unsustainability of their economic models. Widespread economic discontent, and in particular very high youth unemployment, underpinned the Arab Spring uprisings. As the refugee crisis shows, this is also Europe's problem and Euro-Mediterranean economic cooperation needs to be reviewed. Energy is a key part of the cooperation framework.

II. Policy Challenge

Trade links between southern Mediterranean countries (SMCs) are very limited and they trade mainly with the European Union. Energy represents more than half of SMC exports to the EU. While the regional energy relationships were developed on a bilateral basis, the EU's Mediterranean energy policy has followed a strictly regional approach, aimed at harmonising energy policies and regulatory frameworks in the region on the path to a Euro-Mediterranean energy market. This approach has proved unproductive and should change. The EU should pursue bilateral energy policies through public-private partnerships involving the European Bank for Reconstruction and Development (EBRD), EU financial institutions, EU companies and selected SMCs. This would allow support to be provided for sustainable energy in partner countries, improving their economic stability and safeguarding the EU's gas security of supply. It might also represent a business opportunity for EU energy firms in the context of the sluggish EU energy outlook.

Sustainable Energy funds for the southern Mediterranean countries



Source: Bruegel.

Euro-Mediterranean energy cooperation is on the European Union's agenda in the context of creating an EU Energy Union and of revising the EU Neighbourhood Policy (ENP)¹ While until 2014 the EU's relationship with the southern Mediterranean countries (SMCs) was mainly seen as an issue for France, Italy and Spain (and to some extent the United Kingdom), the migration crisis and energy security concerns during the Ukraine crisis have underlined that developments in SMCs are relevant for the EU as a whole. Defining the strategy at EU level is logical because the interests of member states are quite well aligned and they will achieve significant economic and political leverage if they act together. An aim of EU energy policy is "to develop access to alternative gas suppliers, including [...] from the Mediterranean" (European Commission, 2015). The intention is to reduce the reliance on existing suppliers. In terms of foreign and neighbourhood policy, the EU's primary objective is to stabilise the region in order to reduce the migration pressure and reverse the spread of radical Islam.

Despite the significant changes that have taken place in the southern Mediterranean, the EU has been slow to adapt its energy and neighbourhood policies. The EU's policies towards the region continue to be grounded on a multilateral approach, underpinned by the vision of integrating the regional energy markets into a sort of unique Euro-Mediterranean energy community.

¹ In the European Neighbourhood Policy (ENP), the category 'Southern Neighbourhood' includes ten partner countries: Morocco, Algeria, Tunisia, Libya, Egypt, Israel, Palestinian Territories, Jordan, Lebanon and Syria. Being an EU candidate country, Turkey is not included in this category. This Policy Brief focuses exclusively on the Southern Neighbourhood as defined by the ENP. For an insight into the EU-Turkey energy relationship, see Tagliapietra and Zachmann (2015).

The multilateral approach is highlighted in the intergovernmental Union for the Mediterranean (UfM) initiative² The High Representative of the Union for Foreign Affairs stressed in 2015 that the role of the UfM should be enhanced for “supporting cooperation between southern neighbours”³. Accordingly, it was decided in 2015⁴ to create three energy cooperation platforms: the UfM Gas Platform⁵, UfM Regional Electricity Market Platform⁶ and the UfM Renewable Energy and Energy Efficiency Platform (which will start up during 2016). The aim of these platforms is to facilitate “partnerships based on mutual trust and transparency between UfM member states as well as with the relevant energy stakeholders in the region”⁷.

Even though increased regional energy cooperation certainly has economic and political merits, the prospects for these new initiatives are at best limited, for at least five reasons:

- Real energy cooperation in the region has always been, and continues to be, bilateral rather than multilateral or regional⁸.
- Previously tried regional energy initiatives did not deliver.
- The level of intra-regional trade in the southern Mediterranean is among the lowest in the world (Figure 1). This not because of a lack of economic complementarity, but rather because of a lack of political trust among the SMCs.
- The geopolitical situation has massively deteriorated in recent years, further limiting the potential for regional cooperation.
- The EU viewed energy cooperation as a core pillar of its neighbourhood policy that ‘offered’ individual SMCs a complex policy package to increase cooperation. The whole package was perceived by the SMCs as ‘second class membership’ – and the SMCs thus never took ownership of the entire approach.

2 The UfM is a multilateral partnership, created in 2008, of 44 countries: 28 EU member states and 16 Mediterranean and Balkan partner countries. The UfM represents the southern regional cooperation branch of the ENP and has the aim of promoting stability and prosperity throughout the Mediterranean region.

3 European Commission and High Representative of the Union for Foreign Policy and Security Affairs (2015).

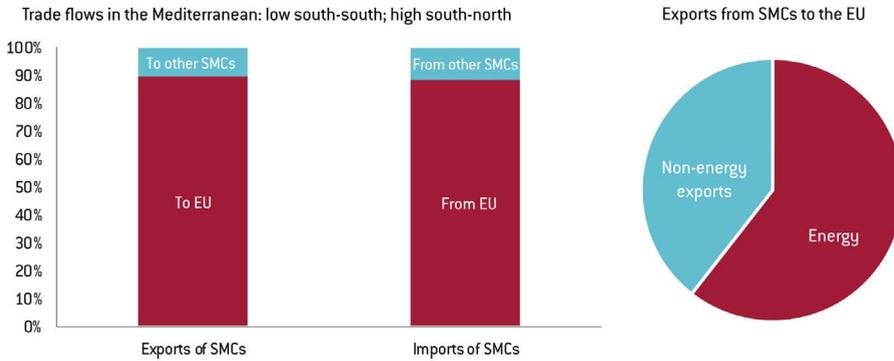
4 For the sake of precision, it should be mentioned that the initial decision to establish the three thematic platforms was taken on 19 November 2014 at the Rome High Level Conference of energy ministers on ‘Building a Euro-Mediterranean energy bridge: the strategic importance of Euro-Med gas and electricity networks in the content of energy security’.

5 Launched 11 June 2015 in Brussels.

6 Launched 12 October 2015 in Rabat.

7 <http://ufmsecretariat.org/fostering-regional-dialogue-on-energy-launch-of-3-ufm-platforms-on-gas-regional-electricity-markets-and-renewable-energy-and-energy-efficiency/>.

8 This is true for all forms of economic relationship; see Zachmann, Tam and Granelli (2012).

Figure 1: The EU's predominant position in Euro-Mediterranean trade

Source: Bruegel based on UN Comtrade and Eurostat databases (accessed March 2016).

In this context, the EU should rethink its energy policy towards the southern Mediterranean, particularly on renewable energy and energy efficiency, for at least two reasons:

- Political stability in the southern Mediterranean is of paramount importance for the EU, and in the longer term, there is no political stability without economic development. But the economic development of the region is jeopardised by unsustainable energy sectors, characterised by growing demand and rising costs at a time when investment and production are declining.
- Energy in the SMCs is a challenge, but also a great opportunity. Energy demand in the region is growing strongly and there is also significant energy production potential. This represents a business opportunity for European energy companies, and should be particularly welcome given the sluggish energy outlook within Europe. Supporting the sustainable energy transition in SMCs might thus also be an avenue for the European energy industry to expand into an emerging market that is also on the radar of others, such as China and Russia. The expansion opportunity should be welcomed by European electric utilities, companies specialised in manufacturing renewable energy and energy efficiency solutions and also by European oil and gas companies that are willing to diversify their portfolios in the framework of the broader global energy transition. Furthermore, the SMCs could be a stepping stone to engage in other parts of Africa, where there is also a growing need for reliable and clean energy.

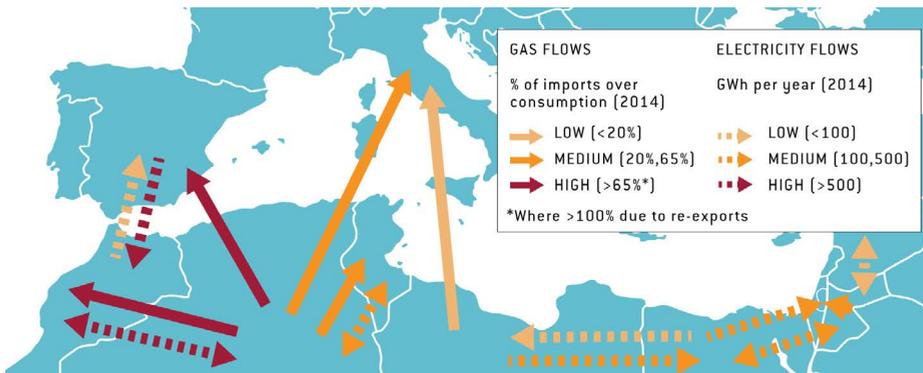
III. A Regional Policy Approach... Without a Region?

The Euro-Mediterranean energy relationship dates back to the 1960s, when work started on the first large-scale energy infrastructure project – a gas pipeline connecting Algeria to Italy via Tunisia. Since then, more than 7,000 kilometres of gas pipelines have been laid across the region, to connect Algeria with Spain and Italy, Libya with Italy, and Egypt with Israel, Jordan, Lebanon and Syria.

Large-scale oil and liquefied natural gas (LNG) infrastructure has been constructed all around the Mediterranean, as have some electricity interconnections. Successful projects, especially in the gas sector, have been built on bilateral state-to-state and company-to-company relationships between producers in the SMCs and importers in the north.

The Euro-Mediterranean energy relationship has never switched from this bilateral approach to a more regional approach (Figure 2), although some large-scale regional energy projects have been attempted over the last two decades, particularly in the renewable energy sector.

Figure 2: Euro-Mediterranean energy relationships: bilateral and fragmented



Source: Bruegel based on MEDREG (2015) and Eurostat (accessed March 2016).

In 2003 the Trans-Mediterranean Renewable Energy Cooperation (TREC) initiative⁹ was started, with the aim of unlocking the renewable energy potential of the region through cooperation “as if there were no borders”¹⁰. Between 2007 and 2009, this initiative evolved into the Desertec project, which was specifically focused on tapping into the potential of North African and Middle Eastern deserts to supply clean power (solar and wind) to those regions and

⁹ See <http://www.e5.org/cooperations-spin-offs/trec/>.

¹⁰ United Nations Environment Programme (2007), p 76.

to Europe. Desertec was politically backed by the EU¹¹, and also gathered support from European companies and banks. However, Desertec failed to deliver. By 2014, 47 of the 50 initial Desertec shareholders had left the consortium, de facto marking the end of the project.

The Mediterranean Solar Plan (MSP) initiative suffered the same fate. Started in 2008 as a UfM flagship initiative, this project also aimed to export solar and wind power to Europe. The MSP was supported by the European Commission, which also promoted cooperation between this project and Desertec. In 2013, the UfM secretariat elaborated a new MSP master plan¹². However, the UfM energy ministers ultimately did not endorse the master plan, de facto dissolving the MSP project¹³.

Desertec and the MSP both failed because of lack of realism. On the commercial side, the business model based on the export to the EU of solar and wind electricity produced in SMCs was simply not viable because of: i) high electricity generation costs; ii) lack of electricity interconnections between SMCs and between the northern and southern Mediterranean shores; and iii) the lack of a clear need on the EU side for additional renewable energy capacity. Politically, both initiatives proved unrealistic because they sought to take an unviable one-size-fits-all approach in the region, and because they did not properly take into account the essential priority for the SMCs: to ensure they could meet their own future energy demand, not the EU's. On top of these weaknesses, the combined effect of the economic crisis and of the uprisings in Arab countries delivered the coup de grace to the projects (Escribano, 2015).

A key pillar of the EU's energy policy in the neighbourhood was to promote the take-up of EU energy policy principles, in particular liberalisation, and EU energy legislation. In the Balkans and eastern Europe, participation in the Energy Community committed countries to adopt the *acquis communautaire* into their national energy legislation. This was supposed to create a stable legal environment, which would be conducive to the much-needed private investment. The partner countries also used their Energy Community membership as a signal that they are interested in EU accession. Without a prospect of accession, SMCs were not asked for, and did not offer, full harmonisation with EU energy rules. Nevertheless, the Action Plans that are a backbone of European Neighbourhood Policy foresee gradual convergence towards European rules. In 2003, for example, a 'Memorandum of Understanding for the progressive integration of electricity markets of Algeria, Morocco and Tunisia and in the EU electricity internal market' was signed¹⁴. The creation of Mediterranean associations of regulators¹⁵ and transmission system operators¹⁶

11 For instance, see Oettinger (2010).

12 See <http://ufmsecretariat.org/mediterranean-solar-plan-master-plan-meeting-with-the-minister-of-energy-and-mineral-resources-of-jordan/>.

13 For a detailed discussion of this evolution, see Vantaggiato (2015).

14 http://www.eumonitor.eu/9353000/1/j4nvgs5kjg27kof_j9vvik7m1c3gyxp/vi7jgswlayzs/f=/15767_03.pdf.

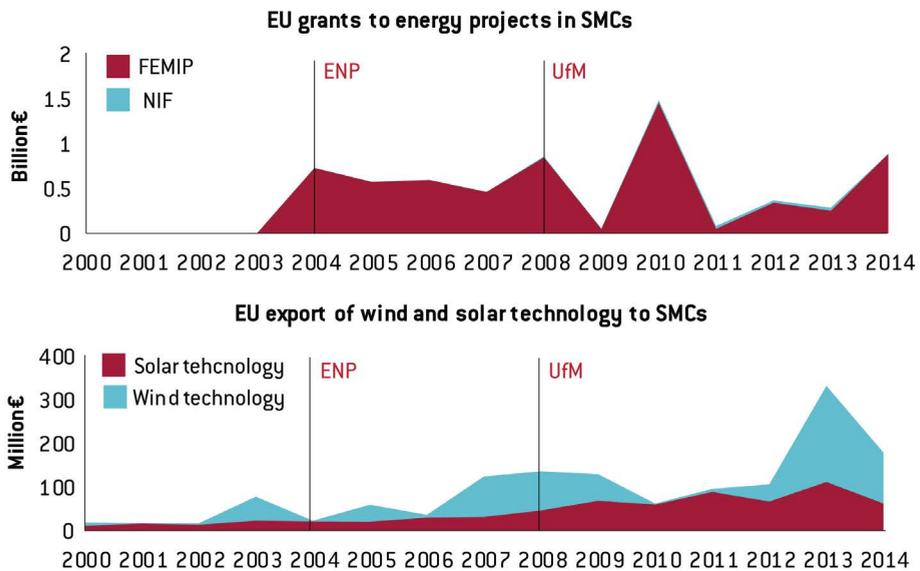
15 <http://www.medreg-regulators.org/>.

16 <http://www.med-tso.com/>.

in 2007 and 2012 also somewhat followed the blueprint of EU internal market integration. But, apart from sharing best practices, the implications have been limited. It is thus time to question whether the export of EU energy rules to the SMCs serves the purposes of either side.

Also from a wider perspective the regionalist approach had no concrete impact on the evolution of energy cooperation in the region. The history of EU grants to energy projects in SMCs and EU exports of solar and wind technologies to SMCs (Figure 3) indicates the lack of concrete impact in the context of either ENP or the UfM.

Figure 3: EU grants to energy projects and export of solar and wind technologies to SMCs



Source: Bruegel based on European Investment Bank and UN Comtrade database (accessed March 2016). Note: FEMIP = Facility for Euro-Mediterranean Investment and Partnership; NIF = Neighborhood Investment Facility.

While the regional approach did not deliver in the past, it has become close to impossible today. The civil war in Syria, the implosion of Libya, the controversial political situation in Egypt, the uncertain political outlook in Algeria and rise of radical Islam indicate an increasing level of geopolitical fragmentation on the southern shore of the Mediterranean. A homogeneous region does not exist.

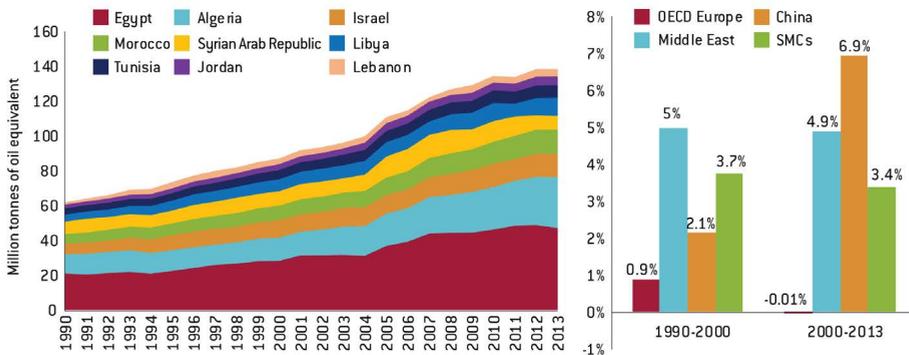
IV. Back to Basics: What Aims for Euro-Mediterranean Energy Cooperation?

How could the Euro-Mediterranean energy relationship be better structured? Structuring cooperation starts with identifying common goals. We identify three main aims for Euro-Mediterranean energy cooperation:

- Supporting the SMCs in meeting their energy challenges for the stake of stability and growth;
- Supporting a transition to sustainable energy in SMCs for climate change mitigation and also for macroeconomic sustainability;
- Ensuring the sustainability of current gas exports from SMCs to the EU.

First, it should be noted that the key energy challenge for SMCs will be to meet their own rapidly growing energy demand in a secure and competitive way. As Figure 4 shows, the total final energy consumption of SMCs has continuously grown over the last few decades. Up to 2000, this growth occurred at an even greater pace than China. Between 2000 and 2013, the SMCs maintained their growth rate at a level of about 3.4 percent, compared to 0 percent in OECD Europe.

Figure 4: Total final energy consumption in SMCs and international comparison of average growth rates



Source: Bruegel based on International Energy Agency database (accessed March 2016)

Energy demand in SMCs will continue to grow in the future, mainly in response to population and GDP growth. The challenge of rising energy demand will have to be tackled in a sustainable manner by SMCs, not primarily to mitigate climate change but to ensure macroeconomic stability.

Between 2008 and 2014 the net energy exports of SMCs dropped – despite similar oil prices in both years – by more than 30 percent in US dollar terms. The decline in net exports represents about 3 percent of the current GDP of SMCs. Consequently, for SMCs simply burning more fossil fuels does not seem to be a sustainable, long-run answer. At the same time countries including Egypt, Algeria, Libya and Lebanon devote about 10 percent of their GDP to energy subsidies. In 2015, energy subsidies constituted a burden of \$35 billion on Egypt's public finances, and this number could quickly rise if oil prices increase again. In 2013 – before oil prices dropped by 65 percent – subsidies in Egypt were \$45 billion (Coady et al, 2015). Thus, fossil fuel subsidy schemes in several SMCs will have to be reformed¹⁷ to reduce wasteful energy consumption and to improve fiscal sustainability¹⁸.

BOX 1: Case study – the development of renewable energy in Algeria

At electricity generation costs of at best €0.13 per kilowatt hour for concentrating solar power and around €0.07/kWh for photovoltaic, these technologies are not competitive with existing Algerian gas turbines. Those generate electricity from gas that could be sold to the EU market at €2.50/kWh, which translates into a generation cost of about €0.06/kWh (40 percent efficiency). However, renewables will become competitive as increasing electricity demand will require additional gas turbines (with fixed costs of about €0.005-0.01/kWh) and the cost of renewable energy technologies is expected to decline further. Given the high share of capital cost in the cost of renewables, the main variable for the speed at which renewables become competitive in Algeria is the cost of capital. This is largely a question of the regulatory framework and the business environment. In the medium-term, the exploitation of renewable energy resources could thus provide consistent economic benefits to Algeria. It could free up considerable volumes of gas, currently used for domestic electricity generation, for additional exports to Europe. Considering the under-utilised export infrastructure, this would translate into immediate economic returns for the country.

Eliminating energy subsidies will improve the competitiveness of renewable energy and energy efficient solutions. This will be crucial not only to meet the SMCs' growing energy demand, but also to maintain gas exports to Europe. Egypt recently showed how a traditional gas exporter could suddenly turn into an importer because of rapidly growing domestic demand. In order to

¹⁷ For a wider discussion of energy subsidies in SMCs, see Tagliapietra (2014).

¹⁸ Energy subsidies lead to an inefficient allocation of resources and market distortions by encouraging rent-seeking behaviour, and thus excessive production or consumption.

continue to supply their gas to Europe, Algeria, Libya and Egypt (which might again become an exporter in the future), will have to tap into their renewable energy and energy efficiency potentials (see Box 1¹⁹).

Maintaining gas exports would be beneficial for the countries because it would ensure a stable stream of revenues that could be used for investment in renewables and efficiency. It would also be beneficial for the EU because it would guarantee the stability of imports from the southern Mediterranean region, which are an important element of the EU's gas security-of-supply architecture²⁰.

HOW TO SUPPORT THE REGIONAL SUSTAINABLE ENERGY TRANSITION

Given the fragmentation of the regional energy landscape in the southern Mediterranean, there is no sensible one-size-fits-all approach for structuring cooperation. Rather than the new UfM Renewable Energy and Energy Efficiency Platform, solid bilateral partnerships between the EU and selected countries in the region are needed to reinvigorate the Euro-Mediterranean energy relationship.

This also means that not all the countries need be engaged in such an exercise. For instance, given their current geopolitical situations, neither Syria nor Libya could easily be involved. Meanwhile, Israel is not in need of EU support and there is limited scope for special cooperation. For the other seven SMCs, barriers preventing the development of renewable energy and energy efficiency projects differ greatly, so a tailored approach should be adopted instead of a region-wide, one-size-fits-all, approach.

The Energy Union Communication proposed the establishment of 'Strategic Energy Partnerships' (European Commission, 2015) to enhance energy cooperation with key producing and transit countries, and in the southern Mediterranean this exercise is already being carried out with Algeria. However, such an approach might not be effective in SMCs, as it might be, for instance, with Turkey, where a strategic partnership might allow the EU and Turkey to use their complementary leverages in potential gas-supplying regions and transit countries to enable new projects (Tagliapietra and Zachmann, 2015). In short, such clear-cut cases seem to be less evident in SMCs. Furthermore, this approach entails the risk of over-politicising the process. In practice, bringing the top policymakers from both sides around a table to discuss energy cooperation might entail a level of abstraction that is not useful for the development of concrete projects. Moreover, this kind of approach might even jeopardise the energy discussion because of interference from other political dossiers on the table.

From our perspective, a better approach to support the sustainable energy transition of SMCs

19 For an expanded analysis of the case study, see Tagliapietra and Zachmann (2015).

20 For a comprehensive discussion of this issue, see Tagliapietra and Zachmann (2016).

would be to focus the cooperation on the rising financial player in the region: the European Bank for Reconstruction and Development (EBRD).

The EBRD could establish new 'Sustainable Energy Funds' with selected SMCs. This mechanism would be a public-private partnership (PPP) involving the bank, the government of the selected country, international energy companies operating in the country and institutional investors willing to make a long-term investment. The scheme would work as follows:

- The EBRD would provide risk-mitigation and credit-enhancement tools to cover the country risk faced by international energy companies and institutional investors. This risk might change over time, as the political situation in a country evolves. Reducing the risk can enable the country to attract more investment because of lower interest rates, in effect providing an investment insurance mechanism;
- International energy companies and institutional investors would take on the commercial risk, to ensure the commercial viability of the projects proposed;
- The government of the selected country would contribute by legally committing to maintain stable regulatory conditions for the given project. Should they fail to do so, the banks will discontinue lending – and the EU will exercise some political and economic leverage to ensure repayment of existing obligations.

This PPP mechanism should be able to provide a solid response to the evidence that investors might jump into the SMCs' sustainable energy sector only if a proper risk-adjusted return is considered as guaranteed.

Considering its experience and reputation, the EBRD seems to be the institution best placed to promote these new 'Sustainable Energy Funds'.

CONCLUSIONS

After almost two decades of unproductive regional cooperation attempts, the EU should reshape its energy cooperation efforts in the Mediterranean through new bilateral approaches. In concrete terms, we propose the establishment of Sustainable Energy Funds with selected SMCs. This would allow support to be provided to sustainable energy projects in partner countries, making them more economically stable and safeguarding the EU's gas security of supply. This might also represent a significant business opportunity for the EU energy industry, especially in the context of the sluggish EU energy outlook.

The authors thank Domenico Favoino for excellent research assistance.

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Chapter 3

The Unmet Challenge of Interdependence in the EU-MENA Space: A View from the South

Karim El Aynaoui, Karim El Mokri, Uri Dadush and Rim Berahab

Introduction

The countries of Europe and those to the South surrounding the Mediterranean, as well as those further East in the Levant and stretching to the Arab Gulf, share a long history of commerce, punctuated by alternating periods of crisis and rapid development. Crisis best describes the last decade. In recent years, their economies have shared one salient feature: European and Arab countries have failed to meet the expectations of their citizens by a wide margin. Both regions have experienced lower growth than their peers over the last ten years. All of Europe has suffered from the global financial crisis, but the European countries of the South closest to the MENA region have seen unemployment soar, and some have experienced not just recession, but depression. Meanwhile, the MENA countries have seen the disappointment of their people turn into waves of turmoil and civil conflicts, contributing to even more economic hardship. The crises to the North and South of the Mediterranean have fed on each other, resulting in diminished trade and a sharp increase in migration pressures. Overcoming these difficulties will predominantly depend on domestic political and economic reforms in European and Arab countries. However, their ability to collaborate in dealing with these shared issues matters as well.

Reform programs must recognize the interdependence of the two regions, in terms of security, geopolitics, economics and energy, and aim to turn it into an asset rather than a source of recurrent instability. Even with their own problems, the United States, Japan, China, and the other great economic powers have clearly done a better job than the EU and the Arab world at mitigating the risks of instability and in exploiting the economic synergies with their developing periphery. To be clear, dealing with the challenge of interdependence between the EU and the Arab World will not, on its own, solve the two regions' growth dilemmas—but it will help. From

a Southern perspective, urgency is critical, not only because there is little sign that the turmoil and conflicts triggered by the Arab uprising are nearing an end, but also due to the collapse of oil prices. This collapse is creating unprecedented budget pressures across a wide swathe of the region – from Algeria to Saudi Arabia – which had escaped the worst of the turmoil. Moreover, the increasing reluctance of the United States to intervene in regional conflicts, following its failed intervention in Iraq and that of its European allies in Libya, leaves a dangerous vacuum. Russia's intervention in Syria, its escalating tensions with Turkey, Turkey's struggle against Kurdish insurgents, the spread of ISIS into Libya, Saudi Arabia's intervention in Yemen, and the rivalry between Iran and Saudi Arabia make for an unstable mix.

Currently, Europeans view these interconnected events mainly through the prism of the refugee crisis, yet arguably, European countries could be seeing only the tip of the iceberg. While in 2015 European countries have seen the inflow of some 1.3 million asylum seekers (less than 0.3% of the European population), it is estimated that about 7.6 million Syrians have been displaced, of whom 1.7 million are in Lebanon and 629,128 are in Jordan, representing respectively 23.6% and 8.3% of their respective populations. The stability of far more populous countries, such as Egypt, is also in question. Should Libya turn into a failed state, it would become a significant security threat to Europe. It would also make it even more difficult to regulate the flow of forced migrants and economic migrants from Sub-Saharan Africa.

To address these issues, this paper will take stock of the economic performance of Europe and the Arab world, examining how they can do better by working together. The paper pays special attention to the trade, investment, migration and energy linkages between the two regions, as well as those among the Arab countries, as well as how they can be improved to achieve better development. Whereas we present a southern perspective, with Arab countries as main focus, the purpose is to understand the constraints facing both regions, and come up with measures that benefit all parties. The paper begins with a brief overview of Europe and MENA's economic performance compared to their peers. It goes on to examine the linkages between the two regions as viewed by the MENA region. These include trade, in which energy plays an especially important role, migration, both voluntary and involuntary, and investment. The paper then discusses the political preconditions for advancing on reforms, especially on those that exploit the latent synergies between the two regions, and their feasibility. It concludes with some critical policy recommendations.

I. Europe and the MENA region: An Inadequate Response to the Global Financial Crisis

Across the world, many countries are still struggling to recover from the global financial crisis, but Europe and MENA are probably the regions finding it hardest. In this section, we will compare the economic performance of various groups over the three years preceding the global financial crisis (2005-2007), with the three subsequent years (2012-2014). During the crisis, from 2008 to 2011, the global economy suffered one of the sharpest recessions and was followed by an incomplete recovery.

Chart 1 shows the pre-and post-crisis annual growth rates for three groups of EU countries: the Euro-zone, newly joined countries, and the rest of the EU. It also shows two groups of MENA countries: the GCC oil-exporters and the rest (mainly oil importers). For comparison purposes, the US and Japan are included. In the euro area (12 countries)²¹, the annual GDP growth in 2012-2014 was 2.7 percentage points lower than in the Pre-crisis period (2005-2007), while it slowed by 1 percentage point in the three main non-euro area member states²². The loss of momentum was even more important in the newly joined countries--4.6 percentage points less annual growth.²³ By contrast, the growth rate of the US economy has returned to levels comparable to those of the pre-crisis period. The poor economic performances of European economies were also reflected in trade flows. The average growth rate of goods and services exports dropped by about 11 points between the two mentioned periods in euro area (12) and by 10 points in the 3 main non-euro area member states. Once again, the fall in export growth rate was more pronounced in the newly acceding countries, from an average pace of 22% in 2005-2007 to 2.9% in 2012-2014. This situation was partly due to the reliance of many newly acceding countries on demand from the core European countries.

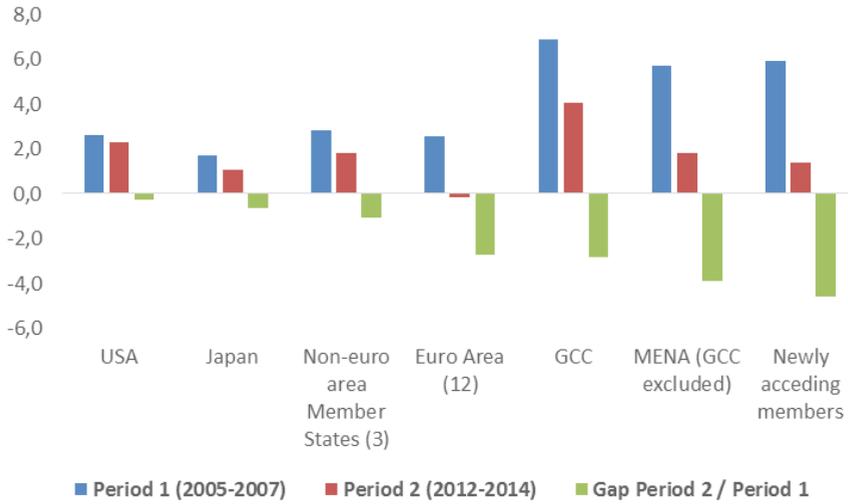
Against this background, the labor market was affected by the negative externalities of the weak recovery. The unemployment rate in the EU reached 10.2% in 2014 compared to 7.2% in 2007. The euro-zone (19 members) did worse than the average, as its unemployment rate increased from 7.4% to 11.5%. By contrast, the US unemployment rate in 2014 was already approaching pre-crisis levels.

21 Belgium, Germany, Ireland, Greece, Spain, France, Italy, Luxembourg, the Netherlands, Austria, Portugal, Finland.

22 Denmark, Sweden, United Kingdom.

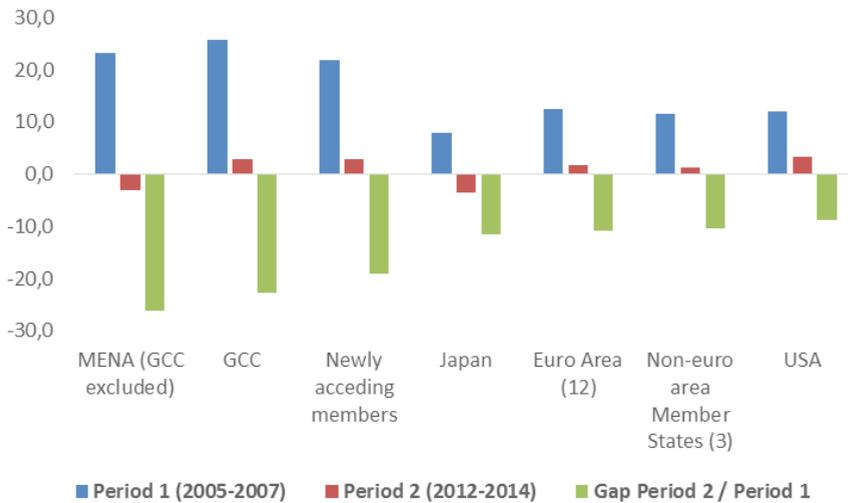
23 Cyprus, Malta, Slovenia, Slovakia, Estonia, Latvia, Lithuania, Bulgaria, Czech Republic, Hungary, Poland, Romania, Croatia.

Figure 1: GDP growth during Pre-crisis and Post-crisis (3-years average growth rate in %)



Source: on the basis of WDI database

Figure 2: Nominal (\$US) export of goods & services growth rate during Pre-crisis and Post-crisis (3-years average growth rate in %)

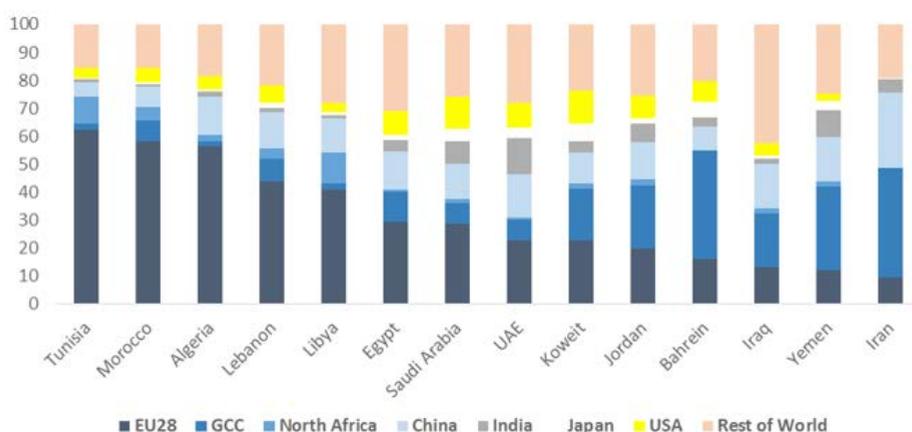


Source: on the basis of WDI database

The weak performance of the European economies contributed to weak performance in MENA, given the EU’s importance as a trading partner for many countries in the region. The EU

accounts for more than 60% of total goods exports for Tunisia, 58% for Morocco, 56% for Algeria, 44% for Lebanon, 41% for Libya and 29% for Egypt. In addition, those countries are tied to the EU through migrant remittance flows and tourism receipts. Against this backdrop, all these countries suffered from the weak recovery in Europe essentially through real sector channels. Contagion via financial links was far less important, given the limited development of financial sectors in some economies in the MENA region and the weak integration in international financial markets in others. As for the GCC countries, they are far less dependent on the EU, and their slowdown reflected global factors as well as financial sector spillovers. The sharp slowdown of GDP growth in GCC countries also affected others in the MENA region, in particular Egypt, Jordan, Iran, Yemen and Iraq through trade linkages and remittance flows.

Figure 3: MENA Exports structure by destination (in percentage of total exports)



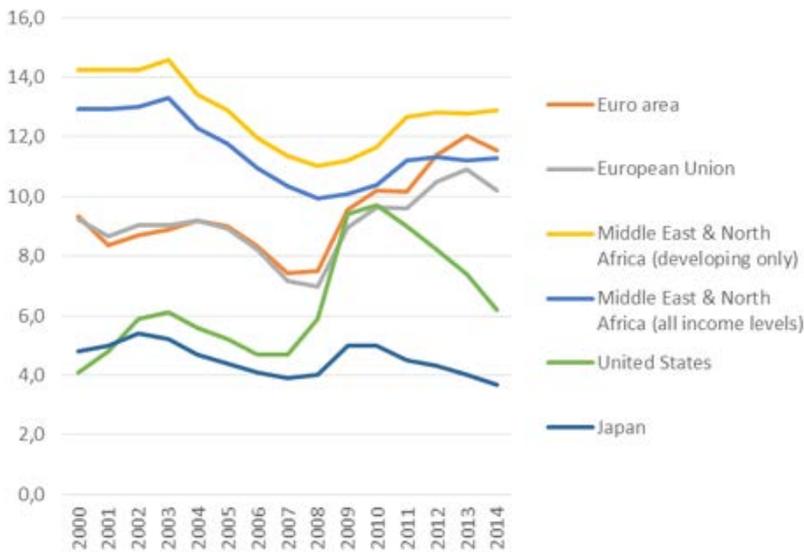
Source: based on UNCTAD database

The MENA region experienced a decline in GDP growth, from 6.9% to 4.1% between 2005-2007 and 2012-2014 in GCC countries and, far sharper, from 5.7% to 1.9% in non-GCC MENA countries. The resilience of the different countries depended on various factors, including the degree of turmoil following the Arab uprising, from 2011 onwards. The effectiveness of the policy measures initiated and initial macroeconomic conditions and buffers also played an important role. For GCC countries, ample reserves and repatriated funds enabled them to respond with monetary and fiscal stimulus (i.e. debt restructuring programs in the UAE helped). In non-GCC MENA countries, countercyclical measures were generally far more modest, given limited fiscal space, international reserves and their access to external sources of financing. Only recently have oil-importing MENA countries, in particular Morocco, Tunisia, Egypt and Jordan, benefited from the fall in oil prices and been able to contain the current account deficits and engage in stimulus packages. By contrast, the GCC countries are now struggling to contain surging fiscal

deficits because of the oil price collapse.

The policies of recovery initiated by MENA countries, however, were not sufficient to save them from the negative effects of the crisis on job markets, especially among the youth. The measured unemployment rate in non-GCC MENA countries rose from 11.4% to 12.9% between 2007 and 2014, but the reality was probably worse. Labor force participation rates, which are already low in the MENA region, decreased during the crisis since discouraged workers dropped out of the labor force. These trends exerted even more pressures on social and political stability.

Figure 4: Unemployment rate (%)



Source : WDI database

1. Europe: What is Behind the Persistently Slow Growth?

Slow European growth affects growth in the MENA region. Although this should not be interpreted as a causal relation, it is nevertheless noteworthy that, according to a recent analysis, a one percent slowing in growth in Europe is associated with a one percent decrease in growth for the MENA region (World Bank GEP 2016). Europe's struggles to reignite growth in the wake of the crisis could be attributed not only to limitations on its ability and/or willingness to deploy counter-cyclical policies, but also to several structural impediments, notably an aging and declining labor force in several countries, a failure to innovate in the face of increased competition from China and other lower-wage economies, as well as the faulty workings of

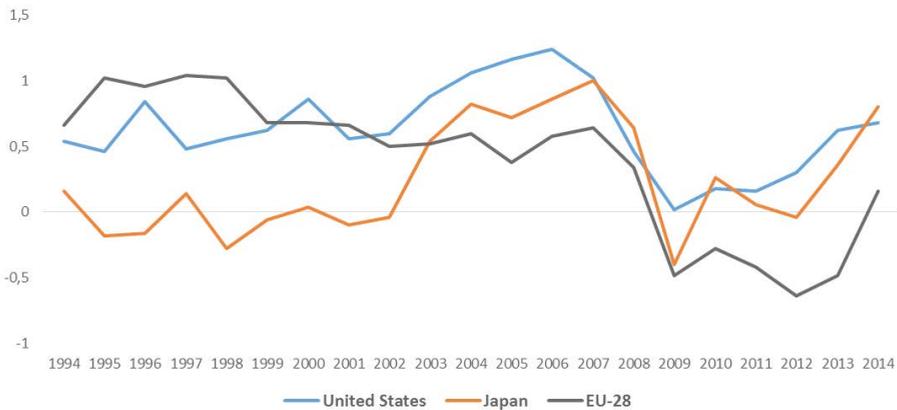
an incomplete monetary union and trends in the income distribution which may be impeding demand.

In this section, we look a little more closely at the effects on growth of aging, slow innovation, wage policies and, more broadly, at the detrimental effect of debt- and export-led growth strategies.

Europe is the second most rapidly ageing region in the world after Japan. Total labor supply in the EU is expected to exhibit no growth until 2023, when it then declines steadily until 2060²⁴. In 2060, the labor force is projected to be 8.2% lower than in 2023. The projected decline in the euro area is even sharper, equivalent to 9.2% of the labor force in 2023. This downward trend in labor as a factor of production will have negative implications for the EU's growth potential in the long run. One channel will be through savings. Aging and increased dependency ratios will probably result in lower private savings and then lower resources to finance investment and long-term growth. In addition, total investment could also suffer from a deterioration of public savings given the expected increase in age-related public expenditures in Europe. In such a context a sustained improvement of productivity supported by an efficient process of innovation will have to be the main source of growth. Yet, Total Factor Productivity growth is on a declining path, and has underperformed not only the US but also Japan, turning negative since the onset of the global economic crisis. According to the "Innovation Union Scoreboard report 2015", 13 EU countries out of 28 exhibited decreasing innovation performance since the crisis. The EU also shows lower innovation performances than South Korea, the US, Japan, and does better than China, whose gap is, however, closing. European innovation is hampered by excessively cautious bureaucracy²⁵. The more limited availability of risk capital than in the United States is also a factor. According to the Venture Capital Insights Report by Ernst & Young, during the period 2006 – 2013, about \$373 billion was invested in venture capital worldwide, of which almost 70% invested in the US while the share of Europe is much lower (14% of total). Meanwhile, the proportion of Chinese venture capital of the total jumped from an average of 9% during the period 2006-2013, to a share of 18% in 2014.

24 Ageing report – European commission, 2015.

25 "The precautionary principle" is one example of an approach that sometimes hampers innovation.

Figure 5: TFP growth in selected advanced countries (5-years moving average, %)

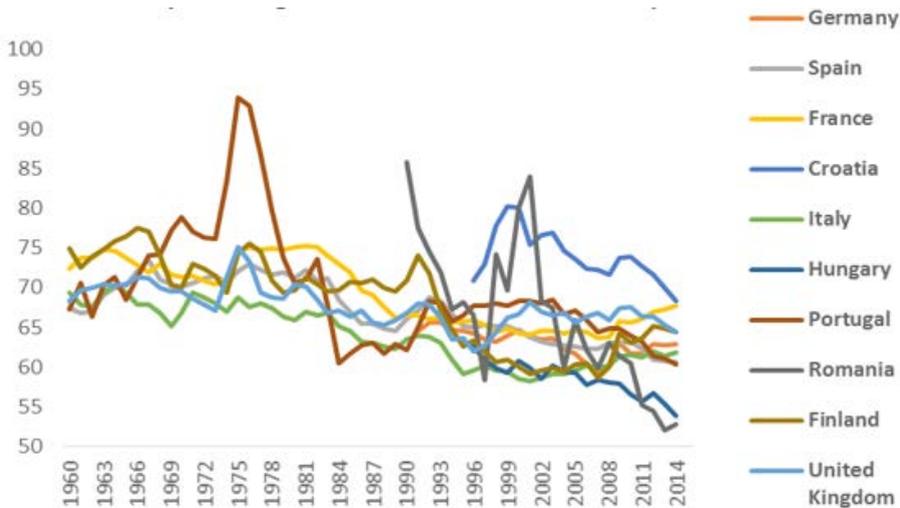
Source: Elaborated on the basis of The Conference Board Total Economy Database

Slow growth in Europe may also be the result of insufficient effective demand, in particular to a share of wages that is too low (Onaran and Obst, 2015). The increase in wage share could have several consequences. First, consumption will rise, since workers who earn wage income have a higher propensity to consume compared to capital owners and higher income groups who earn profit income. The second consequence of the rising wage share is that private investment may decline due to lower profits. Finally, the increase in wages induces higher unit labor cost and a loss of competitiveness causing a fall in net exports. According to (Onaran and Obst, 2015), in the majority of countries, increased wage share would boost aggregate demand through increased consumption, outweighing the decline in private investment and net exports. This outcome is even more likely for large economies with relatively limited openness. The available literature shows that the majority of EU countries are wage-led demand regimes, which means that an increase in the wage share generates a rise in aggregate demand. This is believed to be the case for the UK, Germany, France, Italy, Spain, Greece, Portugal, Sweden, Finland, the Netherlands, and Luxembourg. In addition, recent empirical findings²⁶ indicate that the EU as a whole is a wage-led economy. Moreover, if wage moderation policies are conducted simultaneously in all the EU members, the relative export prices will change a little between them while the total EU domestic demand will decline. In addition, since intra-EU trade accounts for a large part (63% of total EU exports of goods are intra-EU), the positive impact of EU wage moderation on extra-EU trade will be insufficient to offset the negative effect on domestic demand.

²⁶ Onaran and Obst (2015), Stockhammer and Wildauer (2015), Onaran and Galanis (2014), and Stockhammer et al (2011).

Yet, the European Commission has long encouraged wage moderation, advocating real wage growth below productivity growth, to retain competitiveness. This pro-capital distributional policy – which is not unique to European institutions - has been associated with a downturn in the wage share in many European countries (or stagnating share in some others) since the 1980s. The wage moderation in Europe, spearheaded by Germany, may be one of the factors contributing to a sluggish and fragile recovery in Europe.

Figure 6: Adjusted wage share in selected European countries (as percentage of GDP at current factor cost)



Source: AMECO

In order to compensate for the lack of domestic demand, the majority of European economies adopted two alternative growth strategies i.e. debt-led growth and export-led growth strategies. Both these strategies are considered as unsustainable, contributing to inequality according to some recent research findings (Onaran and Obst, 2015; Stockhammer and Wildauer, 2015). In debt-led growth countries, households increase their debt to maintain consumption levels given the absence of sufficient wage growth. This process is possible owing to financial deregulation, expansive monetary policies and financial and property bubbles, amplified by massive capital inflows. The debt-led growth model generated an unstable environment with rising indebtedness of households as one of the factors that induced the recent crisis. The high level of debt also makes the recovery more painful and slow, since it generally requires an important effort of deleveraging. In addition to the USA, a classic example of debt-led growth economies, we can find in the empirical literature several European countries (i.e. United Kingdom, Ireland, Greece, Spain and Portugal). In the export-led model, countries compensate for weak domestic

demand by focusing excessively on exports in a beggar-thy-neighbor process, also making them overly dependent on external demand. These Export-led strategies can impede the process of rebalancing within the EU. They also rely on restraint of wages, which will further weaken domestic demand and amplify export dependence in these countries. Among the EU members that are pursuing an export-led growth, empirical findings identify Germany, Netherlands and Austria as extreme cases. France and Italy are classified as intermediate models (Hein and Mundt, 2012).

The issues discussed above contribute to the persistent weakness of growth in the EU and represent a serious challenge. Addressing these problems is key, not only to the EU but also for MENA region, given the systemic weight of Europe as a major partner for many countries South of the Mediterranean basin.

2. The Slow Transformation Process of the MENA Countries

The poor economic performance of the MENA region, and in particular that of non-GCC countries not sheltered by large oil and gas endowments, reflected not only the cyclical forces unleashed by the global financial crisis, but also the accumulated structural deficiencies of their economic systems. These have been widely discussed in the literature. Below, we highlight five aspects which we believe are most important, and each of which has bearing on the unmet challenge of interdependence with the EU. These aspects are: inadequate diversification, insufficient entrepreneurship, failure to exploit human capital, a dysfunctional job market, and insufficient financial development.

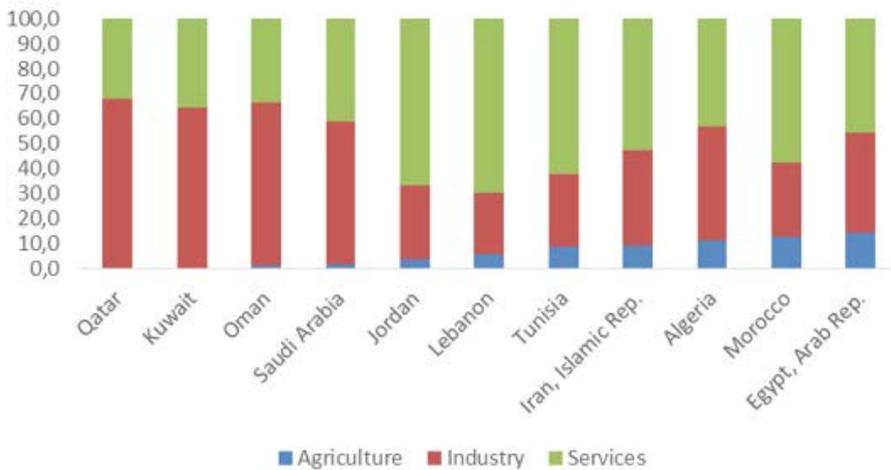
A. DIVERSIFICATION EFFORT AND UPGRADING PROCESS

In a nutshell, the biggest challenge facing MENA countries is upgrading and diversifying their economies to create new employment opportunities for a large and rapidly growing young population. Political and social instability in several countries in the MENA region makes the task even more daunting. Though increasing productivity and creating employment opportunities is an economy-wide challenge, one that concerns non-traded as well as traded sectors, growing the (non-oil) traded sector presents a special challenge. At the same time, MENA countries struggle to absorb technologies prevalent in the most advanced countries, which would otherwise allow them to move up the global value chains and upgrade their systems of production.

MENA has seen some progress, albeit insufficient, in diversification over the last decade. Most countries of the region witnessed a decline in the share of agriculture Value Added in total GDP, while industry and services, which exhibit higher value added per worker, have seen

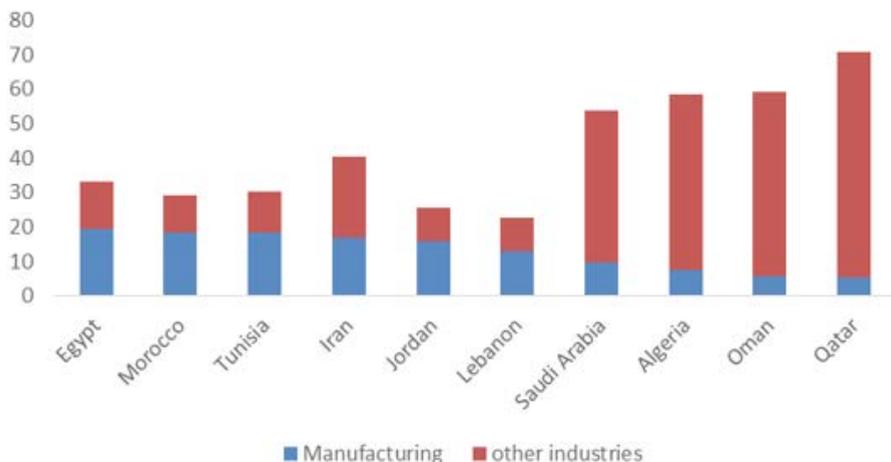
their share increase. Referring to 2014 data, agriculture plays a small role in terms of GDP in oil-exporters but is still a large contributor in countries such as Morocco and Egypt, where it also employs about 40% and 30% of workers, respectively. Services play a much bigger role in GDP of oil importing countries, like Lebanon (70%), Jordan (66%), Tunisia (62%) and Morocco (59%) than among oil exporters. The energy sector, which is included in industry, accounts for the large role that industry plays in oil exporting countries in particular Qatar (68%), Oman (65%), Kuwait (64%), Saudi Arabia (57%) and to a lesser extent Algeria (46%).

Figure 7: GDP structure in 2014 (value added in % of GDP)



Source: WDI database

However, manufacturing plays only a small role in the GCC countries where it accounts for less than 20% of industry Value Added. Manufacturing plays a larger role in oil importing countries, accounting for some 60% of industry value added, the rest consisting mainly of construction and utilities. Although, on average across the world, manufacturing is a relatively small sector and is growing slower than services, it nevertheless remains an important source of growth and innovation and is often the source of higher-paying jobs. These trends suggest that in the MENA region, manufacturing opportunities, as well as those in many modern and high-value services remains under-exploited, helping account for the relatively slow process of structural transformation. Moreover, the predominance of capital- and resource-intensive industries in the industrial sector of several MENA countries is far from ideal in those experiencing a rapid growth of the labor force.

Figure 8: Distribution of industry value added in 2014 (% of GDP)

Source: on the basis of WDI database

B. ENTREPRENEURSHIP

MENA countries have made some progress in improving the business environment and encouraging private investment and entrepreneurship in recent years. However, public enterprises remain dominant in many sectors. According to doing business assessment (2016), MENA economies have, on average, made significant progress in several facets of the business environment, including easing procedures for starting a business, dealing with construction permits, access to electricity and taxes procedures. However, economies in the Middle East and North Africa still have an average ranking of 114 of 189 countries, lagging behind Latin America and the Caribbean, East Asia & the Pacific and Eastern Europe and Central Asia. They exhibit particular weakness in issues relating to the rule of law, such as resolving insolvencies, dealing with a variety of legal issues and protecting minority investors. They also perform especially badly in access to credit.

Table 1: MENA countries Doing Business Ranking (2016)

Country	(2016)
UAE	31
Bahreïn	65
Qatar	68
Oman	70

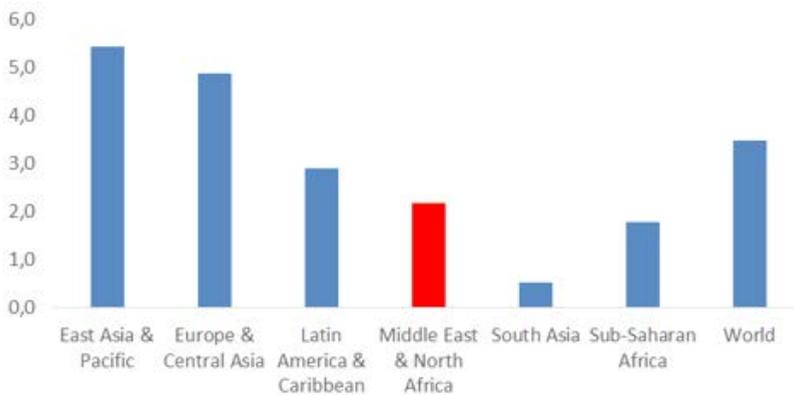
Tunisia	74
Morocco	75
Saudi Arabia	82
Kuweït	101
Jordan	113
Iran	118
Lebanon	123
Egypt	131
Iraq	161
Algeria	163
Yemen	170
Syria	175
Libya	188

Source: Doing Business 2016

MENA countries create too few businesses, as measured by the Average New Business Density Index, well below the world average and that of East Asia, Europe and Central Asia and Latin America-- the other three middle-income regions. The investment to GDP ratio of the MENA over 2010-2014 was above the world average, 24% versus 22%. However, efficiency was relatively low possibly due to the high weight of public investment. The Incremental Capital Output Ratio in MENA countries is still higher, on average, than in some Asian countries, Latin America and Sub-Saharan Africa, while it seems to be more efficient than in Central Europe (World Bank, 2011).²⁷

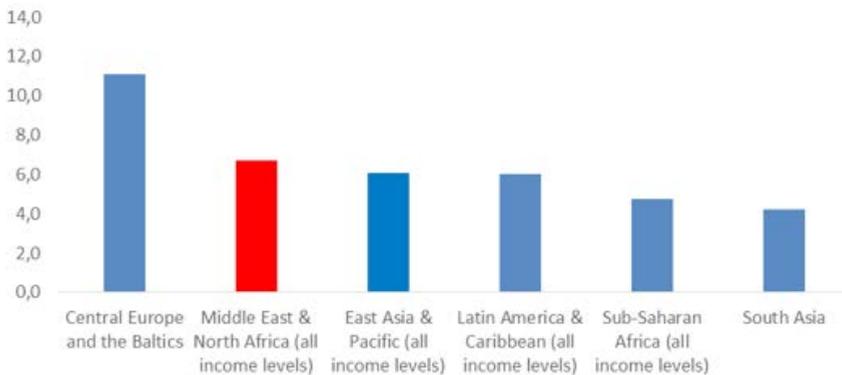
²⁷ Middle East and North Africa Economic Developments and Prospects, September 2011: Investing for Growth and Jobs.

Figure 9: Average new business density 2004-2014 (new registrations per 1,000 people ages 15-64, per year)



Source: WDI database

Figure 10: Incremental capital output ratio (percentage points)



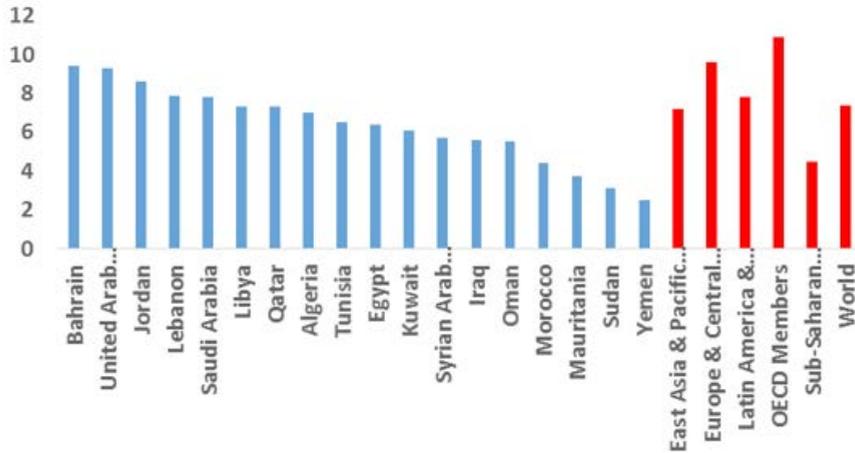
Source: on the basis of WDI data

C. HUMAN CAPITAL

The capacity of an economy to assimilate “know-how” depends on its human capital and an environment that encourages innovation. Education, which now accounts for more than 5% of the region’s GDP, is clearly key, and substantial progress has been made by the majority of MENA countries in terms of access to education. Net enrolment ratios rose from 86% to 94.2% between 2000 and 2013 for primary schooling and from 62% to 71.7% for secondary education. These gains were especially prominent among girls. In addition, the literacy rate for adult population improved dramatically as it increased from 59% in 1990 to 80.3% in 2010 for the MENA region.

However, despite these remarkable achievements, years of schooling remain below those of other developing regions in most MENA countries.

Figure 11: Average years of schooling

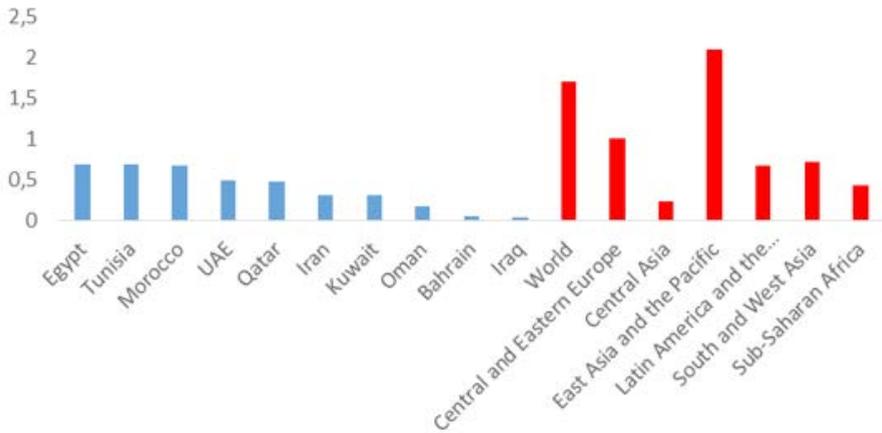


Source: Barro & Lee database

More important still, the quality of education remains problematic. International standardized tests (TIMSS and PISA tests) indicate the low learning outcomes in MENA region on average in comparison to its income level. Besides that, there is a serious problem of mismatch between the skills required by the job market and those taught in the educational system. This mismatch could partly be explained by the traditional role of governments as employers of first choice in the MENA region, since it provides job security and high wages without requiring qualifications relevant to the private sector (The Arab World Competitiveness Review, 2010).

Gaps in education and skills mismatch are in part responsible for the high unemployment among educated people in the region. Deficiencies in terms of skills are also a significant impediment to enhancing productivity in businesses. Firms appear to be slow in assimilating technology absorbed through trade and FDI. The share of R&D in GDP in many economies in the MENA region also lags behind the world's average.

Figure 12: R&D (in % of GDP)

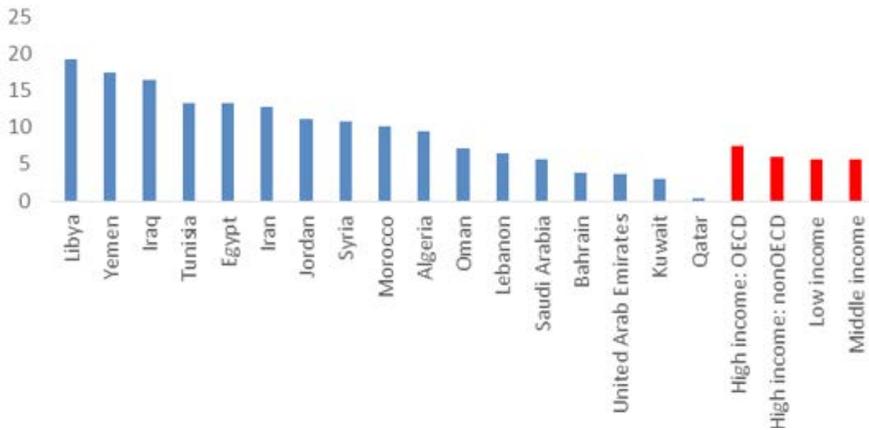


Source: WDI Database

D. JOB MARKET

Slow pace of structural transformation combined with inadequate build-up of human capital, have contributed to a dearth of job opportunities to absorb the growing number of young workers. The business cycle has not helped in recent years, but unemployment is above all a structural phenomenon. Except for the GCC countries that use oil rents to sustain massive employment in public sector, unemployment rates in the other MENA countries are significantly higher than the levels prevailing on average in low, middle, and even high-income countries. It is important to stress that long-term unemployment accounts for a large part of unemployed population. The latest estimations from the ILO show that the proportion of long-term unemployment reaches 45% of total unemployment in Tunisia, 64% in Morocco and 88% in Egypt. Moreover, populations that are most concerned by unemployment in MENA region are youth and educated people. Among the potential factors often put forward to explain high unemployment in many countries in the region, rigidity of job market is probably the most cited. However, while this explanation helps account for the failure to employ graduates in formal settings, the problem of unemployment clearly goes deeper, given the presence of large scale informality in MENA countries. Whether simply allowing for more labor market flexibility in the formal sector, without engaging in more fundamental reforms, would improve job opportunities or would create more insecurity and political instability that worsen the investment climate, remains an open question. and a dilemma that policy-makers have to confront.

Figure 13: Unemployment rate (%)

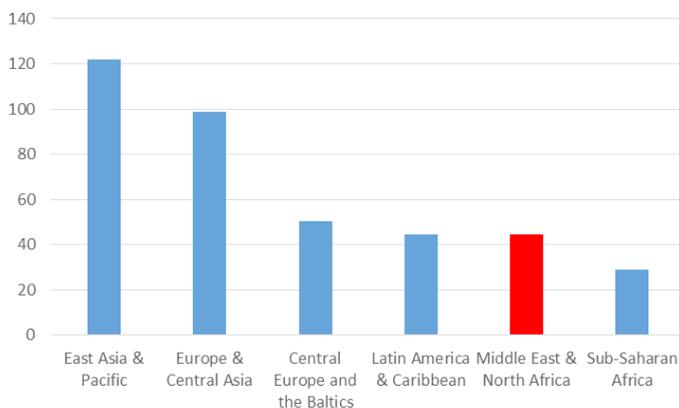


Source : WDI Database

E. FINANCIAL DEVELOPMENT

The banking sector in MENA countries is often based on a simple supply model mostly with basic products. Domestic banks are also not sufficiently integrated to international markets, given the non-convertibility of domestic currencies and capital account restrictions. Over the last two decades, most of the MENA countries, at different degrees, initiated various reforms to liberalize and further develop their financial sectors by improving the regulatory framework, enhancing transparency, enlarging access to banking services, privatizing public banks in some countries in the region and via a progressive adherence to Basel rules. Yet, the majority of MENA countries need to substantially improve the efficiency of their financial sector and the access to credit of all but large enterprises and the public sector.

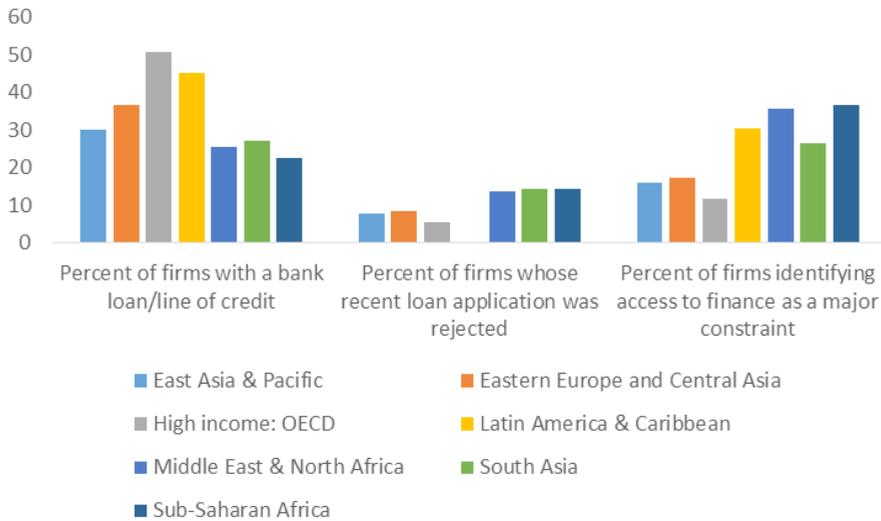
The financial sector in the MENA region is bank-dominated, while other forms of finance – fixed-income and equity financing – are on average relatively less exploited, in particular for SMEs. The dominance of family-owned businesses generally avoiding dilution of their decision power contributes to this trend. However, bank credit remains insufficient. The ratio of domestic bank credit of the private sector to GDP in MENA region in 2014, is about 44%, a level that is much lower than those observed in East Asia and Pacific (122%) and Europe and central Asia (99%).

Figure 14: Domestic credit to private sector by banks (% of GDP)

Source: WDI database

Access of firms to bank financing is a serious problem in most of developing countries but the situation is worse in MENA countries. According to the World Bank Enterprise Survey, the percentage of firms having a bank loan in the MENA region is one of the weakest in the World (25%). Only sub-Saharan Africa has a lower percentage. In addition, and by referring to the same source, the proportion of firms identifying access to finance as a major constraint in MENA region (36%) is higher than all regions except sub-Saharan Africa (37%)—while this percentage is only 16% in East Asia and Pacific, 17% in Eastern Europe and Central Asia and 26% in South Asia. The MENA banking sector appears to be more risk averse in particular when it comes to granting credit to SMEs. These are considered as riskier and having insufficient collateral or, in the case of innovative SME, too intangible an asset base to guarantee accessing to loans. Private banks are unable to compensate for the slow but progressive decline of state-owned banks in the region. Paradoxically, and according to Rocha et al. (2011), state banks in MENA region are taking greater risks than private banks in lending to SMEs, accepting a lower ratio of collateralized loans. However, this orientation of state-owned banks is pursued at the cost of a higher portion of non-performing loan problems in some countries.

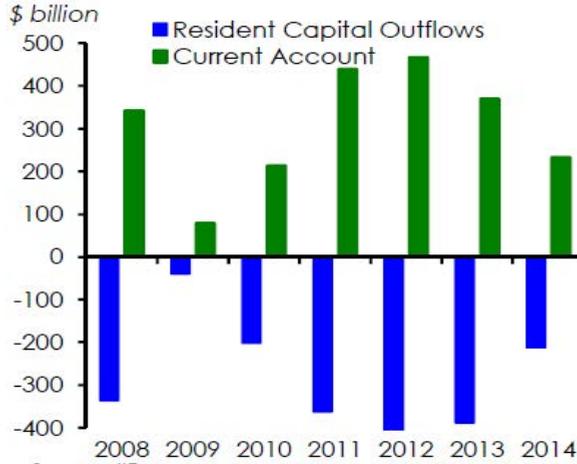
Figure 15: Access of firms to finance in the MENA region (% of total firms surveyed)



Source: World Bank Enterprise Surveys

The integration of the MENA region in international financial markets is also both insufficient and lop-sided, mainly characterized by large outflows from the oil exporters. Most of the MENA oil-exporting countries were major exporters of capital until recently, as they witnessed increasing current account surpluses which have picked up to about \$470 billion in 2012. However, the decline in oil prices since mid-2014, is eroding current account surpluses in these countries as the oil income is falling while domestic demand is still sustained. These developments could likely be reflected by less FDI and portfolio investment abroad, even towards some oil-importing MENA countries in the future. Besides that, political instability in many MENA countries, the slowdown in advanced economies, in particular in Europe, and in emerging countries like China as well as recent monetary policy orientation in the US, are considered as constraining elements that hinder MENA region’s process in terms of integration to the international financial market. FDI Net inflows to the whole MENA region started to fall in 2009, while Portfolio inflows remain volatile. FDI inflows into the MENA region remain tiny compared to other middle-income regions.

Figure 16: Capital outflows of MENA oil exporters



Source : IIF

Figure 17: Foreign direct investment, net inflows (Billions US\$)



Source: based on WDI database

II. EU-MENA Links and Synergies

Integration into the global economy is essential for rapid and sustained growth, and no channel of integration is more important than trade. However, the countries of the MENA region remain among those least integrated with each other through trade, and are also under-trading

with their neighbor to the North—the world’s largest trading block. Intraregional trade is just 10 percent in MENA, compared with one-quarter for ASEAN and two-thirds for the EU. These features, long preceding the Arab uprising and the spreading turmoil, persist despite numerous trade agreements among the Arab countries and between them and the European Union. To be sure, trade agreements can only provide a supporting role to international integration. Successful international integration depends vitally on the wider process of domestic reforms and trade agreements need to be not only ambitious in scope but also effectively implemented.

Unfortunately, these general conditions have been lacking in the MENA region, resulting in weak trade performance that has been extensively documented and analyzed²⁸. Though the region has seen modestly increased integration with the rest of the world through trade and foreign investment, with integration contributing to the region’s growth, outcomes have been disappointing in comparison to the most successful developing regions and, more importantly, have fallen short of those needed to provide the region’s burgeoning young population with good jobs.

1. Stylized Facts on Trade

Research shows that the MENA region could be engaging in significantly more trade, both within the region and without. For example, using gravity models, which predict countries’ trade flows as a function of their economic size and distance, Ferragina et. al (2005) conclude that the volume of trade between the European Union (EU) and the MENA countries could be 3.5 to 4 times larger than it currently is. This is conditional on the two regions reaching the EU’s level of integration. Intra-regional trade within MENA is also low relative to the gravity model predictions and worse than that in sub-Saharan Africa.²⁹ The latter finding has been recently questioned by Freund and Jaud (2015), who find that countries in the region may actually be over-trading with each other—mainly because they under-trade with the EU reflecting trade impediments between the two regions. Behar and Freund (2011) estimate that, overall, MENA under-traded by about 60-70 percent in the 2000s.

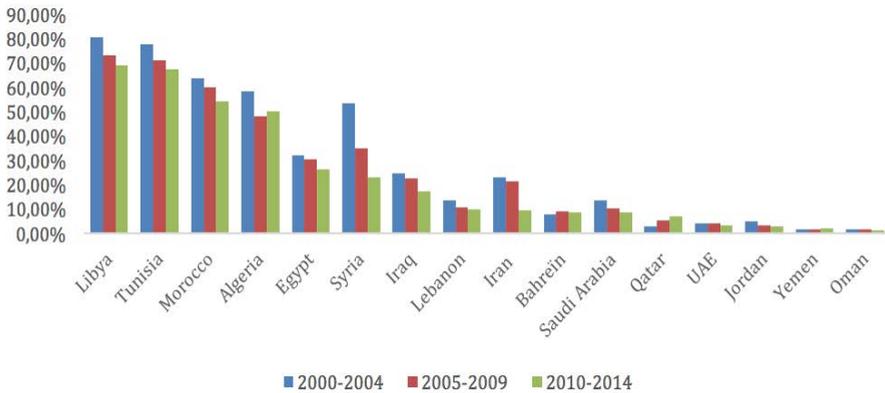
The EU is by far the most important trading partner of countries in North Africa. It attracts more than half of the exports of Algeria, Libya, Morocco and Tunisia, and accounts for a large share of Egypt’s exports. Syria, Iraq and Lebanon are the countries of the Levant that export most to the euro-zone, with average shares around 10-20%. On the other hand, the Gulf oil exporters

²⁸ Most recently in a comprehensive review by Chauffour (World Bank, 2013) and also by Rouiss and Tabor (World Bank, 2013).

²⁹ Behar & Freund (2011) *The Trade Performance of the Middle East and North Africa*, F.R.E.I.T Working paper 321 (forthcoming World Bank working paper); Behar, A. and P Manners (2010) “Distance to Markets and sub-Saharan African Exports”, *African Development Review*.

are increasingly oriented towards Asia, with less than 10% of their exports directed to the EU. The share of the EU in the exports of nearly all countries of the MENA region, whether exporters of energy or diversified exporters, has been steadily declining since 2000, mainly on account of the faster growth of Asia and the effects of the global financial crisis.

Figure 18: Shares of MENA region’s exports to the EU (averages)



Source : UNCTAD-stat

Although the energy exports of the MENA region are mainly directed to Asia, mineral fuels and lubricants nevertheless dominate exports from the MENA region to the EU, representing 68% of the total in 2014. On the other hand, manufactures represent just 6% of the total, and agriculture 3%, the rest being petro-chemicals and other minerals. The largest exporters of oil, gas, LNG and other oil products to the EU are Algeria, Saudi Arabia, Libya Iraq, and the UAE, in that order. In 2014, the energy exports of these countries amounted to 101 billion \$. With the resumption of oil exports from Iran following the lifting of sanctions, increased energy sufficiency in the United States, and the possibility of increased exports from Iraq and Libya should their internal conflicts abate, the sources of oil and gas and the orientation of exports are likely to shift significantly in coming years, in a way that is difficult to predict. Two things are likely however. First, the value of oil and (to a smaller degree) of gas exports has dropped precipitously with the decline in oil prices and will not return to anywhere near previous levels over the next several years. Second, the EU will remain heavily dependent on the MENA region for its energy imports, which currently account for nearly 40% of its consumption of oil and gas.

Indeed, though this feature is sometimes overlooked, energy trade is arguably the most important channel governing the economic interdependence of the two regions. For Algeria and Libya, which are large gas exporters, there are no short-term alternatives to this source of revenue, and vice versa, no comparatively cheap alternatives for the energy needs of Spain and

Italy, their respective clients. Throughout most of Europe, natural gas provides the essential fuel for space heating and for electricity generation, increasingly replacing coal. Given the geopolitical uncertainties associated with Eastern Europe's large gas imports from Russia, ability to import gas from North Africa or potentially from Iraq via Turkey represents an important present and future pillar of Europe's energy security, especially if measures to integrate the continent's electricity grid continue to advance.

Europe and the MENA region also depend crucially on each other in the oil sphere. Whereas the MENA region holds most of the world's oil reserves, Europe accounts for some 15% of global oil consumption, and there is currently no comparably cheap substitute for oil in its transportation sector and industrial uses. However, since, unlike natural gas, the oil trade is global, the interdependence of Europe and the MENA region is mitigated to some degree by the ability of global markets to cushion supply and demand shocks. Still, Europe has a strong interest in avoiding oil supply disruptions that might result from internal or international conflicts in the Gulf or from conflicts surrounding the Suez Canal. Such oil shocks have, on at least three occasions in the last fifty years, been the harbinger of recessions and bouts of higher inflation, prompting understandable concerns about energy security.

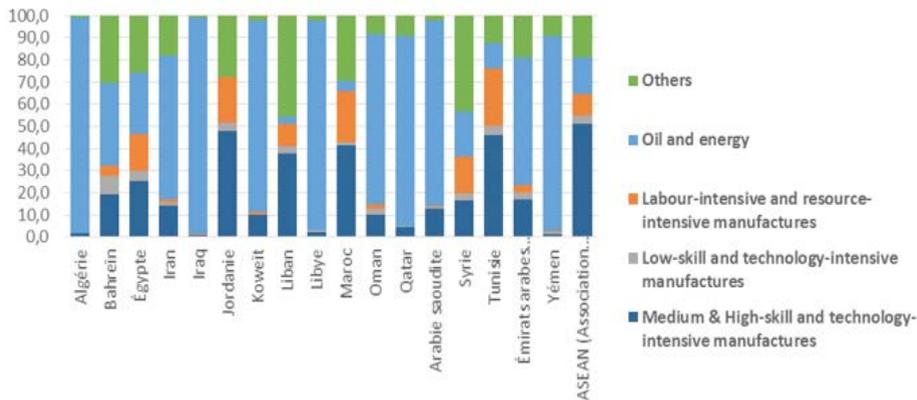
The growing awareness of the risks posed by climate change and the determination to respond by encouraging development of clean and renewable sources of energy, notably wind and solar power, also contribute to raising the stakes on energy cooperation between the two regions. Countries such as Morocco and Libya, which have an abundance of sunshine and open space, have a comparative advantage as providers of solar power to Southern Europe. The welfare gains from these linkages could become even more evident in the future as the cost of providing solar power continues to decline and there is more progress in integrating the European electricity grid.

Compared to energy, the trade between the MENA region and Europe in manufactures and agricultural products, plays a relatively small role. Europe could exist without relying on this trade. However, oil and gas exporters such as Saudi Arabia and Algeria have a strong interest in diversifying their export base and creating more labor-intensive activities, while the MENA region's oil importers depend on their exports of manufactures, agriculture and services for their livelihood. Moreover, the MENA countries offer considerable opportunities for European firms to establish regional value chains, which can make them more competitive on a global scale. Although analysis of the complementarity of the export structures of the MENA countries with that of the import structure of the EU suggests that the complementarity is modest, reflecting a gradual process of diversification.

This process has been too slow, however, especially among oil exporters. Comparing MENA countries with ASEAN, the technology and skills content of exports is low. Two-thirds of MENA countries display export concentration significantly above predicted levels, given income (Diop,

Marotta & de Melo, 2012)³⁰. Only in oil importing countries, such as Jordan, Lebanon, Morocco and Tunisia, do they achieve shares near those of ASEAN (around 51%). This type of manufacture only accounts for 25% of total exports of Egypt. Oil exporting countries, as expected, are more concentrated on energy exports while the share of High/ Medium tech and skills manufactures is very low—particularly in Algeria, Iraq, Libya, and Yemen. Yet some GCC countries are doing better than others, as it is the case of UAE and Bahrain.

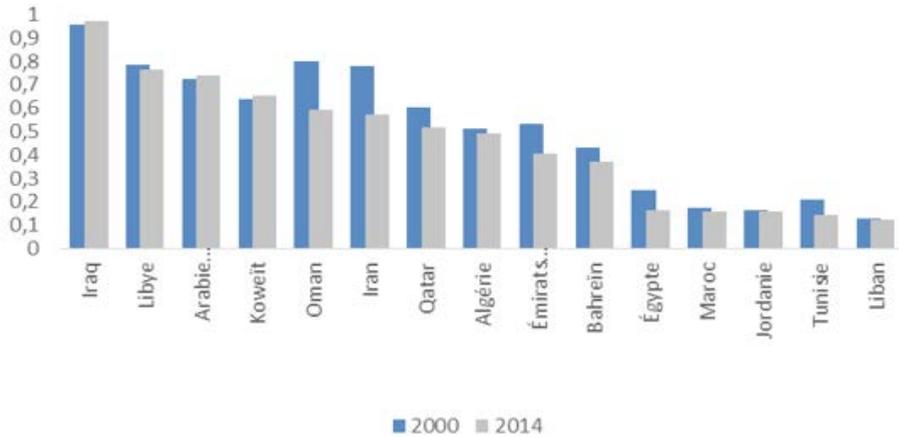
Figure 19: Skill and technology content of exports (in % of total exports)



Source: on the basis of UNCTAD database

More generally, MENA exports are less diversified. As measured by the Herfindahl-Hirschmann Index, there has been little change during the period 2000-2014 for many countries in the MENA region. Despite the fact that countries such as Oman, Iran and Qatar have made more progress on exports diversification than others, they remain highly concentrated.

30 MENA trade agreement, World Bank.

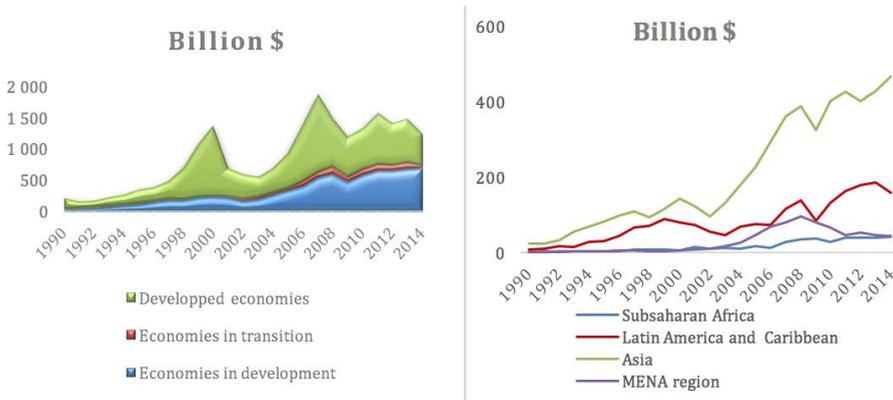
Figure 20: Export concentration Index of selected MENA countries

Source: UNCTAD

2. Foreign Direct Investment

Global FDI has grown rapidly over the last quarter-century, reaching an estimated \$1.7 trillion in 2015, the highest level since the global economic and financial crisis of 2008/2009. Strong growth in inflows was recorded in the European Union (EU) as well as in the United States. In developing countries, inflows of FDI reached \$741 billion in 2015. Developing Asia remained the largest FDI recipient, accounting for one third of global FDI inflows. In Africa and Latin America, flows have stagnated recently reflecting the sharp drop in the prices of their main commodity exports.

Figure 21: Evolution of FDI inflows



Source: UNCTAD

A number of studies have examined the impact of FDI on economy and have recognized its role as a factor for growth, through the creation of positive externalities such as accumulation of physical capital, transfer of technology, and job creation. Scatter diagrams give an indication of the association between inward FDI stocks, GDP, and trade. The diagrams, based on a panel data from 17 MENA countries³¹, represented by the dots, between 1980 and 2014, point to positive relationship between FDI stocks, economic growth (Chart 22) and trade (Chart 23). In fact, both graphs show a positive growing trend line (red line) through time, leading us to this conclusion.

Figure 23: Correlation between inward FDI stocks and GDP for countries of the MENA region between 1980 and 2014, in millions dollars

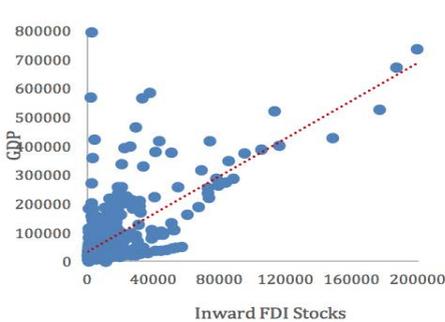
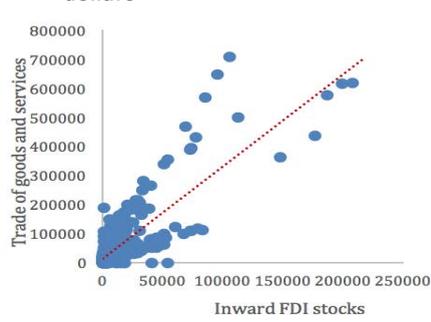


Figure 22: Correlation between inward FDI stocks and trade for countries of the MENA region between 1980 and 2014 in millions dollars



Source: Author's calculations

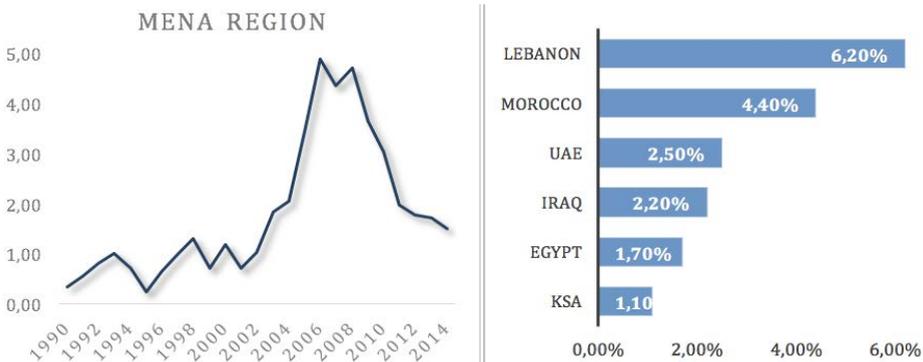
³¹ Algeria, Bahrain, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Qatar, Saudi Arabia, Syria, Saudi Arabia, Yemen.

Still, according to numerous researchers, the MENA region did not fully exploit its potential in trade and FDI, helping to explain the low GDP growth rates (Sekkat, 2004). Lagging economic reforms in Egypt, Algeria and Iran on trade and liberalization of foreign exchange markets present a special deterrent to FDI. However, Tunisia, Morocco and Jordan have done better. In several MENA countries FDI has been deterred by inadequate physical infrastructures.

Not surprisingly, the MENA region attracts small amounts of FDI compared to other developing regions. However, it has seen a substantial increase of FDI flows since the 2000s, both in absolute terms and as a share of GDP, reaching a record level of \$99 billion in 2008 compared to \$5.6 billion in 2000. This trend was temporarily reversed in 2009, with the outbreak of the global financial crisis, and the subsequent outbreak of turmoil due to the Arab uprising. Still, countries such as Egypt, Jordan, Lebanon, Morocco and Qatar saw inflows increase recently. In 2014, FDI into Egypt and Morocco grew by 14 % and 9 % respectively. Relative to GDP, FDI inflows are highest in Lebanon, 6.2% of GDP, followed by Morocco and the UAE.

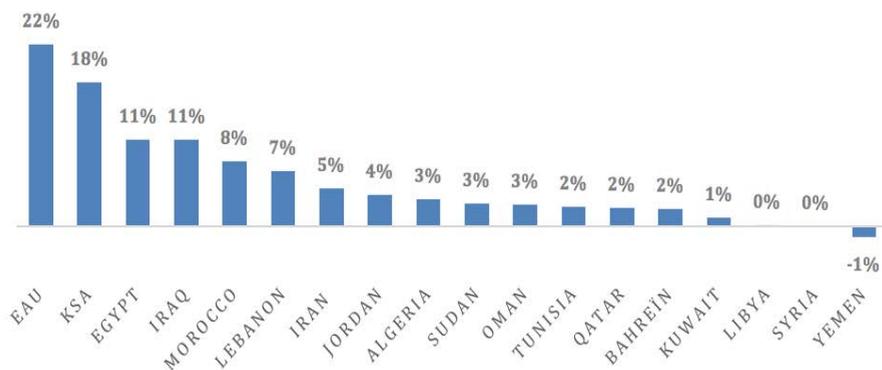
The distribution of FDI is very uneven across the MENA region. In 2014, over 70% of these flows are concentrated in 5 countries: the UAE, which accounted for 22% of inward FDI flows, followed by KSA, Egypt, Iraq and Morocco; while the lowest beneficiary countries include those in conflict, such as Libya, Syria and Yemen. The majority of FDI inflows have gone into petroleum-related activities—the case of Egypt, Libya and the GCC. In Morocco and Lebanon, FDI was mostly oriented toward the service and tourism sector (finance, catering, telecommunications and transport). Algeria has mostly attracted FDI in the construction sector and Tunisia in public services (electricity, gas and water). Little FDI has gone into the manufacturing sector, limiting the extent to which the region participates in global value chains. Recently, Morocco has shown to be one of the few exceptions to this trend in the region with investments in automobiles and aerospace.

Figure 24: FDI inflow in the MENA region as a share of GDP
Percentage share between 1990 – 2014 (a) **(b) Percentage shares in 2014**



Source:UNCTAD

Source: World Investment Report 2015

Figure 25: Distribution of FDI among the countries of the MENA region in 2014, \$ billion

Source: WDI-Database

The share of FDI stock issued from the EU reached \$190 billion in 2012, representing nearly 26.6% of the total inward stock of FDI in the MENA region. Among the EU countries, the main holders of outward FDI stocks to the MENA region were Great Britain (22.1%), France (17.8%) and Italy (17.5%). The majority of stocks from the EU - an estimated 41.1% - benefited the Gulf countries, followed by North Africa (38.4%) and the Middle East countries outside the Gulf countries (20.4%).

In their quest to attract FDI, MENA countries have concluded 622 Bilateral Investment Treaties worldwide in 2010, nearly 22% of all the BITs concluded, which include 81 with other MENA economies (OECD, 2010). These agreements typically accord national treatment (non-discrimination) to foreign investors and also include dispute-settlement procedures. Much less frequently, they include market access, or rights of establishment of foreign investors in specific sectors. Market access by foreign investors, on the other hand, tends to be decided as part of autonomous reforms, rather than as part of international agreements. Even so, a significant number of BITs signed by MENA worldwide are not enforced because the internal constitutional procedures of ratification have not been fully conducted. In parallel with the increase of BITs negotiations, MENA economies have concluded over 50 bilateral trade agreements containing FDI provision. The table below includes several existing bilateral investment-related agreements between the EU and the MENA economies.

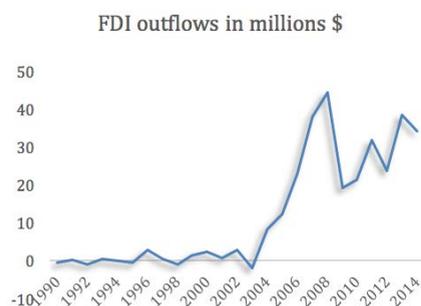
Table 2: Bilateral investment-related agreements (including EU) signed by MENA economies

Parties	Short Title	Date of Signature	Date of Entry into Force
EU – Iraq	EU – Iraq Cooperation Agreement	11/05/2012	-
EU – Lebanon	EC – Lebanon Association Agreement	17/06/2002	01/04/2006
EU – Algeria	EC – Algeria Association Agreement	22/04/2002	01/09/2005
EU – Egypt	EC – Egypt Association Agreement	25/06/2001	01/06/2004
EU – Yemen	EC – Yemen Association Agreement	25/11/1997	02/07/1998
EU – Jordan	EC – Jordan Association Agreement	24/11/1997	01/05/2002
EU – Morocco	EC – Morocco Association Agreement	26/02/1996	01/03/2000
EU – Tunisia	EC – Tunisia Association Agreement	17/07/1995	01/03/1998
EU – GCC (Gulf Cooperation countries)	EU – GCC Cooperation Agreement	15/06/1988	01/01/1990

Source: Unctad, Investment Policy hub

FDI outflows originate predominantly in the GCC countries, including Kuwait, Qatar, Saudi Arabia and the UAE. The UAE topped the list of greenfield projects, mainly in the real-estate sector, with 243 projects in 2014—well above other countries in the MENA region like Saudi Arabia (30 projects) and Qatar (23 projects)

Figure 26: FDI flows emitted by the MENA region (1990-2014) and ranking of the number of Greenfield projects issued in 2014:



Source: UNCTAD

Countries	Project numbers
United Arab Emirates	243
Saudi Arabia	30
Morocco	25
Qatar	23
Kuwait	11
Lebanon	11

Source: fDi Markets

3. Trade Agreements

The trade agreements of Egypt, Jordan, Morocco and Tunisia with the EU, have largely failed to deliver on their promise. Though these agreements form part of a broader Mediterranean initiative to foster the region's integration (see table), they are widely recognized to be low-ambition, partial deals, failing to address some of the region's main impediments to successful integration.

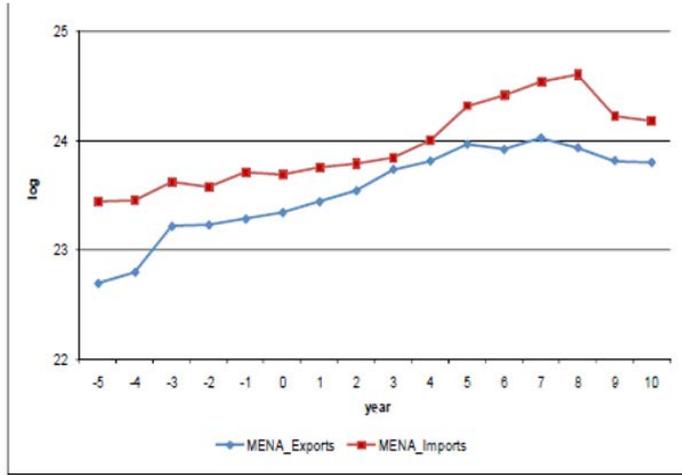
Table 3: Euro-Mediterranean Association Agreements

Country	Agreement Signed	Entry into Force
Tunisia	Jul-95	Dec-97
Israel	Nov-95	Jun-00
Morocco	Feb-96	Mar-00
Jordan	Nov-97	May-02
Egypt	Jun-01	Jun-04
Algeria	Apr-02	Sep-05
Lebanon	Jun-02	Apr-06

In the rest of this section, we will focus on the trade record of Egypt, Jordan, Morocco and Tunisia; countries where the Arab Spring has triggered a process of rapid if uneven political transformation. We will refer to them as countries in transition, or CT for short. An examination of the CT's trade performance to 2007, preceding the global financial crisis and the Arab

uprisings which made the trade picture very murky, shows that after their respective association agreements with the EU came into force, their exports to the EU accelerated only marginally (with the exception of Morocco).

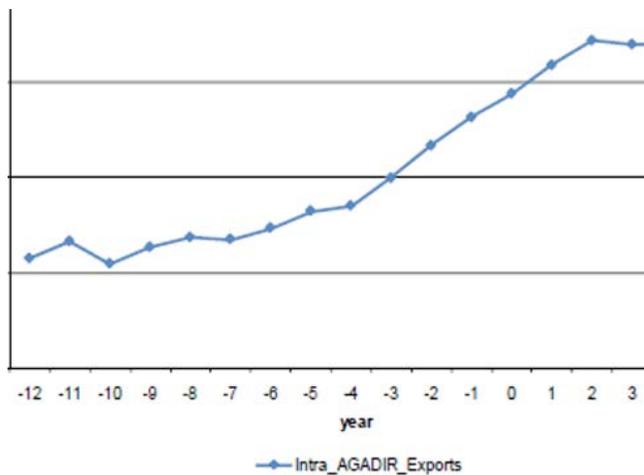
Figure 27: EU-MENA Preferential Trade



Year 1 is the first year of implementation of the preferential trade agreements.
 MENA partners included in the figure are Tunisia, Morocco, Jordan, Lebanon, Egypt and Algeria.

Source: MENA working paper serie n°55, 2012

Figure 28: Trade among AGADIR Members



Source: MENA working paper serie n°55, 2012

Moreover, over 1997-2007, CTs' exports to the EU increased slightly less rapidly than those to the rest of the world. CTs' total exports and (especially) total imports also grew less rapidly than the developing country average. Moreover, Europe's Eastern partners—the largest recently-acceded EU countries ("accession countries") the Czech Republic, Poland, and Hungary and those that have not acceded ("non-accession countries") and have no free trade agreement with the EU, Belarus, Moldova, and Ukraine—outpaced its Mediterranean partners in export growth over 1997-2007, by a wide margin. Furthermore, minerals, fuels, and lubricants accounted for the lion's share of CT export growth over the relevant period, mainly resulting from higher prices for Egypt's large exports of these products. In more recent years (2007-2014) there has been a deterioration in the export performance of CTs relative to the rest of the world and relative to the accession countries.

Although foreign direct investment (FDI) in the CTs increased significantly and grew more rapidly than that in most developing regions, they attracted much less FDI—both in absolute terms and as a share of GDP—than the EU accession economies. Over 1997 to 2007, FDI inflows to the MPs grew handsomely by over 40 percent on average annually and amounted to about \$73 billion. However, over the same period FDI inflows to accession countries were more than 4 times that size and accounted for 6.7 percent of GDP—twice the GDP share of the MPs. Not surprisingly, in recent years, FDI has largely shunned the countries most affected by the uprisings.

Why have the results from trade agreements been so disappointing? Prior to the current set of EU-Med trade agreements, the CTs already had largely free access to European markets in manufactures, which account for the majority of their trade. They also enjoyed a small margin of preference vis-à-vis most other large exporters under GSP arrangements. Therefore, the impact of the agreements on CT exports to the EU was naturally small. In fact, the agreements' big trade liberalization measures were all on the CTs' side.

Moreover, a variety of impediments, including subsidies, quotas, reference prices, and seasonal barriers, continue to hobble exports in the areas where CTs have a clear comparative advantage, notably agriculture, while a schedule for moving toward free trade was set for manufacturing, in which the EU has a comparative advantage. According to the OECD, EU support to farmers accounted for 24 percent of gross farm receipts and around 50 percent of value added, on average, annually over 2007-2009. For the CTs, access to the EU is especially important in goods such as fruits, vegetables, and vegetable oil. The CT agricultural sector supports a significant part of GDP and an even larger share of employment. For example, in 2009, agriculture accounted for 14 percent of value-added in Egypt and 16 percent in Morocco. In addition, it accounted for 31 percent and 41 percent of employment respectively.

Restrictive rules of origin and limited accumulation further restrict the CTs' effective market access to the EU. Diagonal accumulation only exists across a subset of countries³² and ROOs differ

³² The agreement with Maghreb countries allowed limited cumulation. Diagonal cumulation refers to the use

across some Euro-Med countries. The ROOs for Egypt are not the same as those for Tunisia and Morocco, for example. Adherence to specific and complex ROOs places a burden on exporters who may not be familiar with the specific rules and requirements. Studies suggest that the presence of restrictive ROOs account for the failure to utilize preferences.³³ For example, over 1996-2006, as much as 18 percent of Jordan's exports to the EU, which should have been duty-free, paid duties, possibly because of the high costs of obtaining certificates of origin.³⁴ If properly applied, the new Pan-European-Mediterranean ROO system, introduced in 2011, could help remedy some of these problems.

Another major shortcoming of the current EU-CT agreements is related to the temporary movement of workers (as distinct from permanent migration, which is covered in the next section). The EU-CT association agreements essentially reaffirm both groups' very general obligations under the WTO GATS, making no commitments on the number of skilled (or unskilled) workers allowed to work temporarily in the EU. 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. Those with Algeria and Jordan contain somewhat more liberal provisions, including limited movement of intra-corporate transferees or key personnel within one organization.³⁵

The aid flows associated with the EU trade agreements with the CTs are tiny compared to the needs and to what became available to accession countries, as are the mutual reform commitments. For example, the Czech accession agreements provides for incorporation into the EU's Common Agricultural Policy, giving Czech producers subsidies comparable to farmers in existing members and making agricultural exports into the EU free but conditioning production by a system of quotas or by various reference prices. Other regulations include, allocation of structural funds amounting to €26.7 billion (18 percent of 2010 GDP) over 2007-2013, adoption of the EU rule book (*acquis communautaire*) in behind-the-border reforms (including the adoption of community-wide standards), adoption of the lower EU common external tariff, formally unrestricted access to service producers (subject to domestic regulations), freedom of investment and general movement of capital, and the free movement of people.

It is also worth noting that the EU agreements are less far-reaching than the corresponding US agreements. For example, the U.S.-Morocco FTA covers all agricultural products and the United States has committed to phase out all agricultural tariffs. Although schedules differ by product, all tariffs will be phased out over fifteen years.

of inputs from other member countries toward the value-added target.

33 UNCTAD (2004), Trade Preferences for LDCs: An early Assessment of Benefits and possible Improvements: www.unctad.org/Templates/webflyer.asp?docid=4293&intItemID=1397&lang=1&mode=toc

34 Ayadi, Rym et. Al (2009)

35 "Key Personnel" defined as persons working in a senior position within an organization" or "persons working within an organization who possess uncommon knowledge essential to the establishment's service."

Intra-regional trade has, overall, performed worse relative to benchmarks than extra-regional trade. Non-tariff barriers remain big obstacles. Most tariffs in the region have been removed under the two major preferential agreements in the region—the Pan-Arab Free Trade Area (PAFTA), which came into force in 1998 and allowed duty free access to its 17 member countries' markets; and the Agadir agreement, between four countries, which came into force in 2007. Nevertheless, red tape, poor logistics, lack of transparency, and complicated customs clearance continue to hamper regional trade.³⁶ For example, the region's exporters occasionally have to obtain special import permits to relieve themselves of preferences that should be automatic under trade agreements.³⁷

4. Migration Flows

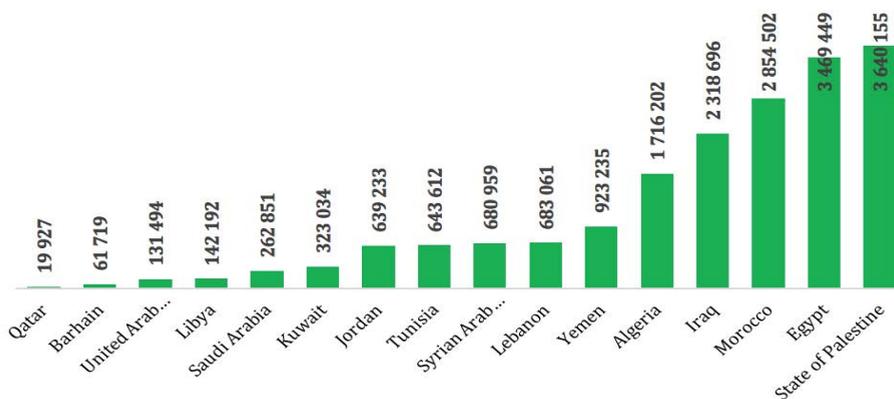
In 2013, at least 18 million people born in the Middle East and North Africa resided outside their country of origin, representing 4.4% of the population of that region—a larger proportion than the world average, which is near 3%. The vast majority of MENA's migrants reside in Europe, especially in France, Italy, and Spain, followed by a large contingent in the oil-rich MENA countries, and a relatively small group in the United States, the largest destination country for migrants. Though the estimates vary, this number has increased sharply in 2014 and 2015 with the ongoing outflow of refugees from Syria, Iraq, and Libya, to neighboring countries and to Europe. According to UN statistics, over 2011-2015, four MENA countries—Syria, Morocco, Libya and Egypt, in that order—were among the world's 20 largest emigration countries, while all five of the EU's largest economies were among the 20 largest immigration countries. Among these groups, Syria saw a cumulative exodus of 1.5 million people, and the UK and Italy saw a cumulative inflow of 900,000 people.

In 2013, the largest number of migrants in absolute terms, with well over a million, originated in Palestine, Egypt, Morocco, Iraq, and Algeria in that order. At the time of writing, migration from Syria – traditionally not a country of large emigration—has probably overtaken that of Algeria.

36 Zarrouk, Jamal Eddine (2003): A survey of Barriers to Trade and Investment in Arab Countries, in Galal, Ahmad, Hoekman, Bernard (Eds.): Arab Economic Integration between Hope and Reality, Washington 2003, p. 48 - 60.

37 Sadi, Salam (2011), Potential Effects of the World Economic Crisis on the MENA's Foreign Trade and Regional Economic Integration, Institute of Economics, University of Erlangen-Nurnberg.

Figure 29: Distribution of the diaspora in the MENA region



Source: United Nation Development Program (UNPD), 2013

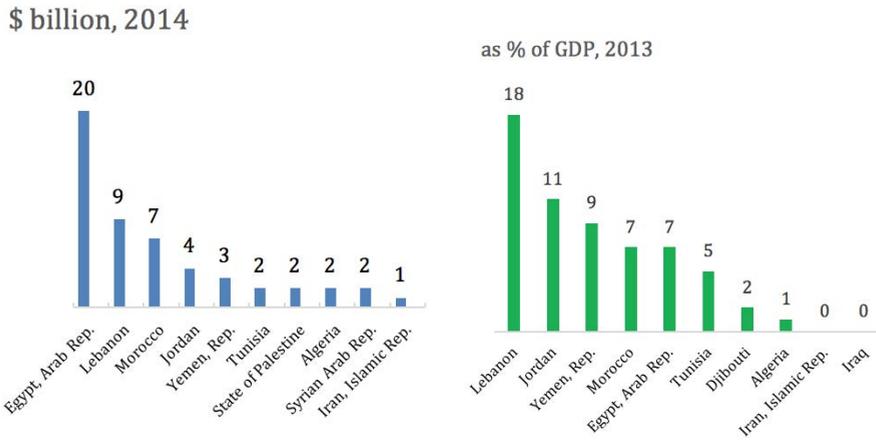
Though the oil-rich Gulf countries attract migrants from the rest of the MENA region, few people originating in the Gulf migrate.

Migrants and the much larger associated diasporas (which includes children and relatives residing abroad who were not born in the country of origin of their parents but retain links with it) are all the more important as vehicle for international integration in the MENA region, in light of the region's relatively low integration through the trade channel. At a time when the productivity gap between advanced and low-income economies is in the range of 20 to 1, and between advanced and middle-income economies around 5 to 1, the diaspora can significantly facilitate the process.

In examining the impact of Diasporas, the spotlight has naturally been placed on migrant remittances (\$436 billion in 2014 according to the World Bank), given their importance as source of foreign exchange in developing countries and sustenance for tens of millions of poor families (see figure 2 and 3). In 2014, it is estimated that the 18 million migrants from the MENA region sent home some \$53 billion of remittances and that countries such as Lebanon and Jordan had remittances in excess of 10% of GDP (see figure 2)—well in excess of what those countries spend on education, health care, and defense combined. For Morocco, a country with a much larger population than Lebanon and Jordan, it accounts for 7% of GDP³⁸, an amount comparable to its foreign currency earnings from exporting manufactures.

38 World Development Indicators Database, World Bank.

Figure 30: Top recipients of remittances

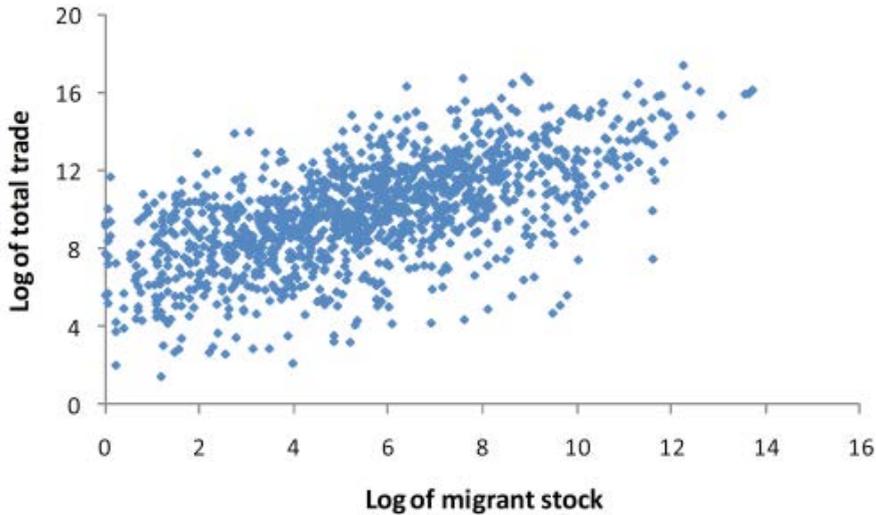


Source: World Bank (2014), "Migration and Development Brief 23", October 2014

However, important as they are, remittances constitute far too narrow a prism through which to view the effect of diaspora on development and poverty alleviation.³⁹ Compared to a country that has a small and disconnected diaspora, a country tightly interacting with its large diaspora can rely on their help when times at home are hard. Personal remittances, for example, tend to be a stable source of foreign exchange, sometimes rising in times of crisis. Moreover, a country with close links to its diaspora may also experience a multiplier effect in the form of increased trade and investment links when its reforms succeed.

The recent and growing literature on the diaspora provides considerable evidence that it plays an important role in international integration. One study shows that a large diaspora is significantly associated with a higher intensity of bilateral trade between the country of origin and destination (see chart 31) (World Bank, 2012). It also shows that the effect is much more pronounced in the case of trade in heterogeneous or differentiated products than in homogenous products such as primary commodities (Rauch and Trindade, 2002).

³⁹ Dadush (2016)

Figure 31: Migration and Trade go hand in hand: African and OECD countries

Source: Data on the stocks of migrants are taken from the Bilateral Migration Matrix 2010 (World Bank 2011). The trade data are for 2007 from the World Integrated Trade Solution. Note: Bilateral trade (2007) and migrant population (2010) between OECD and Africa. Each dot represents a migrant corridor (Kenya-UK, Morocco-France, etc.)

This suggests that links to the diaspora can help overcome the information asymmetries and non-tariff barriers that are known to play a large role in inhibiting trade. Along similar lines, diasporas are found to be significantly associated with the intensity of international investment flows, especially with bilateral FDI flows rather than with (more homogenous and less information intensive) portfolio flows (Leblang, 2010).

Systematic empirical studies of links between trade, investment and diasporas are supported by numerous anecdotes or case studies. The most cited example is the development of the Indian IT industry, now employing some 3.5 million and representing a large share of India's exports. This industry mainly relied on the two-way flow of talent, money, ideas and contacts, between Bangalore and the Indian diaspora in Silicon Valley as well as other technology corridors in the United States. Moroccans residing in the United States represent only a small minority of the Moroccan diaspora but they account for 25% of patents filed by Moroccans abroad. However, perhaps the most important diaspora links in terms of their effect on international trade come from China, with its large expatriate communities throughout East Asia, the United States, and increasingly Africa (Rauch and Trindade, 2002). Hong Kong and Singapore, with their large concentrations of overseas Chinese, are the largest sources of FDI into China.

In the specific context of the MENA region, a crucial benefit of migration is that it provides a

crucial exit route for the region's large number of young unemployed⁴⁰. In fact, the most prevalent motive for migration is economic—as distinct from forced migration resulting from political upheaval or persecution—which, however, has prevailed in the region in recent years.

Despite the political controversy surrounding migration from poor to rich countries, numerous studies of the economic effects of migration to conclude that it can generate large benefits. Many of these studies are based on detailed examination of instances of mass migration (such as the Cuban exodus to Miami, the return of settlers from colonies after their independence), while others consist of statistical analyses of the effect of migration on native wages over long periods. Migration has also been studied using models that simulate the way the economy adjusts to a large increase in the immigrant labor force, and through models that calculate the contribution of migrants to tax revenues and how much they draw on welfare benefits and on public services. These studies do not always agree on everything, but most agree on the following: immigration from low-income to high-income countries boosts investment and output in the host country, more so if the investment climate in the host country is good and the population is aging. Immigration tends to raise the wages of skilled workers and to reduce the costs of many services, such as those of caregivers and household help, freeing more natives to work. However, immigrants also tend to depress the wages of those who compete directly with them, which usually in high-income countries are themselves previous immigrants.

These studies also generally concur that immigrants have a small positive impact on the government budget, mainly because they are younger than the native population and so pay more in taxes and use less public services, especially healthcare. Migrants draw less on pensions and many pay into social security but leave without collecting benefits. Studies have also concluded that migrants tend to boost productivity because they are readier to move to remote localities to find work. Other studies find that migrants can function as shock absorbers for the native labor force, as they are the first to be fired in a downturn.

It is understood that these beneficial effects of migration depend on whether migrants are allowed to work and are not inhibited by extremes of racism and discrimination. In the United States, which has a long tradition of immigration, the children of migrants generally do as well or better than the children of natives from the same socio-economic extraction. In contrast, the children of immigrants to Germany and France, and even their children, do less well than natives of the same socio-economic extraction.

⁴⁰ A large diaspora is not an unalloyed benefit for the country of origin, however. Reliance on remittances can increase the exposure to external shocks emanating from sharp recessions in the country of destination, and for countries most at risk of brain drain (typically small and poor island economies) a large diaspora can facilitate the emigration of a country's best and brightest.

5. The Special Case of Refugees

The flow of refugees from Syria and Iraq (and more recently, Libya) is a human catastrophe of the first order—the cause of the uprooting of millions of families and of journeys that have led to thousands of deaths. It has become a politically divisive issue across the Levant and Europe. Because the conflicts are endemic, and families have been divided and need to be reunited, the displacement flows are unlikely to abate soon. Certainly, there is no imminent possibility of migrants returning to their homes in the vast majority of cases.

Though much of the international press commentary is focused on the islands of Lampedusa and Lesbos and on the state of Bavaria, which are carrying a disproportionate burden, the greater challenges lie elsewhere. In general, refugees represent only a small minority of the migrant inflow into advanced countries, and a minuscule share of their population. It is in the Northern regions of Jordan, the Beqaa valley in Lebanon, Kurdistan in Northern Iraq, and in the Turkey-Syria region where the crisis is far more evident. These regions, which have per capita incomes about 1/5 of the European average, are overwhelmed by refugees and, in the case of Kurdistan, internally displaced from the rest of Iraq. According to Frontex, in the first 9 months of 2015, 710,000 refugees have crossed into the EU, representing less than 0.2% of the population. Italy a country of 60 million has seen the arrival of 129,000 refugees, of whom many have found their way to Northern Europe. By contrast, Lebanon, a country of some 5 million, is host to some 1.2 million Syrian refugees. Syria itself counts some 8 million internally displaced people and Iraq 3 million. It is estimated that 360,000 Libyans have fled their homes.⁴¹

Similar, though less dire, situations exist in a number of other localities across the Levant and North Africa. The migrants are placing enormous pressure on all forms of government services and infrastructure, from schools to health, water to electricity, and solid waste disposal. The World Bank has assessed the new infrastructure needs to run into several billion dollars, concluding that the vast majority of refugees are poor and, without help, vulnerable to starvation and infectious disease. UN agencies, which support migrants directly through cash transfers or by providing services in refugee camps, have seen increased funding but nowhere near enough to deal with the inflow. Thus, they are having to cut aid to families. In most of the impoverished regions where the migrants have settled, it is not realistic to speak of a local, long-term development solution to the refugee problem. The solution must lie in their gradual assimilation in cities near-by or far, most likely in other countries where economic opportunities exist. Whether refugees end up returning to their homes or settling in another country will make a big difference in long-term economic losses and gains from the migrant crisis.

Though economic studies of migration from poor to rich countries suggest that large welfare gains are possible, the gains to be had from migration between countries of similar income

41 A fuller treatment of the refugee crisis can be found in Dadush (2016)

levels, such as between Syria and Jordan, for example, are much less evident. After all, moving a worker from a low productivity region to another low productivity region is unlikely – other things equal – to increase global output. Few studies have looked specifically at the gains from South-South migration (see for example Ratha and Shaw, 2007), and they conclude that the gains are smaller across the board than those from South-North migration. The migrants themselves may gain little if not lose. Their remittance flow is likely to be small and native workers in the host country may see large downward pressure on their wages, especially if the inflow consists mainly of unskilled workers who speak the same language, as in the case of Syrian refugees in Jordan. While the overall economic effects of forced migration from one poor country to another are almost certainly negative, there may be some modest partial benefits. Even in a poor region, inflows of migrants can boost output and investment, and raise the return to capital and entrepreneurship. Moreover, once the situation stabilizes and some return to their country of origin, opportunities from trade and reconstruction are likely to materialize. Even these modest positive effects may fail to materialize, however, if the large inflow of refugees causes the country of destination to see rising ethnic tensions and political instability.

III. Policy Implications

1. MENA countries

The structural transformation process is going at a different pace in the MENA countries. MENA countries with large domestic markets should not excessively rely on exports, but should instead pursue a balanced model including domestic demand. This will reduce vulnerability to external shocks, to which countries in the region are especially prone.

MENA countries must intensify efforts to work harder to move up the value chain and diversify further towards medium and high technology, manufacture skills, and modern services. Besides, diversification should also be implemented in geographical terms by multiplying trade partners, which could enhance resilience to external and asymmetric shocks as well as excessive reliance on European markets.

The transformation towards high productivity sectors with higher technological content could have some negative effects on large parts of the population during the transition, many of whom still rely on agriculture. Where the resources are available, and to mitigate the risk of more instability, it may be appropriate for the governments to enhance social safety nets for the disadvantaged populations.

Improving the business environment is necessary to strengthen the role of the private sector. Among other steps, this means fighting corruption and rent-seeking, enhancing investors'

protection, and ensuring better access to credit, in particular for SMEs. Many countries in the The MENA region has already initiated some reforms to facilitate the access to funding for SMEs, mainly through specialized Guarantee Funds. Much more has to be done, including the development of alternative sources of funding, whether through venture capital or business angel networks, that are more adapted to small innovative projects.

Public investments in infrastructure should increase and should target telecommunications and transport logistics. There may be opportunities to attract more FDI through the creation of ready-to-use and integrated industrial zones or platforms. To invest more efficiently and to contain the effects on under strain government budgets, countries should promote Public-Private Partnerships.

Countries should favor those foreign investments likely to have a large impact on employment and that generate large spillovers onto domestic firms.

Promoting education in terms of quality and compatibility with job market requirements is a vital issue. Sciences, technology, and languages are among the most important aspects to focus on. In addition, vocational training should be further developed to facilitate the access to the job market. It is important to recall that improving skills could guarantee better assimilation of technology and know-how. Besides, public and private sectors should collaborate more in terms of identifying R&D areas of common interest but also in terms of research funding.

Finally, maintaining sustainable macroeconomic balances while preserving the capacity to engage in counter-cyclical policies is critical. Oil-exporting countries currently have to run their reserves down to deal with the effects of lower oil prices. But, in the medium term, they must rebuild sovereign funds that can be used as a diversification and stabilization tool.

2. Europe

European economies need to target investments in advanced infrastructure, R&D and innovation—central pillars of long-term growth strategy. The focus would be to further upgrade production systems in Europe and to improve non-price competitiveness and productivity. It is even more important, for the most advanced EU-members that are already established at the technological frontier, to accelerate growth based on a knowledge-based economy. Enhancing non-price competitiveness of European countries would also mitigate the sensitivity of their exports' performance to cost components and would be more consistent with higher wages. To improve innovation and productivity, enhancing government incentives of R&D projects, including by embarking on public private partnerships could be helpful. The regulatory framework should be better balanced between risk-appetite, which encourages innovation, and precaution, which preserves the public's interests. That means that European countries should adopt a neutral approach based on rigorous scientific assessment in order to decide whether each

innovation could be undertaken or not. Europe also needs to further develop alternative sources of funding that are more adapted to innovative projects (such as venture capital), making them able to support the translation of research outcomes into marketable products and services.

3. Trade

What would it take to engineer a step forward in the integration of EU-MENA trade and of intra-regional integration in MENA? Three aspects appear especially important:

- *Autonomous Reforms*: As the historical record amply illustrates, successful international integration cannot be driven externally – it can only be achieved if it is grounded in a predictable political and economic context and driven by a wide-ranging process of domestic reforms designed to enhance the nation's productivity and competitiveness. At the heart of these reforms are the four Cs: Confidence, since, first and foremost, investors look for rule of law, security, macro-economic and political stability; Connectivity with the world, which includes opening the trade regime as well as good logistics and communications; Capacity, which includes investing in skills; and Cost, which includes maintaining a realistic exchange rate and effective regulations.
- *Ambition*: Trade agreements can provide a secondary but important supporting role to the domestic reform process, provided they are ambitious in scope. Trade agreements that only make changes at the margin achieve, by definition, little directly and provide no political leverage for the reform-minded to push the development agenda. Trade agreements must therefore address the real barriers to integration facing the MENA region – agricultural subsidies and tariffs, enforceability of provisions against non-tariff barriers, restrictive rules of origin, draconian restraints to labor mobility, financing of transport infrastructure, the modernization of customs, and so on. The largely successful EU treaties of accession go well beyond what can be envisaged for the MENA countries in the political dimension, but they also show what is possible in the economic sphere – including, for example, the benefits of a customs union, the free movement of capital and labor, and of real disciplines to drive institutional reform, as well as the importance of structural funds which can amount to 3-4% of GDP a year.

Global Reach: The EU's geographical proximity and historical and economic ties to the Arab world give it a special role in the region. The United States also has a long-standing interest in the region's security and its energy resources. However, the interests of other oil importers, such as Japan, China, and India also loom large and those of China – the world's largest exporter – have been advancing at a rapid pace. The Gulf countries also have a vital stake in the stability of their Arab neighbors. African countries with burgeoning populations and large natural resources

provide significant market opportunities. Potential partners in trade, investment and development for the CTs exist beyond Europt. Therefore, trade policies in the CTs must recognize that closer links with the EU and with each other must be used to leverage reciprocal liberalization with the rest of the world, and should not come at the cost of restricting competition and access of goods originating in the rest of the world.

4. FDI

Short-term FDI prospects for the MENA region are subject to many risks as a result of armed conflicts and political and social tensions in a number of countries, as well as modest global and regional growth prospects and low oil prices. Despite those risks, countries such as Morocco, Egypt, and the United Arab Emirates are likely to attract rising amounts of FDI in coming years

New structural reforms should be implemented to promote diversification, greater openness and competition in key economic sectors and well-functioning labor markets. A transparent regulatory and legal framework is also important to attract FDI, as is investing in the logistics and communications infrastructure. Deepening intra-regional economic integration would increase the region's attractiveness to foreign investors and an integrated region would expand the size of the market. In addition, the diversification of FDI into high growth/high value added sectors is especially important.

5. Migration

Countries should make more effort in strengthening their links to diasporas. This tends to boost trade, foreign investment and remittances.

Forced migration flows which are mismanaged, as is the case now, create large negative externalities for the surrounding region and even for the world. There is no perfect scheme for allocating the burden due to the absence of political solutions to conflicts. Any scheme must envisage increased numbers of refugees settling in the North, redoubled efforts to integrate refugees in their country of asylum, and increased development aid for the countries in the South with the largest numbers of refugees. Such a scheme is more likely to materialize if it is based on voluntary – rather than compulsory – targets to welcome refugees and provide aid, and if a new comprehensive framework for dealing with refugees is adopted.

Conclusion

This paper has argued that both the European and MENA countries have disappointed their citizens in recent years. The resulting crisis took very different forms in different countries, ranging from isolationism, deterioration in the business climate, to revolution and open conflict, but is palpable across the region. The failure to exploit the potential growth synergies in the EU-MENA space is only one reason for the weak outcomes. Domestic reforms that address these problems represent the more important agenda, but much remains to be done in the quest of common solutions too.

Both regions are confronted with important structural issues impeding their growth. But, while Europe is contemplating future shortage of workers, short of demand, and short of renewable and non-renewable energy, the MENA region contemplates one of high and rising youth unemployment, unsatisfied needs, and abundant energy supplies. The exchange opportunities between the two regions are immense and can be exploited in various ways – through trade, foreign investment, migration, and transfers of know-how. Exploiting these opportunities requires the elaboration of more effective frameworks for cooperation, ranging from deeper and more comprehensive trade agreements to security treaties. More important still are the domestic reforms that will boost each region's growth prospects and make their exchange even more valuable.

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Chapter 4

Industrial policy, Structural Change and Global Value Chains Participation: Case study of Morocco, Tunisia and Egypt

Abdelaaziz Ait Ali and Yassine Msadfa

Introduction

Interventionism of the public sector within the economic activity has been a major controversial point for different economic doctrines. Industrial policy is one feature of this issue. It has been argued that the development process cannot be triggered under the famous adage of “laissez faire laissez passer,” but instead the public sector needs to intervene maybe not as an alternate to the private sector but more as agent who strives to correct some inherent market failures observable especially in developing countries. Nowadays, economists question less the merits of industrial policy but focus more on the scope and the how: two issues within consensus is missing.

Emerging and developing countries have in fact always considered industrial policies (especially vertical policies) as a conditional step towards development. While experts agreed that industrial policy could be defined as “all kinds of effort on the part of government to encourage and promote a specific industry or sector,” it is much associated with the “manufacturing sector” and the belief that the catching up process goes through building an industrial structure, in an era of premature deindustrialization in the developing world. The World Bank goes further and defines industrial policy as “government efforts to alter industrial structure to promote productivity-based growth.” Dani rodrik (2007) argues that growth or development, as he said, deal fundamentally with the question of structural change: it involves producing new goods based on new technologies, and transferring resources from traditional activities to these new ones.

North African countries are not an exception, and fully believe in the importance of a strong

manufacturing sector that could create enough job opportunities and sustain their growth model. Keeping in mind the success stories of East Asian countries, they have launched many active industrial policies that set quantitative targets in terms of exports, investments and employment (e.g. Tunisia and Morocco). Besides, these economies still allocate an important share of their workforce to the agriculture sector that operates at very low productivity levels. Achieving reallocation of the labor factor from agriculture to highly productive sectors (at least sectors in which productivity is higher than agriculture) is expected to generate important income gains. This movement of labor should play a crucial role in producing convergence within economies but also across developed and developing countries. That is why we are conducting some structural change analysis for this group of countries, with a special focus on manufacturing sector behavior in terms of productivity and labor relocations patterns.

One feature of the structural change in these countries is the upgrading process of their exports. In this paper, we propose to measure this upgrading process through the use of two indices: export variety and export quality. Horizontal diversification (variety expansion) and quality upgrading are two important facets that relate to the transformation of a country's economic structure. The ability to make transition from simple and low-quality to sophisticated and high-quality products is viewed as a necessary condition for export success and eventually economic development (Khandelwal, 2010). Quality upgrading tends to be higher in manufacturing than in agriculture and natural resources.

This paper aims to analyze the economic performance of this group of countries in relation to their structural change in the last decade. Industrial policies related to the manufacturing sector of 3 North African countries (Morocco, Egypt and Tunisia) will be presented, exploring to which extent these strategies have served the structural change of these economies, in terms of productivity patterns and export performance. Furthermore, some stylized facts will be discussed in relation to the degree of participation of these countries in the Global Value Chains (GVCs), within a changing landscape of production systems and trade networks. In addition, light will be shed on the opportunities associated with the integration of these countries in the GVC and risks of being caught in the "low value added activities trap." This essay does not claim to fully apprehend this issue and assess the impact of these policies over economic activity but rather to serve as viable basis for discussion.

1. Review of the industrial policies in Morocco, Egypt and Tunisia

It is generally useful to differentiate between horizontal and vertical aspects of industrial

policy. Horizontal policies include neutral policies such as maintaining a competitive exchange rate, providing an educated workforce and improving the business environment. Vertical policies are designed to promote specific industries where governments intervene to “pick winners” by providing tax holidays or subsidies.

1. Horizontal policies

A. MACROECONOMIC MANAGEMENT AND BUSINESS ENVIRONMENT

Recently, Morocco, Tunisia and Egypt were considered to have fared relatively well in the aftermath of the 2008 global financial crisis. However, they all suffered from severe macroeconomic imbalances during the 1980s including high levels of debt, a shortage of foreign exchange reserves and fiscal deficits. To restore these imbalances, IMF and World Bank reform programs were adopted during the 1990s. These programs also made a first attempt at reducing the role of the state in economic activity and also involved the partial implementation of Washington consensus structural reforms including trade liberalization, financial sector deregulation and privatization.

A decade after, this set of countries adopted other types of reforms related to the investment climate in order to encourage the private investment. Egypt, for example, changed taxes and tariffs in 2004, and significantly streamlined regulations to start a business and also has a one-stop shop for investors. Morocco established commercial law courts and opened almost all economic sectors to foreign investment and Tunisia strengthened investor protection and reduced customs processing delays by two days on average.

B. EDUCATION, SKILLS AND SUPPORT TO RESEARCH AND DEVELOPMENT

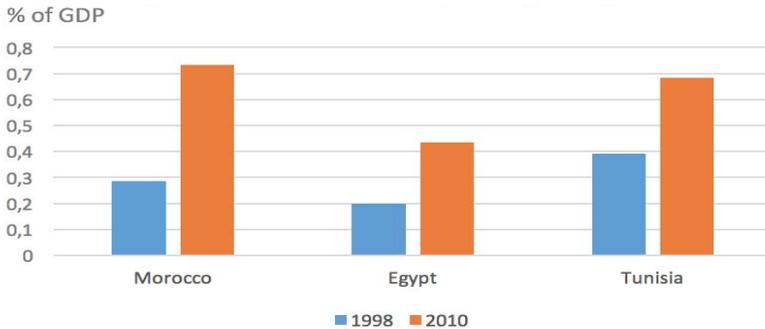
Structural change occurs when labor moves from low to high productivity sectors. To make this reallocation happen, labor must have the required education and skills to access the more productive jobs. These factors thus determine the dynamics and pace of structural transformation. Recent empirical analysis confirms that one important determinant of productivity growth associated with labor reallocation is education attainment (Lee and Malin, 2013).

Given their demographic structure, all three countries have considerable human capital potential. Definitely aware of this potential, governments of the three countries have spent around 5% of GDP between the 1970s and the 2000s on education and training.

In addition, there is an emerging public policy awareness of the importance of R&D, and to varying degrees, all three countries have made some progress in promoting R&D activities.

Morocco and Tunisia have formally adopted a national innovation policy. Furthermore, they have formulated long-term visions compatible with this policy. In Egypt, the Science and Technology Development Fund established in 2007 is estimated to have supported 571 projects with a total budget of 60 millions euro (FEMISE report 2015).

Figure 1: Research and Development Spending



Source : WDI

2. Vertical policies

Compared to horizontal policies discussed above, policies that are designed to support the development of specific economic activities (be it in manufacturing or other industries) have been the most controversial. Such policies may entail trade protection, directed allocation of credit, various forms of tax incentives or special rules in public procurement that favor domestic suppliers. One common objection against targeted industrial policy is that bureaucrats are not likely to have the necessary competences to identify deserving or winning industries better than entrepreneurs. An alternative view is to see industrial policy as a process through which the public and private sectors collaborate to identify critical interventions that are required to make the industry more competitive (Rodrik, 2008).

Country cases

- **Morocco**

Morocco followed import substitution policies throughout the 1960s and 1970s. Such as in many other countries, this was a period of high protection rates as well as non-tariff barriers such as import licenses and import quotas. The trade regime started to be liberalized in the 1980s, which was paralleled by a number of free trade agreements and in particular an Association

Agreement with the European Union signed in 1996 and implemented since 2000.

Industrial policy in Morocco since the 1990s can be divided in three periods. In the 1990s the main focus was on privatization. This was a period of rapid decline of trade protection.

The second period, between 2002 and 2007, was characterized by a multiplicity of investment promotion and tax exemptions schemes. At the same time, there were two initiatives where the private sector was targeted directly:

- The first was directed to large firms and relied on privatization revenues collected at the Hassan II Fund for Economic and Social Development.
- The second was directed to SMEs, and managed by the SME Agency (ANPME). The purpose was to assist SMEs in their “upgrading” (Programme de Mise à Niveau).

In the third period, the “Emergence Program” was implemented. The program, targets specific sectors such as automobile, aeronautics, electronics, textile and food industry (African Development Bank, 2012), redirecting exports towards high-growth markets. Investment incentives (to foreign and domestic investment) were granted under the general investment incentives regime (Investment Charter and its implementing decree), under the Hassan II Fund for Economic and Social Development and for large projects through an agreement regime.

Under the Emergence Program, the SME Agency (ANPME) manages two support schemes, one that aims to provide direct subsidies to support the growth of promising SMEs (Imtiaz), and the second to support efforts by SMEs to increase productivity through efforts in areas such as marketing, finance, quality control, as well as supply management design and R&D (Moussanada).

This program was launched in 2005 and updated in 2009, to become the National Pact for Industrial Emergence (PNEI). This pact set specific objectives for increasing industrial GDP, spillover effects of the tradable sector and creating additional jobs by 2015. Six economic sectors – known as Morocco’s Global Jobs (Métiers mondiaux du Maroc - MMM) – have been identified and supported due to their strong potential for growth: aeronautics, offshoring (subcontracted activities from outside the country), food industry, textile, electronics and automobiles. The pharmaceutical and chemical and para-chemical sectors were added to the list in 2013. The choice of sectors was motivated by re-casting the country’s natural strategy from being based on geographical location and availability of cheap labor to one based on logistics and competitive offer.

Some significant results from this program can be found in the automobile and aeronautic sectors:

- Morocco’s automobile sector has experienced significant potential for growth for almost a decade, with a double-digit annual growth for investment and exports. One feature

of that is the opening of the Renault-Nissan industrial complex in Tangiers in 2012, which has an annual production capacity of 340,000 vehicles, 90 percent of which are intended for export, in particular to Europe. Since the Renault group began operating in Morocco it has continued to implement a policy of local integration aimed at increasing the number of components that are locally sourced.

- Another example is the development of the aeronautic sector, where a promising global value chain has been aided by specific government measures. With 100 percent of its production aimed at exports, the Moroccan aeronautics sector comprises nearly 100 companies of international scope (such as Boeing and EADS), involved in activities covering production, services and engineering, which are the main components of the global value chain for aeronautics.

To ensure the success of the PNEI, the Moroccan government has set up a direct assistance device for training for the main four sectors (offshoring, automobile, electronic and aeronautics). These aids concern essentially the vocational training. More precisely, the state will for example support the establishment of training institutes, which are intended for management by professionals from these sectors. From direct aid to training, key elements of the PNEI, the main objective is to strengthen the attractiveness of Morocco as a country of industrial investment. These aids are one of the essential elements of the MMM development project in the coming years.

Figure 2: Export value of Morocco’s “Emergence program key sectors”

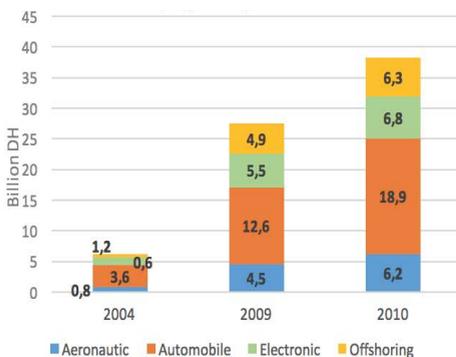
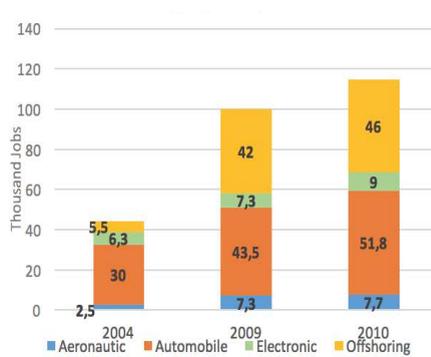


Figure 3: Job creation in Morocco’s “Emergence program key sectors”



Source: Ministry of industry, commerce and new technologies morocco 2012.

- **Tunisia**

An interesting aspect of industrial policy in Tunisia is the emergence of an export promotion strategy earlier than many other developing countries that like Tunisia had an import substitution policy. However, a major problem that Tunisia faced after independence was a massive departure of foreigners who dominated economic activities until that time. Tunisia first responded by a public-led import substitution strategy. This was a period where nominal and effective protection rates were very high and almost all imports required some kind of licensing and/or administrative approval (World Bank, 2008; Nabli and al., 1999).

In the early seventies, this policy was replaced with one that emphasized both import substitution and export promotion along with private sector development. Specifically, the government created an “offshore” sector in 1972 and put in place generous fiscal and financial incentives to attract foreign direct investments and boost exports. There was a particular focus on manufacturing, especially of textiles. Firms that exported all of their products enjoyed duty-free raw materials and equipment imports, a 10-year corporate tax holiday, free repatriation of profits and trade facilitation services. Heavy industry, transport, water and electricity were still reserved for the public sector (African Development Bank, 2012, p. 160).

The policy framework of import protection started to change in the 1990s and the government started to reduce trade barriers. The initial trigger was the launch of the Economic Recovery and Structural Adjustment Program (ERSAP) in 1986. This program involved the reduction of tariffs and easing of quantitative restrictions on imports. Tunisia became a member of WTO in 1995 and signed an association agreement with the EU in 1995.

An upgrading program aimed at increasing the technological, marketing and organizational capacities of firms increasingly facing EU competition accompanied the liberalization in industry. There were also some measures to facilitate integration into global markets, such as streamlined technical controls, improved customs procedures, and increased access to information on standards and technical regulations to raise transparency and meet international trade obligations (World Bank, 2008).

Ghali and Rezgui’s (2013) provide an overview and assessment of the two main components of industrial policy in Tunisia. The first is the manufacturing upgrading program and the second is export promotion policy. The upgrading program (Programme de mise à niveau de l’industrie) was launched in 1996 with an aim of preparing enterprises for the requirements of free trade with the EU.

According to Ghali and Rezgui, the upgrading program went through three phases. In the first phase (1996-2000) the program helped consolidate the physical and intangible investments of all firms. In the second phase (2000-2005) there was an effort to improve the business environment that supports industrial activities. The program aimed at providing financial support to upgrade about 2,000 private firms between 1995 and 2005 (Goaied and Jendoubi, 2007). Enterprises went

through an external audit focusing on finances and competitiveness; they also were required to submit an upgrading plan that could make them eligible for government financial support to modernize equipment, raise quality standards and strengthen balance sheets. The third phase, after 2005, was characterized by the promotion of certification and standardization of products and processes and promoting innovation, allowing the Tunisian industries to become more competitive for better integration into the Global Value Chains (GVCs).

- **Egypt**

Egypt embarked on import substitution industrialization (ISI) in the 1930s, in the aftermath of the 1929 great depression and the ensuing sharp decrease in world cotton prices. ISI intensified in the post-independence years starting the 1960s, with a complete shift to a planned economy where the state took direct control of industrial production. This orientation was accompanied by a massive wave of nationalization in industry and trade. During this period, industrial policies were highly selective: the state not only indirectly influenced flows of labor and investment into different economic sectors through discriminatory incentives (such as differential tax rates) but also very directly as the country's largest investor (Galal and El-Megharbel, 2005).

The period 1974-1990 was often called the "Open Door" (Infitah) policy period. During this period, central planning policies were partially reversed with the adoption of partial liberalization. Reforms concentrated on the liberalization of the foreign exchange market and consumer imports.

Yet, some features of the old economic regime remained in place, in particular with respect to pricing and subsidy policies, import restrictions to protect domestic industry, the overwhelming public sector that remained a primary actor in production and maintained tight control over state enterprises and continued to monopolize public utilities.

In 1991, a structural adjustment program was adopted and some elements of the industrial policy were phased out or reduced. With the adoption of the joint World Bank-IMF Economic Reform and Structural Adjustment Program (ERSAP), the government undertook a first phase of reforms that helped to shift the economy partly from central planning towards market-based mechanisms, more trade openness and a more leading role for the private sector. This included macroeconomic stabilization reforms, the introduction of a competitive exchange rate, and partial price liberalization (including agricultural prices). This phase also witnessed the privatization of some public enterprises but not the financial sector.

In 2004, a new wave of reform was launched. The aims were to stabilize the exchange rate, reduce and rationalize the tariff structure, make drastic cuts in income tax rates, streamline tax administration and employ more efforts to reform the business environment and promote the private sector. Nevertheless, the shift to the market economy was never complete with the remaining important role of the public sector, protection of domestic industries through both relatively high tariff rates (e.g. in the textile and clothing and food industries) as well as the

substantial energy subsidies which primarily benefit capital intensive sectors.

In terms of the trade regime, Egypt considerably liberalized its economy and opened it up to foreign trade during the 1990s and efforts intensified as of 2004. During the 1990s, reductions and exemptions from custom duties were given to certain industries (particularly consumer durables and assembly industries) as well as the use of local content requirements. In 2004, the government implemented significant across-the-board tariff cuts and a reduction in the number of tariff bands.

An Industrial Development Strategy (IDS) was developed in 2005 with the goal of transforming the industrial sector into an engine of growth. The Egypt IDS takes a vertical approach to industrial policy, focusing on selected manufacturing sectors that the government should support. The EIDS defines eight fields of action: (i) human resources and entrepreneurship, (ii) access to finance, (iii) infrastructure, (iv) innovation and technology, (v) quality upgrading, (vi) enterprise competitiveness, (vii) export promotion and (viii) FDI attraction.

Under the IDS, strategic sectors were identified to benefit from special investment and export promotion efforts: engineering, food processing, chemicals & pharmaceuticals, textiles and clothing, building materials, furniture, paper & paperboard and leather. The strategy explicitly excludes (i) companies in the tourism and hydrocarbon sectors, (ii) microenterprises (with fewer than 10 employees) and (iii) small companies (with fewer than 50 employees) – as well as (iv) non-manufacturing companies.

II. How did North African countries perform in terms of structural change?

In this section, we conducted analysis of changes in the economic structure of the three countries in terms of productivity patterns and export performance. As a first step, we measured the contribution of labor reallocation between below average productivity and above average productivity to overall productivity growth. Then, we analyze export performance using two new indices: export variety and export quality at an aggregated level and per sector.

Structural change: how to measure it?

We tried to assess the structural change in Morocco, Tunisia and Egypt since 2000 to 2013. Due to data availability, we cannot extend this analysis prior to 2000. Besides, and in order to explore any effects of the crisis on the economic structure of these countries, we divided our period to two sub-samples 2000-2008 and 2008-2013 and give our view on any signs of

break in the economic transformation that have been witnessed elsewhere (Riley, Bondibene and Young, Bank of England 2015). The sectoral desegregation of employment does not allow an extensive analysis to be performed. Besides, data inconsistency between national accounts and employment poses several problems during this work. As a result, our analysis is aggregated to five sectors (agriculture, manufacturing, mining and utilities, construction, and services).⁴²

1. Labor movement and contribution to overall productivity growth

We follow the methodology described by Rodrik and Macmilan (2011) to measure the contribution of employment reallocation to productivity growth. A key element to economic prosperity in the developing world is about channeling the employment force from the agriculture sector, generally less productive, to sectors that experience larger productivity. As labor move towards modern sectors, the catching up process of these countries is launched insuring expanding incomes. If this economic transformation is observed generally in the long run, what matters most is the speed in which reallocation takes place.

$$\Delta P / P^0 = (\sum_i (P_i^T - P_i^0) S_i^0 + \sum_i (S_i^T - S_i^0) P_i^T) / P^0$$

Where S_i is the share of sector i in overall employment, P_i is the labor productivity level of sector i , and superscript 0 and T refer to the initial and final period. The first term is the within effect, that measures the productivity growth of each sector induced by sector-specific factors (increasing capital deepening or/ and increase in total factor productivity). The second term, which is related to our issue known as between effect, measures the contribution of the reallocation to labor factor to productivity growth. Productivity could increase in fact simply through moving employees from low productive activities to above average productivity activities. In some economies, Africans in particular, the reallocation of factors was observed in the opposite direction, meaning that the labor factor moved to below average productivity (Rodrik and Macmilan, 2011).

We also measure the dispersion between sectoral productivity along our sample. We expect that the productivity gap is supposed to shrink with economic development making agricultural productivity comparable to other sectors in the economy. This dispersion indicator refers to the coefficient of variation that would be compounded in two versions, with and without the mining and utilities sector.

$$\sigma(P_i) / \text{mean}(P_i)$$

⁴² In the final version of this paper, we plan to base our structural change analysis over a deeper employment breakdown.

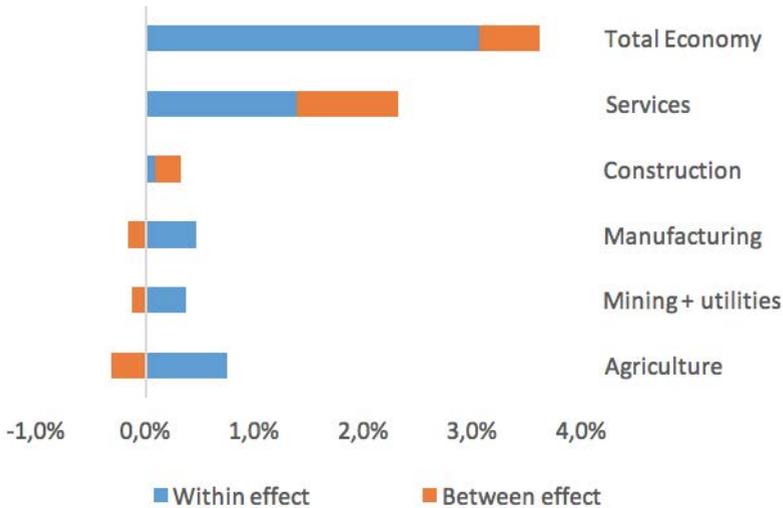
A. MOROCCO STRUCTURAL CHANGE: POSITIVE CONTRIBUTION OF LABOR REALLOCATION TO PRODUCTIVITY GROWTH ESPECIALLY TOWARD SERVICES.

Between 1999 and 2013, the Moroccan economy experienced an annual increase in its overall productivity by 3.7% on average, almost 13% of this increase was due to the labor reallocation effect toward sectors with productivity above average and the rest was generated through capital accumulation and technological upgrade (within effect). By sector, it seems that services have been attracting more and more employees in this period and was, with its above average productivity, the major contributor to the structural change. Besides, productivity within this sector has witnessed an average increase of 2.6%, accounting for 40% of intra-sectoral gains, so the effect of reallocation has been amplified by the intra-sectoral productivity gains. Gaaitzen de Vriesa, Marcel Timmera, Klaas de Vries (2013) pointed out this issue and proposed a new methodology for productivity decomposition that considers “dynamic productivity gains” triggered by the combination of two effects at the same time “ reallocation and intra-sectoral gains.”

$$\Delta P = \sum_i (P_i^T - P_i^0) S_i^0 + \sum_i (S_i^T - S_i^0) P_i^0 + \sum_i (P_i^T - P_i^0) * (S_i^T - S_i^0)$$

Gaaitzen de Vriesa, Marcel Timmera, Klaas de Vries (2013) suggested to decompose the between effect also into two components. The first component (The second in this equation) measures the contribution of labour reallocation across sectors, being positive (negative) when labour moves from less (more) to more (less) productive sectors, with the fact that productivity in this case refers to levels observed in the initial period. The third term represents the joint effect of changes in employment shares and sectoral productivity growth. It is positive (negative) if workers are moving to sectors that are experiencing positive (negative) productivity growth. Hence, the second term in equation measures whether workers move to above-average productivity level sectors (static reallocation effect) whereas the third term measures whether productivity growth is higher in sectors that expand in terms of employment shares (dynamic reallocation effect).

Figure 4: Yearly average productivity growth, decomposition (1999-2008)



Source : HCP and authors' calculation

In the Moroccan case, using this approach for overall analysis does not result into different outcomes when it is aggregated at the national level. In terms of sectoral breakdown, the aggregated result however hides sectoral gaps. For the service sector, it shows an important fact related to the ability of this sector to generate more employment and at the same time increase efficiency in the sector. Our analysis is quite descriptive, yet it reveals that capital accumulation and/or technological change can go hand in hand with jobs creation in the service sector. If we go deeper analyzing services by sub-sectors, results revealed that, services to corporations and personal services, followed by telecommunications and finances are the main contributors to the between effect. These sectors have witnessed in fact an slight increase in their employment shares during that period but with their productivity hugely above average and agriculture levels, the effect has been amplified leading to an increase in overall productivity.

Taking for example telecommunication and finances, their productivity level are respectively 40 and 23 times higher than agriculture. Therefore, if 40 employees in agriculture are being dismissed but one of them is heading to telecommunications sector (39 are unemployed so their productivity is zero), overall productivity would not change. This hypothetical example shows clearly the importance of the reallocation of labour between low productive sectors and high productive sectors and the leeway of welfare improvement in the Moroccan economy.

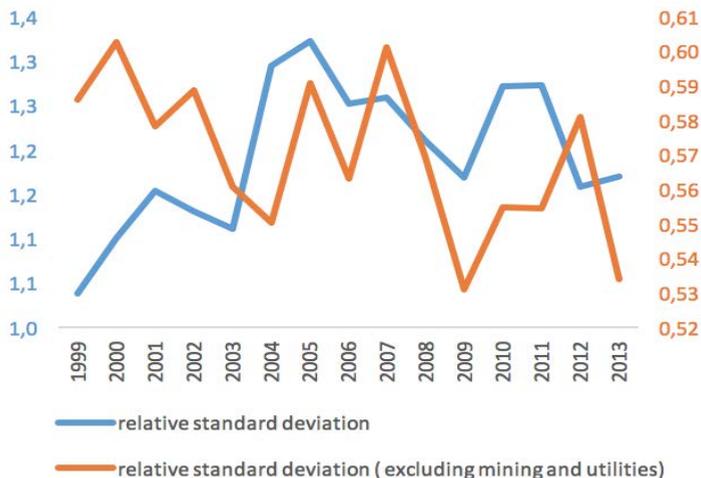
Agriculture, a sector that creates between 14% and 18% of total VA and employs around 40% of the total labor force, has made great progress in terms of intra-sectoral productivity gains, and contributed to 1 third of intra-sectoral gains in the economy. This sector also witnessed a

shrink in its labor force, standing at 40% in 2013 compared to 48% in 1999, meaning that the labor force was pulling out of agriculture. In spite of this important progress, productivity in agriculture is still considerably below average and represents only half of the overall productivity. This situation demonstrates the potential extent of labor reallocation between agriculture and other sectors of the economy.

For manufacturing, its share in terms of wealth creation has steadily decreased over time, from 19% in 1980 to 13.5% in 2013. Employment share has witnessed also the same pattern with a decline to 10.4% in 2013 instead of 12% in 1999. Regarding productivity, the manufacturing sector experienced almost the same pattern as agriculture, with a positive contribution to overall growth but much less than services or even agriculture, estimated at 0.5% percentage points. Compared to the productivity level in the service sector, it represents 90% of productivity. What come out of this analysis is the process of deindustrialization of the Moroccan economy at an early stage. This process which is not specific to Morocco but observable in the most of the developing world, should not be tackled as negative issue (at least according to this simple methodology), as long as new entrants in the labor market are channeled to the highly productive sector or at least above manufacturing productivity levels. Moreover, what is contrasting compared to services is the behavior of the sector in terms of productivity growth that was achieved without attracting much employment. In this case, capital deepening has contributed to increased productivity at the expense of employment. Labor was pooled out of manufacturing in relative terms (shares) and reallocated to services.

Are productivity gaps declining?

Figure 5: Coefficient of variation



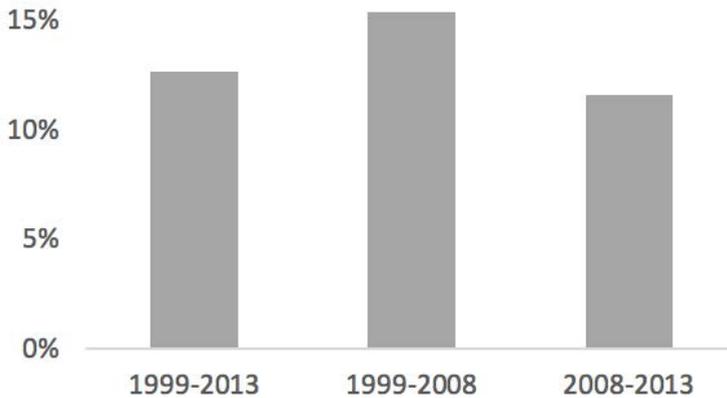
Source : HCP and authors' calculation

The structural change that the Moroccan economy experienced during this period apparently did not lead to a decline in productivity gaps, as measured by the coefficient of variation. Actually, the opposite is true; Gaps are showing an upward trend. This quite ambiguous result should be nuanced, given the increased volatility shown by the mining sector, for which the productivity level is six times bigger than average. The mining sector, along with utilities, is known for its high capital-deepening ratio. Excluding this sector, it is evident that gaps have shrunk during our sample from 0.58 to 0.52.

Overall, the reallocation of labor between the agriculture sector towards services in general combined with the increase in intra-sectoral productivity growth driven by capital accumulation and technological upgrade has led to expanding incomes in Morocco. GDP per capital as a measure of development has more than doubled in this period, reaching 7.3 thousand dollars (PPP) compared to 3.4 thousand dollars in 1999.

Any impact of the crisis on the productivity pattern?

Figure 6: Contribution of between effect to overall productivity growth, in (%)

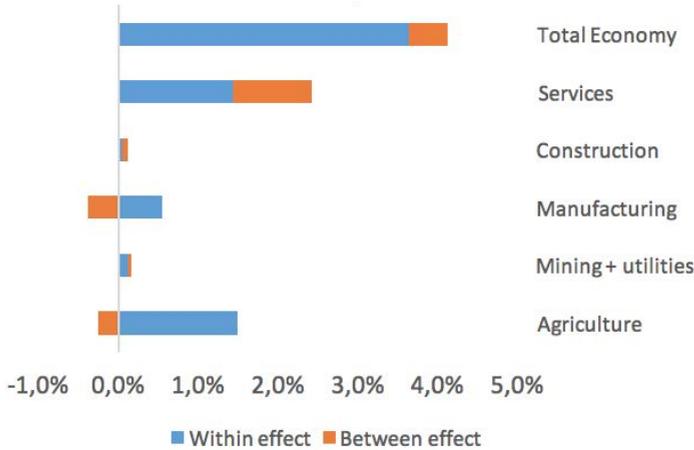


Source : HCP and authors' calculation

Almost 8 years after the onset of the crisis, economists are still puzzled by the pattern of labor productivity in some advanced countries that is still below its pre-crisis level and does not grow at its pre-crisis potential growth rate (Oulton and Barriel, Bank Of England. (2013)). The severity of the shock resulted in permanent damage to the supply capacity and risks of misallocation of resources including labor between high and low productive companies and sectors. The objective of this session is to consider whether the crisis have compromised the

structural change in the Moroccan economy.

Figure 7: Yearly average productivity growth, decomposition



Source : HCP and authors' calculation

We conducted the same approach above, this time for two sub-samples 1999-2008 and 2008⁴³-2013. At a first glance, the figure above shows that the reallocation effect is still contributing positively to productivity growth, meaning that the process of optimal labor allocation is still going on. Compared to overall productivity growth, it seems although that the contribution has slightly slowed down, to 11.8% of total productivity growth compared to 15.3% prior to 2008. What is striking in this case, is the within component that is supposed to shrink after the crisis. The relative rigidity in the labour market in Morocco, leading to higher firing costs, should have contributed to a lower elasticity of employment to added value evolution. In fact, sectoral within contribution to overall productivity growth did not show any sign of decrease. Quite the contrary, it has increased to an average growth per year of 4% instead of 3.5%.

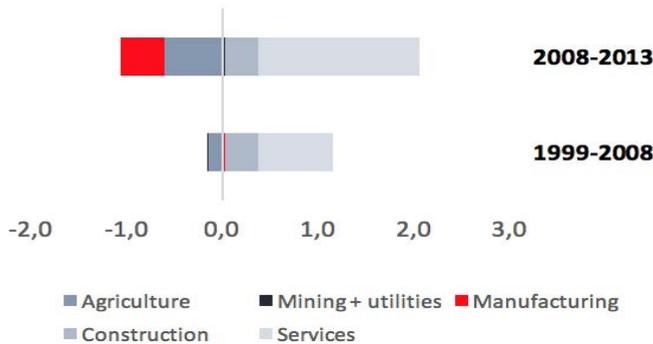
By sector, the biggest contribution was due to the dynamic evolution of productivity within agriculture that experienced a growth pace in 2008-2013 beyond the performance during 1999-2008, which in particular reflects exceptional rainfall conditions. Studies identified in Morocco great implications of rainfall over labor productivity and total factor productivity (TFP) in the agriculture system (Haut-Commissariat au Plan, 2016). This study estimated that the growth rate of TFP in the agriculture sector reached an average of 9.5% after 2008 while before that, it

⁴³ 2008 has been chosen as point of reference for the crisis; it might be argued that the implications of the crisis did not materialize until 2012 with a decrease in non-agricultural output growth rate. However, in order to harmonize all the sections of different northern countries and to have enough data for comparison, we decided to keep it as a turning point.

improved yearly by only 2.5%. Thus, near half of the increase in within the productivity effect has been driven by an improvement in agriculture productivity.

Except for mining and utilities where productivity gains have decreased, other sectors did not show any specific behavior after the onset of the crisis and kept their previous trend. In fact, studies over the capital accumulation by sector in Morocco identified clearly that growth rate of capital per worker has improved between 1998-2007 and 2008-2014, from 4.8% to 5.1% on average in industry and from 4.6% to 5.9% in services, while the TFP growth rate in services rose to 2% on average instead of 1.4% before. One explanation of the small effect of the crisis over the structural change is the nature itself of the crisis. While in advanced countries, the crisis started in the banking sector and then spread to the real sector, in Morocco, the banking sector has been spared and the crisis affected mostly the tradable sector. Riley, Bondibene and Young (2015) explained that when the banking sector took a hit, it might lead to a misallocation effect and then ultimately inefficiencies in resource allocation across firms and sectors.

Figure 8: Jobs creation or losses in percentage of jobs creation

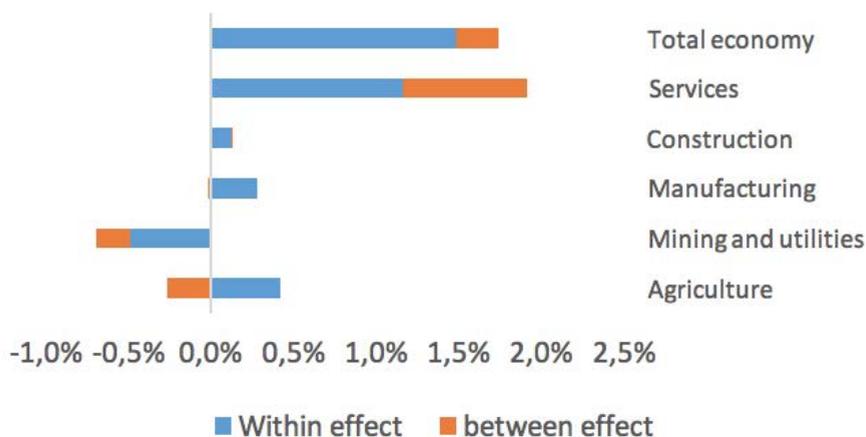


Source : HCP and authors' calculation

While the productivity growth rate did not change after the crisis, it hides interesting fluctuations across employment and value added patterns. In fact, the employment level has decreased in manufacturing by 9.1%. Regarding value added evolution, it has kept the same upward trend with a slight deceleration to 2% on average compared to 3% previously, suggesting that the manufacturing sector experienced a substitution between labor and capital during these 5 years that kept production increasing although at a rate less than before. It might be also that the TFP contribution to added value growth has expanded hugely to offset the decrease in employment. The question to ask is about the nature of this substitution effect, if it has a cyclical component or reflects some major changes in the production process within manufacturing.

B. TOWARDS STRUCTURAL CHANGE IN TUNISIA⁴⁴

Figure 9: Decomposition of productivity growth, 1989-2008

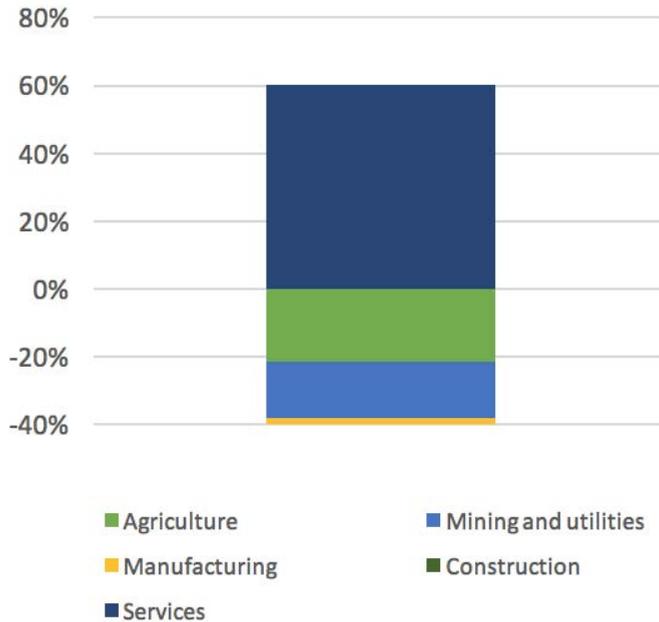


Sources: ILO and the UN, National Accounts Main Aggregates Database and authors' calculation

Unlike Egypt, structural change analysis for Tunisia revealed that over the period 1989-2008, 15% of productivity growth estimated at 1.7% was attributed to the reallocation effect between apparently below average productivity and above average productivity. A common feature in all these countries is the low productivity in agriculture that still generates an important part of wealth has one of the biggest share in employment. However, Tunisia compared to other countries allocate only 15% of its labour to agriculture, producing around 10% of total value added. Between 1989 and 2008, employees moved from agriculture to services. The service sector was able to attract most of the labor supply out of agriculture, and mining and utilities. In fact, mining and utilities, representing 9 times the average productivity, has witnessed a decline in its employment share, from 1.8% to 1.2%, which keeps the employment level at almost the same level. Productivity growth could be more important if employment was mainly reallocated from agriculture and construction, where productivity is 2 to 3 times lower than average.

⁴⁴ For Tunisia: employment data are available for 1989 as a reference point and not 1999 as for other northern African countries.

Figure 10: Share of between effect by sector



Sources: ILO and the UN, National Accounts Main Aggregates Database and authors' calculation

Marouani and Mouelhi (2015) addressed the same issue for the Tunisian economy given a deeper employment breakdown and assessed the contribution of structural change to productivity growth. They showed in fact, that structural change during the period 1983 and 2008 is positive. Labor supply has been heading to hotels and restaurants, and finance, two sectors that have an above average productivity. They also showed that the effect would be much more important if employees were not reallocated from mining and public utilities, which have an average productivity 3 and 6 times higher than average. In addition, their results suggest that transport and communication, manufacturing and agriculture sectors have made important progress in terms of their within productivity growth. For the Tunisian case, manufacturing has been losing its share in wealth creation, shrinking from 17.2% in 1989 to nearly 16% in 2008 and 15% in 2013. The pattern of decline in share of employment is less steep. Its share barely declined from 19% in 1989 to 18.6% in 2008 and 10% in 2013. Unlike Egypt and Morocco where manufacturing is losing employment, in Tunisia manufacturing is still demanding for labor. Even after the crisis, the sector did not seem to be seriously impacted.

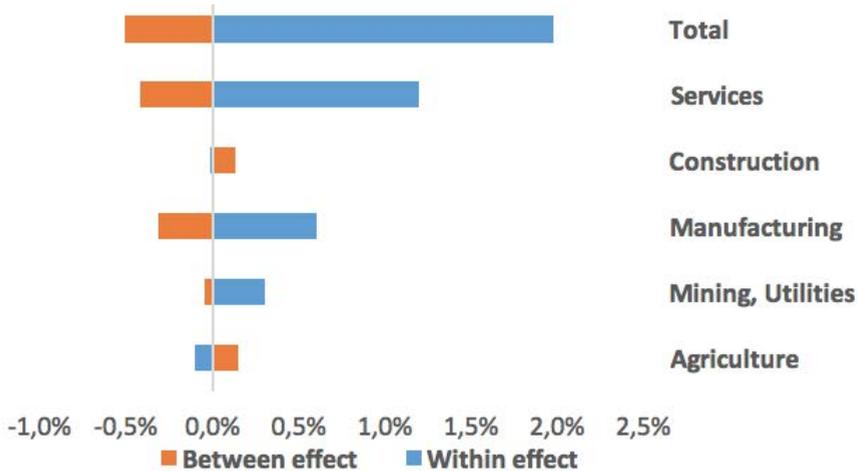
Ghali and Rezgui (2013)⁴⁵ extended the analysis of the manufacturing sector and revealed that the apparent steady way of change inside the manufacturing hides some deeper transformations.

45 Ghali and Rezgui (2013) "Structural Transformation and Industrial Policy" FEMISE.

It has been able to consolidate its strengths by increasing its capacity to attract more skilled labor, which is a signal of technological upgrading and transition towards highly productive industry. A production function has been estimated where manufacturing value added growth is broken down into the contribution of skilled and unskilled labor and capital; the residual is considered as a contribution of technology (TFP). The decomposition suggested that TFP has been the major contributor to growth especially in the recent period (2006 – 2010). By sub-sector, results are quite heterogeneous. In food processing, mechanical and electrical, and chemical and rubber, the contribution of skilled labor approximated by tertiary educated workers is valuable and has been rising since 2006, while the situation is different in the other industries. For example, in the textile and leather industry, the workers with secondary school level of education still represent key sources of value added growth, however in construction material and glass, skilled workers do not seem to fit into the production system and have a negative contribution to growth, indicating that the technology used in this sector is rather intensive in low skilled labor.

C. STRUCTURAL CHANGE IN EGYPT: GROWTH-REDUCING STRUCTURAL CHANGE.

Figure 11: Between and within effect, by sector 1999-2008

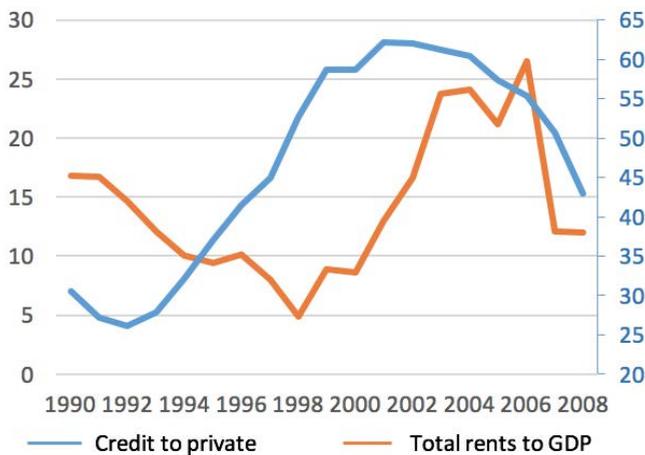


Sources: ILO and the UN, National Accounts Main Aggregates Database and authors' calculation

Following the same methodology applied for Morocco, the analysis for Egypt revealed completely different results in terms of the reallocation effect contribution to overall productivity growth. In coherence with some studies dealing with that issue, (ADB, 2013; EIB, 2014, the between effect has a negative impact over productivity growth. In fact, sectors that have been creating more jobs have a below average productivity level, while above average productivity has

witnessed a decreasing employment share, leading to a negative reallocation effect. According to El Haddad (2013), he suggested that the negative structural shift has been triggered since 2002, while before the between effect contributed positively to overall productivity. He also considered that this negative contribution is partially due to reallocation within services from highly productive sectors, such as banking and finance to low productive sectors, like informal trade (e.g. street vendors) and small scale repair shops (ADB, 2012). Simultaneously, it is obvious that the construction and agriculture sectors have been attracting new entries to the labor market more than other sectors in the economy, which is quite challenging for the prosperity of the Egyptian economy. These sectors are undoubtedly low wage activities that seem to be a “forced alternative” for job seekers as long as they cannot integrate into the modern sector of the economy. This situation might be a result of a mismatch between labor supply qualifications and labor demand needs, which is also alarming for long-term growth. In fact, skills represent an important prerequisite for any successful transformation of economic structure and reallocation of labor towards modern sectors of economy. However, this negative reallocation could just be the implications of a negative demand shock that Egyptian economy or in particular, manufacturing and services, witnessed during this period. Besides, some puzzling facts are worth mentioning regarding agriculture. This latter with the lowest productivity level did not contribute that much to overall productivity growth through increasing capital deepening of technology upgrading, in spite of the potential of huge catching up dynamic.

Figure 12: Total rents and credit to the private sector to GDP in %



Source: WDI

Rodrick and Macmillan (2011) have documented this kind of economic transformation that

seems not to be going in the right direction. These authors argue that resource driven economies where the extractive sector is a major exporter of the economy, might witness some negative structural transformation. Natural resources curse, which leads to over-dependency on primary commodities, may result in an inefficient resource allocation in the economy. In fact, a revealed comparative advantage in that sector generally leads to a concentration of labor in the mining sector (the easy way), at the expense of sectors with a higher potential for economies in the long run, such as manufacturing or services. Morsy, Levy and Sanchez (2014) found, using the share of commodities in exports, that the extent of structural change is negatively associated with a higher share of commodities in a country's exports, suggesting that a specialization in commodities is likely to jeopardize the process of structural change. In addition, they also highlighted the role of the efficiency of the banking sector in the promotion of structural change in Egypt. Through a cross-sectional econometric analysis, they found that the low growth of credit in the private sector is one explanation of the lagging structural change in the country compared to some emerging economies.

Figure 13: Real effective exchange rate, change in %



Source: Brugel Real Effective exchange rate database.

Moreover, the exchange rate policy conducted by the central bank⁴⁶ might be the factor to point out in this growth-reducing structural change. In fact, the period where the economy witnessed a positive structural change, the currency experienced a huge depreciation compared

⁴⁶ An increase means appreciation, while a decrease means depreciation.

to its main economic partners. However, since 2003 the Egyptian currency appreciated steadily in parallel with this negative between effects. Overvaluation tends to put pressure on tradable industries further damaging especially the light-manufacturing sector that operates at tight profit margins and enhances imports of manufactured goods. In addition, liberalization of the economy combined with the appreciation of the currency could be a factor to blame for the case of Egypt. Egypt has gone under a structural reform of its trade regime aiming to open its economy to foreign competitors and benefit from increasing demand coming from abroad. Said and Elshennawy (2015) have demonstrated however that trade liberalization between 1996 and 2005 didn't damage the manufacturing sector, but quite the reverse, manufacturing kept employing people. However, data show that in 2002 manufacturing employment declined in relative terms but also in absolute value. It shrunk in 2002 and 2003 by 2.1% and 4.5%, along with the appreciation and increase in imports ratio. Overall, further studies need to be launched to analyze deeper and understand growth-reducing structural change during that period and assess which factors would shape the most, for the case of Egypt, structural transformation and enhance growth and economic prosperity.

Like Morocco but at a lower extent, the contribution of manufacturing to wealth creation has been decreasing from 17.5% in 2000 to around 16.4% in 2013, while employment has experienced the same pattern with a sensitive decline of almost 3 percentage points to 10.7%. Accordingly, within productivity saw one of the largest increase in the Egyptian economy. Its contribution to total within productivity growth amounted 30% of total within effect estimated at 1.2% per average, while in the service sector it is 60%. In terms of productivity gap, unlike Morocco, productivity was above average levels and it exceeded services in general.

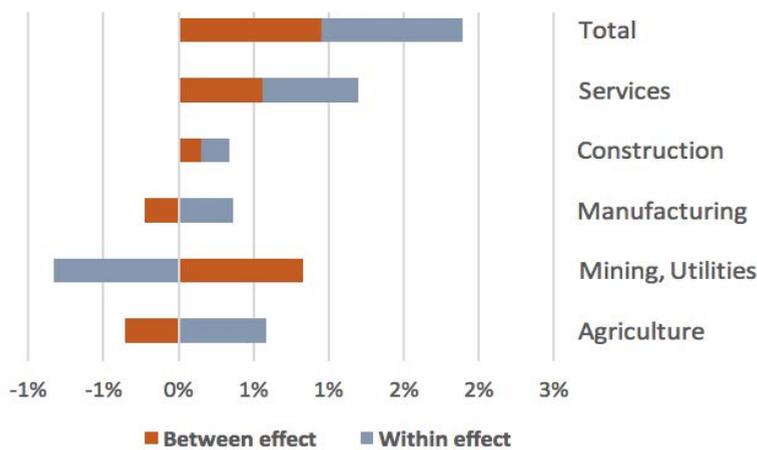
El-Haddad (2013) extended the employment movement analysis to the manufacturing sector. He explained that the structural movement of employment contributed positively to productivity growth which might explain the importance of the within component we generated through aggregate measurement. The decomposition of productivity growth for the 10 most performers in manufacturing during 2004-2006 showed clearly that new sectors have emerged with an above average productivity level and were able to attract more employees. He explained also that classic manufacturing sectors like petroleum refineries, other nonmetallic mineral products, mostly capital intensive, have reached a potential ceiling where absorbing labor supply is not any longer an option.

Any impact of the crisis on the productivity pattern?

At a first glance, structural change analysis before and after 2009 revealed some interesting facts for the case of Egypt. If reallocation effect estimations revealed that for the period 1999-2009, labor has been heading towards less productive sectors, especially since 2002, the results

are entirely the opposite applying the same approach for 2009-2013. In fact, labor was moving mainly from agriculture and manufacturing towards mining and utilities, services and at lesser extent construction. Productivity gains inside each sector were also important for sectors that lagged behind, e.g. agriculture and services. Overall, productivity growth in that period was shared equally from within productivity growth and reallocation effect.

Figure 14: Between and within effect, by sector 2009-2013



Sources: ILO and the UN, National Accounts Main Aggregates Database and authors' calculation

Agriculture and services have thus been witnessing the optimal pattern as economic theory and development path experiences suggest. Productivity is increasing in that sector first probably due to modernization and capital deepening that pushed at the same time employees far from this sector towards the rest of the economy. Services, hopefully in highly productive sectors, are attracting more and more labor and increasing capital use and technology inside the economy. Regarding manufacturing, the same panorama can be drawn for Egypt as in Morocco. Not only did the employment share in manufacturing maintain its declining trend as a sign of premature deindustrialization, but also the number of employees in manufacturing declined by 3,2% between 2009 and 2013. It could be that substitution effects between capital and labor inside manufacturing kept productivity and production generally increasing.

What is amazing in this case is the behavior of mining and utilities for the case of Egypt. In fact, its employment share has increased during this period. In a counterfactual scenario where mining and utilities did not attract more labor, total between effects would be around zero. Unless there was a natural resources discovery in Egypt during that period which is unlikely because of the drop in total value added, this reallocation effect might have altered the competitiveness of the sector that is known for its low labor elasticity and its higher capital-deepening ratio. It also

could be possible that the mining sector and utilities could be considered as a way-out option for the public authorities (only possible if mining companies are owned by the public sector) in a time of crisis. In the case of Egypt, the Arab spring is also a factor not to neglect during our analysis that might have pushed towards this employment strategy. Another explanation of the behavior of mining lies in the relation between growth and unemployment. Above we have explained that the Egyptian had witnessed an increase dependency over rents since 2002, which might have relatively increased the labor demand by the sector. This labor demand could have lagged behind and didn't take place until recently.

2. Export performance: new measure of quality and variety indexes

In this section, we propose a new measures of export performance, related to horizontal and vertical dimensions. The measure of export variety is derived from a CES utility function by Feenstra (1994) and has been widely employed recently.⁴⁷ This measure enables both a comparison in terms of changes in product variety over time for two countries and at a same time point.

$$Variety_t^c \equiv = \frac{\sum_{i \in I_t^c} p_i^a q_i^a}{\sum_{i \in I_t^a} p_i^a q_i^a}$$

This is interpreted as the share of total U.S. imports (country a) from products that are exported by country c. p is the price and q is the quantity of imports.

$$\ln(s_{cht}) - \ln(s_{0t}) - \alpha p_{cht} - \sigma \ln(ns_{cht}) - \gamma \ln pop_{ct} = quality$$

For the quality index, we constructed a new measure of quality upgrading. The challenge is related to the unobserved component of quality. Economists have always considered prices as a viable proxy for quality. While it is very practical to proceed that way, it however makes strong assumptions about the cost structure around the world indicating that any price differences is driven by quality and not cost (Khandelwal, 2010). Derived from a nested logit demand system that allows correlations among consumer preferences (Berry, 1994), the procedure utilizes both unit value and quantity information to infer quality such as: imports with higher market shares are assigned higher quality, conditional on price. The regression equation is:

Where s_{0t} is the market share for outside variety (here taken as the domestic variety), which

⁴⁷ For example, Hummels and Klenow (2005), Broda and Weinstein (2006), Feenstra and Kee (2007, 2008), etc.

is set by 1 minus the industry's import penetration. s_{cht} is the overall market share of product imported from country c .⁴⁸ ns_{cht} is its market share within product h (the nest share) and pop_{ct} is the population of the exporter country and P_{cht} is the price of product h imported from country c .

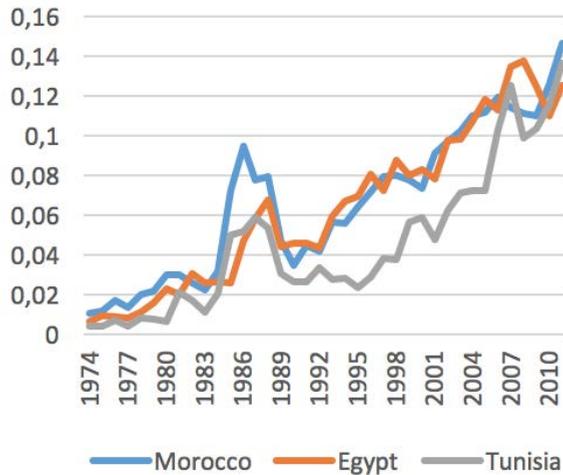
The idea behind the regression is that once you have controlled for the economic and population size, and mainly the prices, the gap reflects quality. A variety's quality will rise if its price can rise without losing market share.

The main dataset used in the two indexes is the product-level U.S imports from 1972-2012. In particular, U.S. imports are classified under the 7-digit Tariff Schedule of the U.S. Annotated classification (TSUSA) for 1972-1988, while after 1989 imports are classified under the 10-digit Harmonized System (HS).

A. VARIETY INDEX

The result for the pooled manufacturing industries from 1972 to 2012 is presented in Figure 15. We also broke down the aggregate manufacturing exports of each country to the US into nine major industries based on the 2-digit Standard Industrial Classification (SIC) (1987 version) and constructed the export variety indexes accordingly.

Figure 15: Variety Index for Pooled Manufacturing Industries



Source: Authors' calculations based on the US merchandise imports

48 For further technical discussion, see Khandelwal (2010) "The Long and Short (of) Quality Ladders" NBER.

As illustrated by Figure 15, overall, countries relatively expanded their export varieties in the manufacturing sector over time.⁴⁹ There is no distinct difference in export variety for Morocco, Tunisia and Egypt over time. In particular, not a single country took a dominant role during 1970s and 1980s. Starting from 1990, a slight divergence began to emerge between Morocco and Egypt on one hand and Tunisia on the other hand. By 2011, Morocco achieved to cover 14.67 percent of export varieties relative to the U.S. in the manufacturing sector. While, Tunisia boosted itself to the second position in terms of export variety to the U.S. with 13.68 percent, followed by Egypt with 12.5 percent.

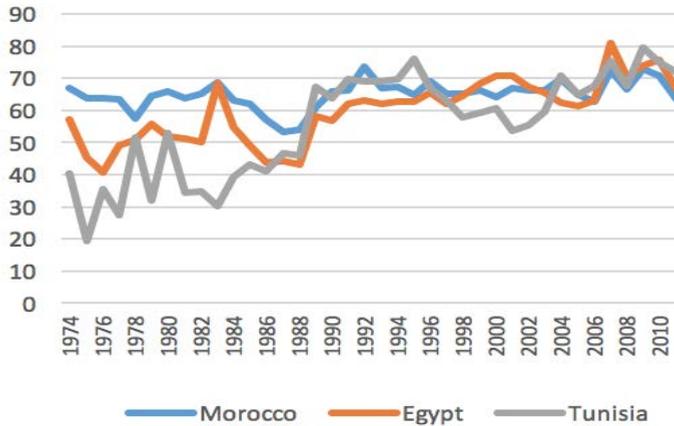
In the food sector, Morocco and Egypt have followed a broadly similar trend since the 70s. In Morocco, the export variety index went from 3% to almost 12 percent in 2011. Egypt went from nearly 0 percent in the early 1970s to cover 10 percent of export varieties by 2011. As showing in Figure 21⁵⁰, Tunisia was lagging behind since 1990, but in recent years, the variety of its exports improved significantly, reaching the level of Morocco and Egypt. Having a relative comparative advantage in the textile, leather and apparel sector, the three countries similarly increased their share of export varieties to the U.S. in this sector. By 2011, Egypt manage to cover 42.7 percent of export varieties, while Morocco and Tunisia share first place exporting 48 percent of varieties to the U.S. in the textile sector (Figure 22). Figure 23 show that after a rather stable trend for the three countries for the period 1974 to 1998, it was Egypt that records the highest variety rate, covering 4 percent of export varieties to the U.S. in chemicals sector by 2011. Figure 24 shows a clear gap between Morocco and the two other countries since the early 90s regarding electronics. In fact, Morocco reached 21 percent of export varieties to the U.S. sector by 2011.

49 There is a discrete fall in 1989, which is due to the change of product classification from 7-digit TSUSA to 10-digit HS system.

50 See figures 21, 22, 23 and 24 in appendix.

B. QUALITY INDEX

Figure 16: Quality Index for Pooled Manufacturing Industries



Source: Authors' calculations based on the US merchandise imports

The figure above illustrates how quality indexes of manufacturing products evolved in Morocco, Egypt and Tunisia. It worth mentioning that quality indexes have been computed over the period 1974 to 2011 with regard to exports to the US market. So, for countries like Morocco, that have witnessed an expansion of their automobile sector's exports since 2013, the index is not expected to capture this change. In addition, for these countries, the European market has been the main destination of their exports. Therefore, the interpretation should be treated with care, as it does not really reflect the structure of total exports. Overall, as shown by the figure, aggregated manufacturing exports of the three countries are relatively of the same quality during the estimation period and they did not show any specific behavior in the 2000s. By sectors, results seem to be more heterogeneous. In fact, for the textile, leather and apparel sector that ranks number 1 for Egypt and Tunisia and number 3 at the top exporter sectors for Morocco, quality improved for the Tunisia economy and slightly deteriorated for the Moroccan textile products, while for Egypt it has kept relatively the same quality level between 2000 and 2011. For the tobacco and food business, no significant changes occurred in the last decade with a quality that seems superior for the Tunisia and Moroccan products compared to the Egyptian ones. Regarding the chemical products, Morocco and Egypt are outperforming the Tunisian economy, but with no significant changes during the 2000 decade.

III. Industrialization and integration in the global value chains: opportunities for North Africa

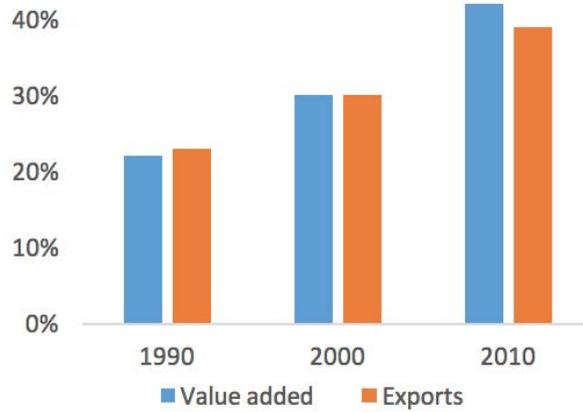
The deindustrialization process in the case of Morocco, Egypt and at lesser extent Tunisia could be overcome through increased integration in global value chains (GVC). GVC offer opportunities to smaller economies like these to specialize in production segments in which they have a comparative advantage without developing the domestic platform to perform all steps of complex manufactured products. Opportunities for countries to generate a manufacturing value added are more possible than ever through joining an international production network. In fact, International firms seeking competitiveness have completely changed the landscape of the International trade in the last decades through an increased fragmentation of production systems. The technological progress and a sharp decline in trade barriers and transport costs have made it possible and pushed towards setting new ways of production all over the world. One indicative feature is the rising flow of trade in intermediates that increasingly constitutes one of the major components of trade.

This section aims to establish the facts related to the degree of integration of these countries into GVCs, explain the opportunities launched by this form of specialization to enhance their structural change, and identify the threats and risks associated to GVCs and implications on their economic development process.

1. How much is the domestic value added (DVA) in total trade of these countries?

Developing economies have leveraged the benefits of the increasing flow of trade these last decades. In fact, they were able to capture an increasing share of trade value added by upgrading their production systems and establishing integrated networks domestically. While these countries still do not capture the major part of trade value added, the marginal rise of trade flow is beneficial to these countries and developing economies increasingly produce the needs of the developed world. In fact, domestic value added has increased from 22% in 1990 to 42% in 2010, while the total contribution of developing economies in the total trade did not increase proportionally, standing at 39% in 2010 compared to 23% in 1990. Regarding our sample countries, the domestic trade value added has slightly increased compared to the total domestic value added in the world. It has almost doubled from 1990 to 2012, reaching 0.4%. While it is still very small compared to the global economy, given their economic size this increase would yield in major economic performance.

Figure 17: Share of developing economies in global value added trade and in global exports



Source: UNCTAD-EORA GVC database (2014) based on UNCTAD. 2013. “Global Value Chains: Investment and Trade for Development.” World Investment Report

In terms of captured value added to gross exports, the three countries have experienced a slight decrease in their domestic value added in the last two decades, especially since 2000. It is estimated at 71% in Tunisia, 80% in Morocco and 84% in Egypt. This feature should not be considered as a negative evolution but rather as integration into GVCs and optimization of the production system. Nowadays, competitiveness requires the optimal production system, which goes hand in hand with specialization through an international division of labor. An economy like Korea with a GDP per capita over 21,000 USD, PPP is capturing only 58% of exports.

Figure 18: Participation in GVC and domestic trade value

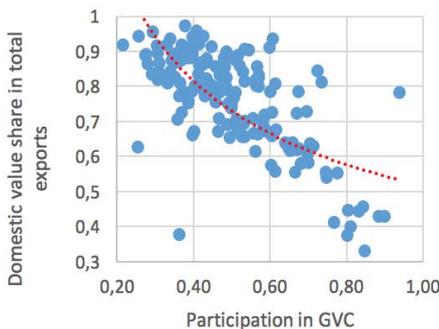
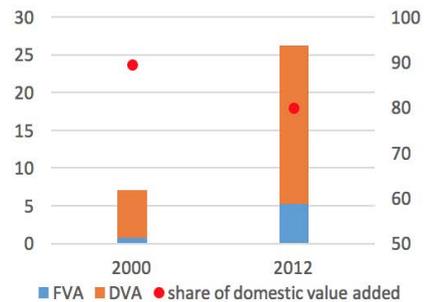


Figure 19: Exports goods and services of Morocco in billions of dollars

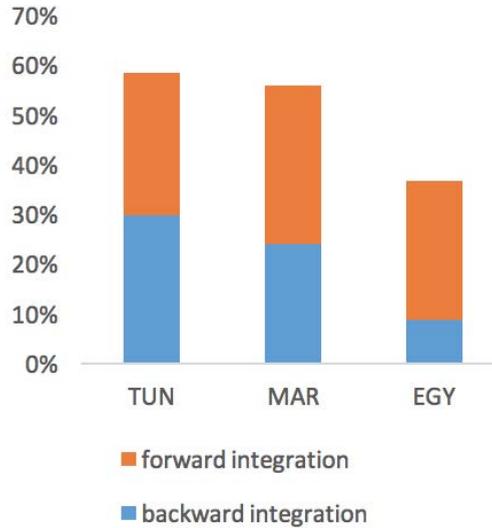


Source: UNCTAD-EORA GVC database (2014)

The figures above clearly confirm this fact and suggest that participation in the GVC⁵¹ comes at the expense of domestic added value. Countries that were able to capture a higher share of trade value added are less integrated in the GVC. There are two separate cases of relatively unintegrated economies. The first case is whether the economy is relatively closed, that exchanging mainly final goods, and the second case is whether they, mainly developed economies, have reached a level of maturity in which they are able to develop a domestic network through increasing attractiveness to foreign investments. Similarly, economies that tend to resist this changing landscape of trade and production networks are not admitting that increasing domestic value added requires importing foreign value added, and are therefore doomed to failure.

Measuring the share of domestic value added is the wrong way to assess integration in the GVC and its implication on economic growth, at least at the beginning of the process of integration. It is understood that countries that rely less on foreign value added (FVA) in exports – would see their economic activity increasingly grow, but this holds true only once a development level has been reached. Small countries like in North Africa are constrained to letting part of the value added produced abroad to sustain their growth model and insure their competitiveness. For the case of Morocco, in 2000 the share of domestic value added was about 90%, and 12 years later it decreased to 80%. What is interesting in this case is the value of domestic value added in dollars that tripled during the same period. It is difficult to assume that the Moroccan economy could be able to increase the domestic value added exported relying only on domestic capacities without integrating the international production network system. Thus, keeping in mind only the share as the most relevant indicator of domestic implication on growth and development might be misleading especially in the first stages of integration.

51 This indicator will be explained later.

Figure 20: GVC participation, in 2011

Source: UNCTAD-EORA GVC database (2014)

2. Participation in the GVCs?

In order to understand the degree of participation in the GVC, an indicator has been constructed to quantify the extent to which each country is integrated in the GVC. This indicator shows the portion of a country's exports that is part of a multi-stage trade process, by adding to the foreign value added used in a country's own exports (the upstream perspective) also the value added supplied to other countries' exports (the downstream perspective) (UNCTAD, 2014). As explained, they are different forms of participation, either at the first stages of production generally commodity exporters or economies that process crude materials and thus are located at the final stage of production. Regarding our sample, it is clear that the upstream component is relatively prevailing, meaning that these countries operate more at the beginning of the value chains, maybe as providers of commodities and raw materials. Egypt seems to be less integrated than Morocco and Tunisia in the GVC, a difference mainly induced by the upstream component. Compared to 1995, it is clear that these countries, especially Morocco and Tunisia, are increasing their reliance on GVC as a trade locomotive, while Egypt is more focused on the upstream component as a driver of GVC integration. The rise of the flow of the intermediate goods of these countries is focused more on Europe as the destination and provider of intermediate goods. The

historic trade relations between these regions, the increasing trade agreements, and the flow of FDI entering these economies represented most GVC participation and was achieved along with European partners and companies (ADB, 2014).

These figures related to 2011 do not show the increased reliance of these economies on GVC as a trade driver for North Africa. Morocco's automobile sector has been considered as one of the successful stories in the region, with double-digit annual growth rates for FDI and exports. In 2014, automobile exports represented over 20% of total Moroccan exports. The opening of the Renault-Nissan industrial complex in Tangiers in 2012, which has an annual production capacity over 300,000 vehicles, the major part of which is for export, to Europe and North Africa. Certainly, domestic value added generated by this sector is still not important and does not meet expectations, but as a strategy that keeps in mind the long run effect of technology transfers and quality upgrading, domestic implications on income and employment should be significant.

3. After entering GVCs: what is the next step?

The location of each economy in the GVC (downstream or upstream perspective) can be misleading for policy makers who intend to assess the economic performance of a country. Economies might be requested at the beginning of a production chain as a commodity provider, which tends to be not highly desirable for an economy that strives to process its natural resources and generate more domestic value added. Furthermore, developed economies might be involved in the GVC at the first stages of the process as leaders in research and development or design, activities that create more value added. Accordingly, economies could be also located downstream doing the assembly for example in the car industry, which is low in domestic value added.

Entering the GVC itself could be considered as a success especially if it is not related only to the comparative advantages in a commodity. However, the challenge for each economy is the capacity to upgrade and climb GVC ladders from low value added to high value added activities. As explained above, countries that integrate GVC should be able to admit domestic value added losses especially in the beginning of the process. Mastering low value added activities is a prerequisite to target upgrading and climbing the GVC. The technological transfer and the accumulation of new capabilities could trigger the "climbing process" if the right industrial policy is implemented. Escaping the "low value added trap" requires combining several success factors, related mainly to the supply of skilled labor able to leverage the challenge and migrate the economy towards high value added activities. The logistics and infrastructure framework are relevant ingredients of success in order to keep the economy competitive and highly driven by international movements.

The right dose of trade openness is a factor to also consider while implementing the adequate industrial policy for a country striving to sustain its competitiveness. Nowadays, it is not admissible that countries put some strong trade barriers on imports and the idea that importing comes at the expense of employment and output does not hold anymore. We addressed this issue above, explaining that in order to increase local production we need to increasingly rely on imports. Competitiveness requires more specialization and a rising division of labor. Nevertheless, over-reliance on imports can systematically damage the local production system and compromise any attempts to move the economy away from low value added activities. Some developing countries have seen their structural transformation being jeopardized due to increased imports. This refers in fact to the exchange rate policy adopted by the monetary authorities. We have seen for the case of Egypt that the appreciation of the currency might have altered the structural transformation of the economy and led to the issue of the growth-reducing structural change (Rodrick and Macmillan, 2011).

GVC participation should be able to benefit the whole economy and not only the operational sectors of firms. Increasing linkage between these sectors and the rest of the economy is a relevant task that policy makers should keep in mind. Tunisia is considered as a concrete example of this lack of linkage. While exports of electrical machinery, business services and tourism are performing and well connected to international markets, implications over the rest of the economy are not meeting expectations. These activities operate in isolation from the local economy, because of the dualism in regulations between the offshore and onshore sectors, which significantly limits the potential for further upgrading (ADB, 2014).

Besides, GVC integration is not only about manufacturing. Services are representing a rising share in trade in manufactured goods. OECD confirms that over 30% of manufactured goods traded globally is created by services. The larger part of this supporting activity is related to transport and logistics, finance, and communications. These services are relevant to supporting manufacturing. Furthermore, services are being traded now and their production system is fragmented in different locations. Banking, education, health and communications services are all types of sectors that are traded more frequently but are less prone to research and interest from policy makers. Accordingly, insuring performance in the manufacturing sector and taking full advantage of GVC integration is not dissociated from upgrading the service sector, where value added is hidden inside manufactured goods.

Concluding Remarks and Directions for Future Research

The countries of North Africa have always considered the industrial policy an important means to upgrading their manufacturing sector and path to development. In an era of premature deindustrialization, the manufacturing sector is expected to offer job opportunities for the population and absorb unemployment in the region especially for young people. That is why, based on the recognized success of East Asian countries in terms of implementing the “right” industrial policy, these countries were very involved in implementing active policy interventions, aiming to promote some activities in the manufacturing sector, like electronics, transportation equipment, or textiles, expected to insure the economic convergence, welfare and prosperity for their population. These countries suffer from an over-reliance of their economy on the agriculture sector that still employs 40% of the employed population in Morocco, 28% in Egypt and 15% in Tunisia, which operate at very low productivity levels.

In relation to the objective of an industrial policy that aims to promote structural change and economic convergence, we thus analyze the pace of their structural transformation in the last decade using two approaches. We analyze labor reallocation between five sectors of the economy for the three countries and assess to what extent this movement contributes to the overall productivity growth. Achieving the reallocation of the labor factor from agriculture to highly productive sectors (at least sectors in which productivity is above agriculture) is expected to generate important outcomes, in terms of GDP growth and welfare.

First results show that for the case of Morocco and Tunisia, performances are comparable with a reallocation effect that was positive and contributed around 18% and 21% to overall productivity growth. Except that for Moroccan economy overall productivity increased by an average rate of 3.7%, while for Tunisian economy, productivity growth was 1.7% for the sample period. The service sector has been the main contributor to this shift by being the first employer with a productivity level above average. For manufacturing, not only its employment share is decreasing but for the case of Morocco, since 2008, employment is declining as perhaps a sign of deep changes occurring in the manufacturing sector that experienced a rise in the capital deepening ratio. Manufacturing in Tunisia however was able to keep its share in total GDP relatively constant. For Egypt, the period 1999-2008 experienced a negative contribution of the reallocation effect to overall productivity growth, meaning that the labor factor was moving from high productivity sectors to low productivity sectors. This growth-reducing structural change could be the result of a combination of many factors as studies suggested, such as the exchange rate appreciation, over-dependence on commodity exports and inefficiency in the banking sector.

The second approach applied in this study is related to the construction of new measures for exports performance, quality and variety dimensions. For the quality index, it seems that not much improvement has been noted in the 2000s for the three countries, even for industries targeted by the policy makers in each country. For the variety index, some facts are worth mentioning. In

fact, the overall performance of the three countries has improved steadily in the last decade, but driven mainly by classic sectors such as textile or food and tobacco. While for electronics, a sector targeted by the public authorities, Morocco was able to diversify its supply to the US markets and outperformed Tunisia and Egypt.

Taking full advantage of the changing landscape of the production systems and networks may allow North African countries to accelerate their structural change and enhance their manufacturing sector. As shown, these countries are increasing their participation in the GVCs as a remedy to their deindustrialization. Specializing in niche manufacturing activities may allow them to promote manufacturing knowledge and capabilities without developing the domestic platform to perform all steps of complex manufactured products. The challenge for each economy in this case is the capacity to upgrade and climb GVC ladders from low value added to high value added activities. At a starting point, it could be enough for a country to integrate the GVC in low value added activities, which is apparently the case for these countries, but beyond a certain level, these economies must aim to climb the GVCs ladders and move away from low value added activities. Describing the right ingredients for any industrial policy is, in my viewpoint, the best way to deceive, but economists agree on the importance of upgrading the logistics and infrastructure framework, which are relevant to keep the economy competitive and highly anchored to international markets. In addition, a success in climbing the GVC ladder is contingent on capacity to insure the supply of skilled labor to leverage the challenge and take off the economy to highly value added activities. Besides, it is important for the countries to tap the benefits of the GVC participation for the rest of the economy through building linkages between export oriented activities and non-tradable sectors.

Active interventions in selective sectors are not enough to build a strong manufacturing sector and a competitive economy. A “policy mix” between vertical and horizontal policies is to be kept in mind. Maintaining a sound macroeconomic framework is also crucial, especially regarding monetary policy decisions, exchange rate movements and the fiscal policy stance. Long-term strategies related to innovation, labor market, and trade policies are not to be neglected when implementing industrial policy. The case of Egypt is quite revealing in this case. Focusing on direct interventions and targeting a specific sector while not implementing the right short-term policies like monetary and fiscal policies could be threatening for the growth path of the economy and lead to mis-allocation of resources and all the efforts engaged by the policy makers can go up in smoke.

Further studies need however to be launched to better understand the functioning of the North African economies, the underlying dynamics and the divergence compared to some success stories in the East Asia region. In addition, micro simulation should be run to conduct some impact analysis of different incentives provided by the governments for the targeted sectors.

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Appendix

Figure 21: Variety Index for Food and Tobacco Industry

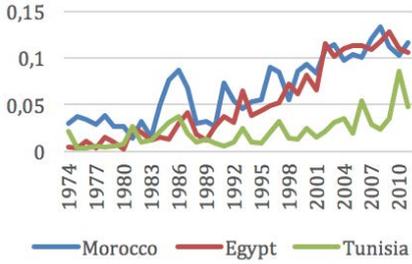


Figure 22: Variety Index for Textile, Apparel and Leather Industry

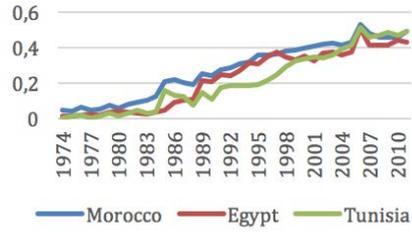


Figure 23: Variety Index for Chemicals Industry

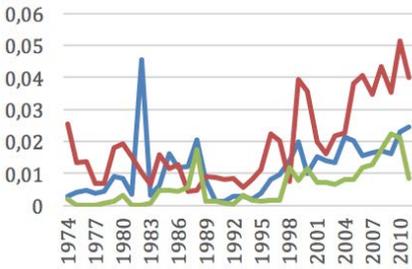
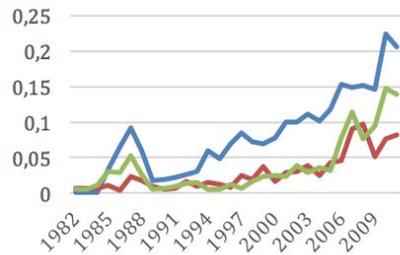


Figure 24: Variety Index for Electronic Industry



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Seven Years after the Crisis: Intersecting Perspectives

This joint Bruegel-OCP Policy Center publication comprised of four policy contributions from researchers of both institutions is the result of the establishment of “Platform for Advanced & Emerging Economies Policy Dialogue.” The first edition of this continuous dialogue took place in Rabat on April 1st 2016 under the theme of “Seven Years after the Crisis: Intersecting Perspectives.” In the first paper, “Youth Unemployment in the Mediterranean Region and its Long term Implications”, written by Nuria Boot, Karen E. Wilson and Guntram B. Wolff, the focus is on the correlation between youth unemployment in the Mediterranean region and the problems that this leads to in Europe as a whole. The second paper, “Energy Across the Mediterranean: A call for Realism”, by Simone Tagliapietra and George Zachmann, advises the European Union to draw lessons from two decades of unproductive regional cooperation attempts. Karim El Aynaoui, Uri Dadush, Karim El Mokri and Rim Berahab contributed with the paper “The Unmet Challenge of Interdependence in the EU-MENA space: A View from the South”. They examine bilateral relations between Europe and the Arab world, especially as they relate to trade, migration, investment, and energy. In “Industrial Policy, Structural Change and Global Value Chains Participation: A Case Study of Morocco, Tunisia and Egypt”, Abdelaziz Ait Ali and Yassine Msadfa use two methods to analyse the pace of structural transformation (the positive change in manufacturing capability) in Morocco, Tunisia and Egypt.

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