

# Assessing the European Union's North Africa trade agreements

Uri Dadush and Yana Myachenkova

---

**URI DADUSH** ([uri.dadush@bruegel.org](mailto:uri.dadush@bruegel.org)), Non-Resident Fellow, Bruegel; Senior Fellow, OCP Policy Center

---

**YANA MYACHENKOVA** was a Research Assistant at Bruegel

---

The authors would like to thank Ignacio Garcia Bercero, Monika Hencsey, Hauke Waszkewitz, Guntram Wolff and participants in a seminar held in Rome on 12 October 2018 for very helpful comments. Hamza Saoudi provided excellent research assistance.

---

This paper was produced with the financial support of Compagnia di San Paolo.

---

## Executive summary

**THE TRADE AGREEMENTS** that the European Union has with North African countries – with Algeria, Egypt, Morocco and Tunisia – are often seen as having delivered disappointing results since they came into force during the 2000s. The four North African countries have seen insufficient growth in their exports to the EU, and have undergone only limited diversification. In the meantime, the EU's exports to North Africa have grown quite rapidly.

**ECONOMIC GROWTH IN** North Africa has been well short of what is needed to reduce chronic under-employment, especially of young people. The EU trade agreements with North Africa could generate additional, large benefits if they either directly led to or at least incentivised behind-the-border reforms to make the North African countries more competitive in international markets. Though this reform is the responsibility of the governments of North African countries, the EU could provide stronger incentives to improve the business environment. Meanwhile, in agriculture, were the North African countries able to compete with the EU on an even playing field, agriculture's share of domestic value-added would almost certainly be significantly larger and rural poverty correspondingly lower than at present.

**NEVERTHELESS, THE AGREEMENTS** have been judged too harshly. They helped generate large amounts of trade, though not enough was done on the domestic front to derive the maximum benefit from them. Moreover, the domestic and international environment has been unfavourable, impeding North Africa's progress. Over much of the relevant period, the EU grew sluggishly, and North African countries faced sharply increasing competition on European markets from China and the eastern Europe countries that joined the EU in 2004 and after. Generally, countries that acceded to the EU have done much better than the countries of North Africa. While the countries of North Africa are not EU candidates, there is much that they and the EU can learn from the example of the former accession countries in terms of how a new generation of trade agreements between the EU and North Africa could be deeper and more comprehensive than currently, and could be accompanied by increased aid for trade.

---

---

# 1 The EU-North Africa trade agreements

The trade agreements between the European Union and Algeria, Egypt, Morocco and Tunisia, part of a broader effort to integrate the north and south shores of the Mediterranean and the Near East, have disappointed many who believed they could transform North Africa.

The political context clearly has not helped. The vision of the 1995 Barcelona Declaration, signed by EU, North African and other Mediterranean nations was to create an “*an area of shared prosperity*,”<sup>1</sup> but two decades on it was acknowledged that this vision had not been realised and the Barcelona Declaration could not have predicted the destabilising impact on North Africa “*of al-Qaeda... and the subsequent invasions of Afghanistan and Iraq; the political immobility and lack of reforms and improvements in governance in many Mediterranean Partner Countries...; the instability caused by the Arab Spring since 2011...; the migration and refugee crises; or the emergence of Islamic State terrorism*”<sup>2</sup>.

Over the last ten years, growth in the four North African countries<sup>3</sup> has been relatively slow, volatile and characterised by large current account and fiscal imbalances. Egypt, Morocco and Tunisia have seen *per-capita* income growth of around 1.5 to 2.5 percent since 2007, while in Algeria it has been around 1 percent, some 2-3 percent slower than average of the lower middle income countries. These growth rates are not *per se* disastrous, but they are entirely inadequate to deal with youth unemployment in the four North African countries, which is among the highest in the world. Nor are they sufficient to raise the very low participation of women in the labour force. There has been little convergence with incomes in Europe, and the absolute difference in income levels might be increasing, reflecting the sharp slowdown in the North African countries since the Arab Spring. In this context, it is natural to point to the EU’s trade agreements with these countries as one of the culprits, or at least as not having helped.

Though we recognise the importance of the region’s political turbulence in influencing these outcomes, our aim is solely to provide an economic assessment of the trade agreements between the EU and North Africa. We argue, in line with previous assessments, that the trade agreements are highly imperfect and much can be done to deepen them and improve on them in various ways. However, we also argue that the common view of the trade agreements is overly negative, for three main reasons:

- First, there tend to be excessively high expectations of trade agreements, whereas domestic conditions and policies are the main driver of economic growth and specifically of export performance. For the North African countries, domestic conditions and reforms had to play an even more significant role in stimulating exports since the countries faced very low EU tariffs even before the trade agreements were concluded.
- Second, the welfare benefits of a trade agreement are not adequately measured by the improvement in the bilateral trade balance; a much better, though imperfect, measure is the increase in total trade between the parties. In the case of the EU and North Africa, total trade has increased significantly.
- Third, some international and domestic developments external to the agreements clearly contributed to the weak performance of North Africa’s exports to Europe. We cannot know the counterfactual, but it is possible that without the agreements, North Africa’s growth, investment and export performance would have been considerably worse.

1 The Barcelona Declaration is available at [https://ec.europa.eu/research/iscp/pdf/policy/barcelona\\_declaration.pdf](https://ec.europa.eu/research/iscp/pdf/policy/barcelona_declaration.pdf).

2 As noted by the European Institute of the Mediterranean; see <https://www.iemed.org/actualitat-en-noticies/20e-aniversari-del-proces-de-barcelona/>.

3 Libya, which does not have a trade agreement with the EU, is excluded.

The main policy implication of this is unsurprising: more effort should be made to improve and deepen the existing trade agreements. More importantly, the North African countries need to accelerate domestic reforms. These reforms are needed anyway to boost economic growth and employment, irrespective of trade agreements, but reform can also work to maximise the benefits from the agreements.

---

---

## 2 The literature takes a dim view of the EU-North Africa agreements

Although the trade regimes of North African countries continue to be ranked among the most protective, they are more liberal than in the past. Trade liberalisation has progressed significantly as a result of numerous bilateral and regional agreements, membership of the World Trade Organisation and adoption of its disciplines, and instances of autonomous trade reforms. For example, in Morocco and Tunisia, Most Favoured Nation (MFN) applied tariffs (tariffs that are applied to all World Trade Organisation members) on non-agricultural products were cut from about 21 percent in 2006 to about 8 percent in 2017. Even against this background, the literature reaches generally negative conclusions when assessing the trade performance of North African countries. Several of the studies find that current trade volume is well below its potential given the countries' relative sizes, geographic distances from centres of demand, common language and colonial links (Cestepe *et al*, 2015). They also find that there is a low degree of intra-regional integration, reflecting non-complementary production structures and many non-tariff barriers<sup>4</sup>. Associated with that fact are low integration in global value chains. Studies also find that there is low product and geographic diversification of the region's exports<sup>5</sup>.

The EU plays a very prominent role in North Africa's trade, representing by far the largest trading partner of countries in the region, on account of its size, geographic proximity, linguistic and colonial ties, and the existence of large North African diasporas in Europe. North African countries have long enjoyed access to European markets under the Generalised System of Preferences, and the formal effort to promote closer market integration between the EU and North Africa dates as far back as 1969 (Parra *et al*, 2016), culminating in trade agreements which came into force at different times (Table 1) and which were part of a broader effort to integrate Europe with the 'South'.

4 Non-tariff barriers remain major obstacles to trade within North Africa. 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 hamper regional trade. For example, the region's exporters occasionally have to obtain special import permits to avail themselves of preferences that should be automatic under trade agreements. North Africa also has particularly low logistics quality, while the Middle East has onerous documentation requirements.

5 Using gravity models, which predict countries' trade flows as a function of their economic size and distance, Ferragina *et al* (2005) concluded that the volume of trade between the EU and Middle East and North Africa countries could be 3.5 to 4 times greater if the two regions were to reach the EU's level of integration. Other stylised facts gleaned from the literature include: Mashreq countries exhibit greater levels of integration both within the area and with the rest of the world compared to Maghreb and Gulf countries; EU, Gulf Cooperation Council and Arab Maghreb Union (AMU) trading arrangements have not promoted greater integration among member countries (Al-Atrash and Yousef, 2000); the trade potential of the Middle East and North Africa region is found to exhibit the greatest degree of under-trading, after South-East Asian countries (IMF, 2002); the region is an "underachiever", especially where trade with the EU and with Eastern Europe is concerned (Miniesy, 2004); intra-regional trade within the Middle East and North Africa is low relative to that predicted by gravity models and worse than in sub-Saharan Africa.

**Table 1: Trade agreements between the EU and Mediterranean countries**

Country	Agreement signed	Official entry into force <sup>1</sup>
Tunisia	July 1995	Dec 1997
Israel	Nov 1995	June 2000
Morocco	Feb 1996	Mar 2000
Jordan	Nov 1997	May 2002
Egypt	June 2001	June 2004
Algeria	Apr 2002	Sep 2005
Lebanon	June 2002	Apr 2006
Palestine (interim agreement)	2005	2007

Source: Bruegel.

However, while North Africa's imports from the EU have risen significantly since the signatures of the respective free trade agreements (FTAs), studies employing the gravity model find that the effect of the FTAs on North Africa's exports to the EU has been modest at best (Parra *et al*, 2016).

Studies attribute the unequal benefits of the bilateral trade agreements to three main factors:

- First, as mentioned, the fact that North African countries already faced low EU tariffs even prior to the agreements.
- Second, limited liberalisation of agriculture in the EU, while agriculture is seen as a sector that is part of North Africa's comparative advantage. Studies suggest that regional trade agreements that have included agriculture tend to be more advantageous to developing countries, and so Middle East and North African countries could have benefited significantly from inclusion of agriculture in their trade agreements with the EU (Parra *et al*, 2016). This shortcoming has been partly corrected with new agreements on agriculture with some countries.
- Third, the trade agreements between the EU and North Africa are generally considered 'shallow', ie weak on liberalisation of services, investment and on dealing with non-tariff barriers and various 'behind the border' impediments to trade.

Most of these studies, which compare the effect of FTAs on trade with that of arms-length relationships, are subject to the critique that FTAs are between parties that trade a lot anyway, so attempts to estimate the effects of trade agreements on the volumes of trade are biased downward (Baier and Bergstrand, 2007). Freund and Portugal-Perez (2013) aimed to correct for this. They used panel data covering 1994-2009 and controlled for country-pair, importer and exporter fixed effects. Their results indicated that trade agreements signed between the EU and North African countries during that period did not lead to better outcomes according to various measures. They concluded that the agreements need to be deeper<sup>6</sup>.

6 A common challenge in the empirical gravity literature is the zero-trade problem along with the issue of self-selection underlined by Parra *et al* (2016). Helpman *et al* (2008) were among the first to propose a two-stage estimation procedure that incorporates selection into trade in the first stage and trade flow equation in the second stage. Hence the model is able to predict zero trade flows among others. However, as Cestepe *et al* (2015) highlighted, researchers have to find an exclusion restriction for the identification of the second equation, and Westerlund and Wilhelmsson (2011) proposed an easier to implement fixed effects panel Poisson Maximum Likelihood estimator to solve the zero-trade problem. Irrespective of the various econometric challenges encountered in the assessment of the EU's Middle East and North Africa trade agreements, the majority of studies agree that there is potential for greater intra-regional cooperation and the full inclusion of agricultural trade in EU-North Africa FTAs.

**Table 2: Moroccan and EU tariffs on goods from the rest of the world, 1993 and 2016**

	1993				2016			
	Morocco MFN applied rate	Morocco effectively applied rate	EU effectively applied rate	EU MFN applied rate	Morocco MFN applied rate	Morocco effectively applied rate	EU effectively applied rate	EU MFN applied rate
Food and live animals	36.94	36.94	7.34	10.42	23.37	18.17	2.86	7.13
Beverages and tobacco	31.03	31.03	15.00	39.63	30.47	9.48	1.05	5.25
Crude materials, inedible, except fuels	22.88	22.88	0.56	0.98	3.36	0.58	0.15	0.45
Mineral fuels, lubricants and related materials	24.67	24.67	0.52	0.94	5.60	1.07	0.32	0.40
Animal and vegetable oils, fats and waxes	50.70	50.70	5.90	8.53	6.53	2.47	2.04	4.64
Chemicals and related products, n.e.s.	45.92	45.92	6.25	7.52	5.64	0.79	1.75	2.90
Manufactured goods classified chiefly by material	62.71	62.71	3.77	6.00	12.16	2.70	1.84	3.04
Machinery and transport equipment	51.85	51.85	4.65	6.04	9.72	2.11	1.28	2.10
Miscellaneous manufactured articles	69.59	69.59	3.71	8.56	13.26	4.63	3.45	5.85
Commodities and transactions not elsewhere classif.	55.47	55.47	0.10	0.12	2.50	0.15	0.06	0.07

Source: <https://wits.worldbank.org/>.

### Asymmetric liberalisation

The EU undertook comprehensive trade liberalisation under General Agreement on Tariffs and Trade (GATT)/World Trade Organisation (WTO) rounds from their outset, while liberalisation in North Africa was slower. In fact, Algeria is still not a member of the WTO. Egypt joined the GATT in 1970, Morocco in 1987 and Tunisia in 1990. Moreover, the EU has granted preferential access to North African countries since 1973 under the Generalised System of Preferences or other special arrangements.

For example, in 1993, Morocco's MFN tariffs were two to ten times higher than the EU's, and Morocco's effectively-applied tariffs were the same as MFN since there were no bilateral trade agreements of note (Table 2). In 1993, the EU tariffs that Morocco faced were near zero for manufactured products and around 12 percent for agriculture. By 2016, both the EU and Morocco had granted each other tariff-free access for nearly all manufactured products (Table 3). Notable exceptions include Moroccan imports of food and live animals, for which tariffs remain near 12 percent. Morocco has also reduced its MFN applied tariffs dramatically, while

the EU has made more moderate reductions. Morocco has also entered into trade agreements with the United States, other Arab countries and Turkey, and this is reflected by its effectively-applied tariffs being far lower than its MFN applied tariffs. For manufactured products, Morocco's effectively-applied tariff is at time of writing near zero.

**Table 3: Tariffs applied by Morocco and the EU to each other, 1993 and 2016**

	1993		2016	
	Morocco effectively applied rate on the EU	EU effectively applied rate on Morocco	Morocco effectively applied rate on the EU	EU effectively applied rate on Morocco
Food and live animals	30.65	13.27	11.98	1.13
Beverages and tobacco	45.08	11.56	6.94	0
Crude materials, inedible, except fuels	25.2	0.77	0.26	0
Mineral fuels, lubricants and related materials	45.94	1.92	0	0
Animal and vegetable oils, fats and waxes	51.05	1.03	1.93	0
Chemicals and related products, n.e.s.	45.86	0.01	0.01	0
Manufactured goods classified chiefly by material	62.77	0.43	0.01	0
Machinery and transport equipment	52.28	0.03	0.98	0
Miscellaneous manufactured articles	72	0.54	0.01	0
Commodities and transactions not elsewhere classif.	55.97	0.25	0	0

Source: <https://wits.worldbank.org/>.

As Morocco's tariffs have been lowered from far higher levels than the EU's tariffs since the 1990s, it is hardly surprising that EU exports to Morocco grew faster than Morocco's exports to the EU as the agreements came into force. It is more perhaps surprising that exports from Algeria, Egypt, Morocco and Tunisia to the EU also grew less rapidly than their exports to the rest of the world. From 2001-16 EU exports to the four countries expressed in US dollars grew at 7.3 percent per year, while EU global exports (including to the North African countries) grew at 5.2 percent per year. In this period, exports from the four North African countries to the EU grew at only 4.6 percent per year while exports from the four countries to the world (including the EU) grew at 6 percent per year<sup>7</sup>.

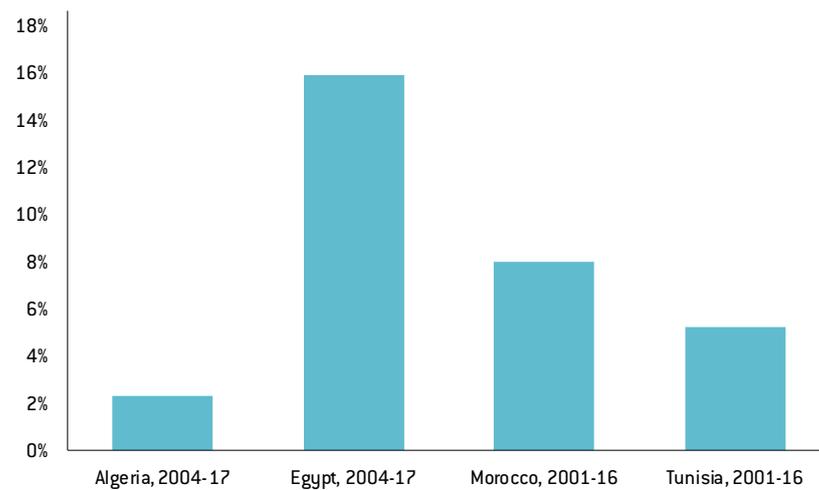
As things stand, the four North African countries except Tunisia continue to run large non-energy trade deficits with the EU (Figure 1).

Tunisia's non-energy trade with the EU was in deficit for many years but, as its domestic demand slowed amid political uncertainty, became balanced in 2016, despite a sharp fall in Tunisia's production and export of phosphates. Algeria, whose exports are dominated by oil and gas, not surprisingly runs the largest bilateral deficit with the EU, excluding energy.

But are bilateral trade balances the appropriate measure of gains from the trade agreements?

<sup>7</sup> Sourced from the World Bank WITS database (<https://wits.worldbank.org/>). Algeria's exports of oil and gas grew slowly and were affected by world energy market conditions, not its trade agreements. However, even if Algeria is excluded, the trade balance outcomes remain disappointing.

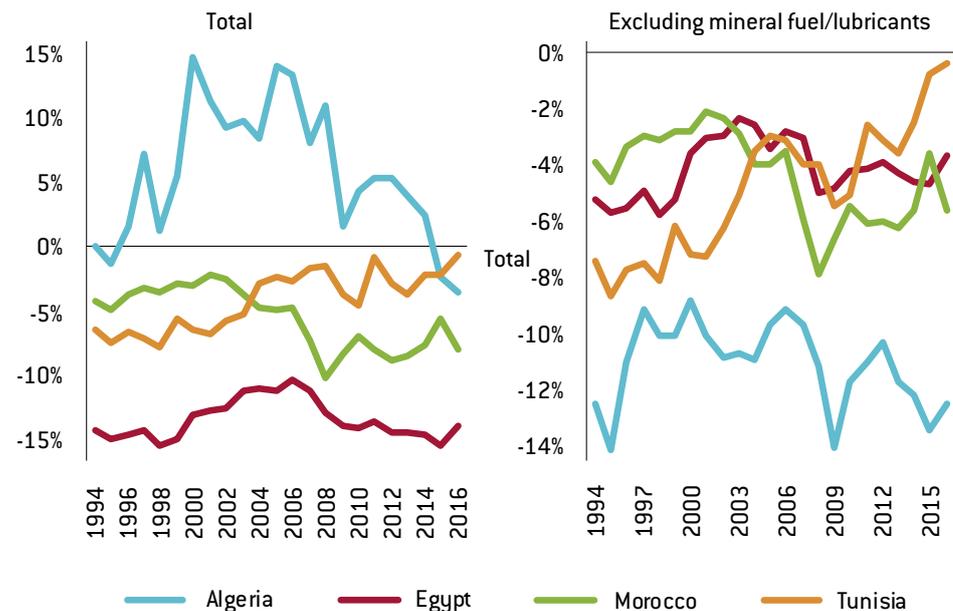
**Figure 1: North African countries, average annual growth in exports to the EU (energy included)**



Source: Bruegel based on Eurostat.

**Figure 2: Bilateral trade balance of Algeria, Egypt, Morocco and Tunisia with the EU, 1994-2016 (% GDP)**

Source: Bruegel based on <https://wits.worldbank.org/>, Comtrade and WDI. Note: Trade is calculated on the basis of the SITC Revision 3 nomenclature.



### Trade expansion

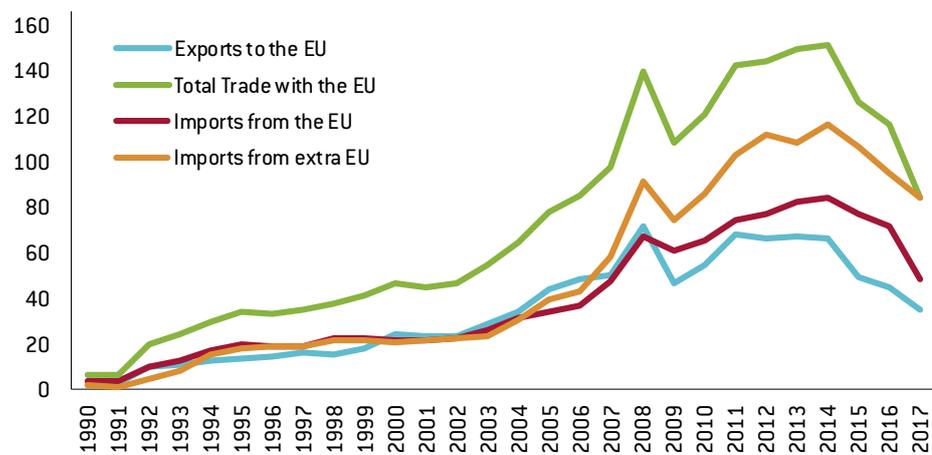
Well-established theories of tariffs and of the costs and benefits of trade agreements point to the expansion of trade between the parties, not bilateral trade balances, as the most important single indicator to measure the gains of trade liberalisation. When a small country lowers tariffs to zero unilaterally, the price of imports falls by the amount of the tariff, favouring consumers and firms that import parts and raw materials for producers. This gain, the largest immediate benefit of liberalisation, is measured approximately by the tariff multiplied by the volume of imports. The losses associated with unilateral MFN trade liberalisation consist of tariff revenue, equal to the tariff multiplied by the initial value of imports, and the decline in domestic production of the imported products, measured approximately by the decline in

the volume of domestic production of the imported product multiplied by the tariff<sup>8</sup>. Standard theory shows that because importing is cheaper than producing at home, the gains to consumers are greater than the losses to domestic producers and the loss of tariff revenue. The gains from tariff reduction accrue even when the tariff is reduced unilaterally, without reciprocation by trading partners.

The gains and losses from a bilateral trade agreement can be calculated in the same way as the unilateral MFN elimination of tariffs with two important differences. First, there is the additional gain of increased exports in the partner's market (measured approximately as the increase in the volume of exports to the partner multiplied by the tariff as previously applied by the partner). Second, there is the cost of granting tariff preferences to the partner where the partner is not the most efficient producer of that product, known as trade diversion. This is measured approximately as the tariff multiplied by the reduction of imports from third parties.

Thus, the net gains from a bilateral trade agreement will be unambiguously positive if there is little or no apparent trade diversion, and the gains are likely to be greater the greater the amount of trade generated between the partners. Figure 3 shows that North Africa's trade with the EU grew rapidly in the wake of the agreements, and so did its imports from outside the EU, indicating significant trade creation and suggesting no trade diversion. Some North African countries, most notably Morocco, have reduced their MFN tariffs in recent years with a view to limiting trade diversion. Figure 2 also shows that, while North Africa's imports from the EU grew more rapidly than its exports to the EU, the former grew far less rapidly than imports from outside the EU. The effect of the Arab Spring is evident in the sharp deceleration and then decline of trade in recent years.

**Figure 3: Trade performance of North African countries: exports, imports and total trade with the EU and imports from the rest of the world (excluding the EU), 1990-2017 (\$ billions)**



Source: WITS, Comtrade. Note: total trade is calculated in accordance with SITC Revision 3 nomenclature.

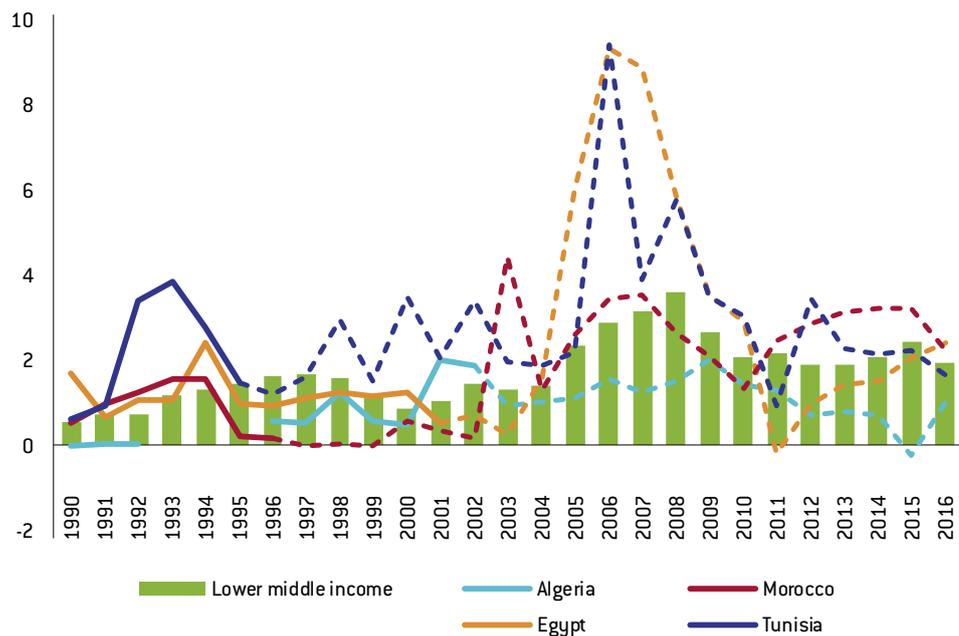
8 For a precise exposition see, for example, Krugman (2008).

## Caveats

The argument that what matters most in affecting welfare is trade creation rather than the trade balance – though well-grounded in economic theory – must come with some important caveats, which are especially relevant in the North African countries. The standard analysis implicitly assumes that resources (labour, capital, land) are fully employed and that, following trade liberalisation, factors of production move smoothly and quickly from the import-competing to the export or to the non-traded sector. However, if there are significant costs associated with the reallocation of resources, and especially if there are deterrents, such as acute political uncertainty, to investment in exporting sectors and to the upgrading of import-competing sectors, one can expect that the export supply response will be less, that the reduction in domestic import-competing sectors will be greater, and the costs of adjustment will be higher and that the adjustment will take longer. In that case, unemployment might increase and the net benefits from the trade agreement will be significantly reduced and could conceivably even be negative. Since North African economies are characterised by low employment/population ratios and high unemployment, especially among young people, this possibility lies at the core of concerns of North African policymakers about the effects of their trade agreements with the EU. These concerns are fully understandable.

It is sometimes argued that widening bilateral trade deficits in North Africa relative to the EU simply reflect their higher return of capital as developing countries, and that such capital inflows are a beneficial effect of the trade agreements. There is evidence that, in the early years after the agreements came into effect, there was a surge of FDI into the region and that FDI flows into the region were higher than those into other lower middle income countries (Figure 4).

**Figure 4: Foreign direct investment, net inflows (% of GDP)**



Source: WDI. Note: dashed lines represent the FDI share of GDP after agreements between the EU and Algeria, Egypt, Morocco and Tunisia respectively have been signed.

However, as Figure 4 also shows, the flows of FDI were not sustained, with Morocco a partial exception. All North African countries tend to run sizable government deficits which contribute to current account deficits. Moreover, there is considerable evidence that the return of capital in North Africa is not high in comparison to the average of lower middle income countries. For example, Morocco's investment/GDP ratio is 31.2 percent compared to 26.4 percent in the lower middle income group, but over the last ten years, its *per-capita* income grew at a

rate about 1 percent slower than the lower middle income average. A similar calculation for Algeria suggests that the return of capital was even lower than in Morocco. A historical look at Tunisia and Egypt suggests that they used capital more effectively than Algeria and Morocco, but their domestic savings rates were far lower and both countries exhibited high and difficult to sustain global current account deficits, which have led them to resort to the International Monetary Fund to finance their balance of payments.

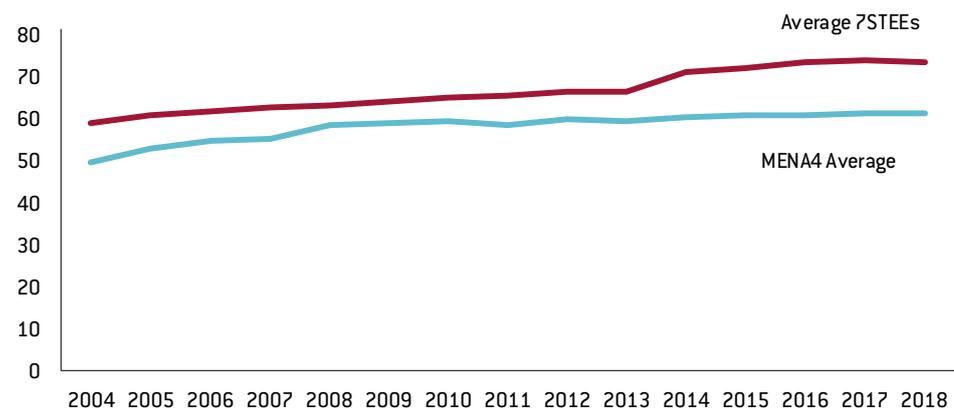
The risk that trade liberalisation might cause large adjustment costs, protracted unemployment and unsustainable current account deficits can provide valid grounds for pacing trade liberalisation, which of course also entails delaying the gains from increased trade. However, these obstacles do not negate the arguments in favour of the agreements. Instead, they show that the main issues that need to be addressed are the domestic causes of investor reticence, labour and product market rigidity, and weak competitiveness. As it happens, the EU-North Africa agreements did envisage immediate liberalisation by the EU but long implementation periods, over a decade or so, for the North African nations. However, their domestic reform processes have not yielded the hoped-for results.

### Unfavourable investment climate

An extensive literature has shown that there is no automatic ('unconditional') convergence in income level between rich and poor countries, even when trade between them is liberalised – underscoring the importance of domestic conditions and reform (Sachs *et al*, 1995; Rodrik, 2011). In extreme cases, where a country is beset by profound political upheaval and investor uncertainty, as during extended periods during the Arab Spring or during the protracted civil war in Algeria, it is unlikely that investors in the export sector will take the risk, even if trade liberalisation causes the currency to devalue and provides easier access to imported parts and raw materials. Nor, in the event of trade liberalisation, are investors likely to take the risk of upgrading the import-competing sector to face the influx of competitive products from abroad.

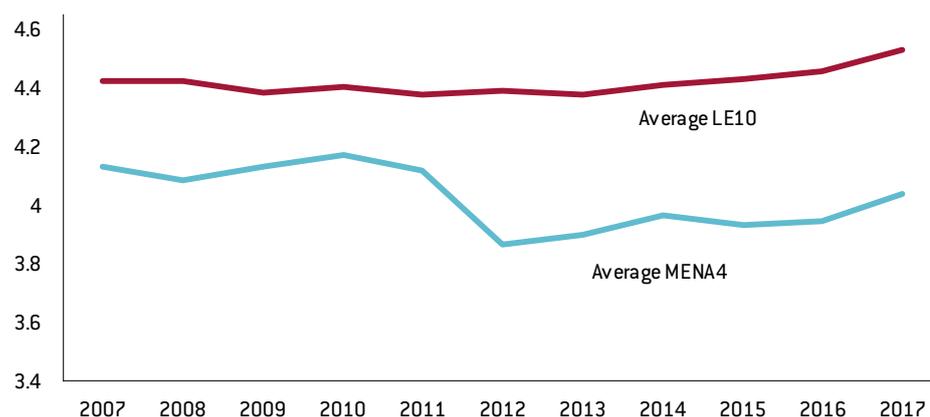
Various measures of progress in domestic reform, such as the World Bank's *Doing Business* and the World Economic Forum's *Competitiveness Report*, suggest that the North African countries lag behind not just the EU but also their developing country peer groups, including the eastern European former EU accession countries (and now EU members), which have provided nearby low-cost labour in competition with North Africa (Figures 5 and 6). Even when political conditions have been relatively stable, as in Morocco, uncertainties in other parts of the region have often had a contagious effect.

**Figure 5: 'Doing Business' average distance-to-frontier (DTF) scores**



Source: Bruegel based on *Doing Business*, World Bank. Note: DTF is calculated as an average of DTF (starting a business), DTF (enforcing contracts) and DTF (resolving insolvency). MENA4 stands for Algeria, Egypt, Morocco and Tunisia. 7STEEs stands for the seven small transition eastern European economies. The term was introduced by the World Bank and refers to Bulgaria, Croatia, Estonia, Latvia, Lithuania, Slovakia and Slovenia.

**Figure 6: Global Competitiveness Index, 2007-17**



Source: Bruegel based on World Economic Forum, the *Global Competitiveness Index* (GCI) dataset 2007-17. Note: The GCI investigates 12 aspects of competitiveness: institutions, infrastructure, macroeconomic environment, health and primary education, higher education and training, goods market efficiency, labour market efficiency, financial market development, technological readiness, market size, business sophistication and innovation. The score ranges from 1 to 7 (best). LE10 includes the 10 countries that joined the EU in 2004: Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia.

It should be noted that the North African country averages shown in Figures 5 and 6 mask significant differences between Algeria, which is ranked among the lowest-scoring countries in the world by both the World Bank's *Doing Business* report and the World Economic Forum's *Competitiveness Report*, and Tunisia, which is ranked near the median. Morocco, which is the highest ranked North African country by both organisations (rank 69-70), is ranked higher than comparable lower middle income countries. Egypt is also ranked very low (115-128) relative to its income level.

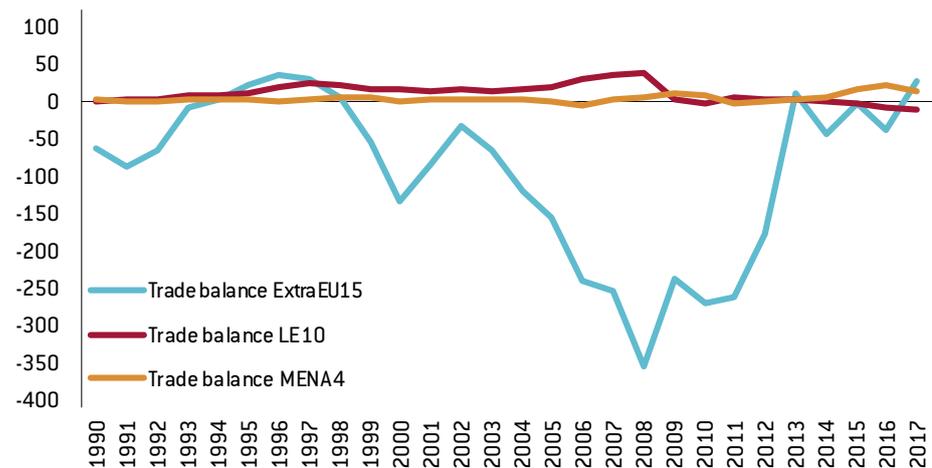
### **A difficult international environment**

In addition to domestic impediments, four developments external to the North African region and to the agreements have clearly dampened the region's export performance: low growth in the EU, the accession process, China's rise and the end of the Multifibre Arrangement.

First, following a period of recovery in the wake of the 1991-93 recession, EU growth has been on average near 2 percent since 2000, about half the average of the rest of the world. In addition, the EU suffered disproportionately and longer from the Global Financial Crisis. The subsequent euro crisis had a particularly pronounced effect on southern Europe, notably Italy and Spain which are, with France, the main trading partners for the North African countries. Even in the pre-crisis years, exports to the EU from the Arab countries with EU trade agreements (a broader group than North Africa) increased slightly less rapidly than their exports to the rest of the world. Those countries' total exports and total imports also grew less rapidly than the developing country average. Slower growth of trade with the EU than with the rest of the world is partly explained by the fact that EU aggregate imports from Arab countries grew less rapidly than EU imports from the rest of the world. For example, imports into the EU grew by 6.8 percent on average between 1997 and 2007, while the imports of developing economies grew at a nearly 9 percent annual rate.

Second, shortly after the bilateral trade agreements between the EU and Algeria, Egypt, Morocco and Tunisia were signed in 2002, 2001, 1996 and 1995 respectively, the largest EU enlargement happened in 2004, introducing new low-cost competition within the EU's borders.

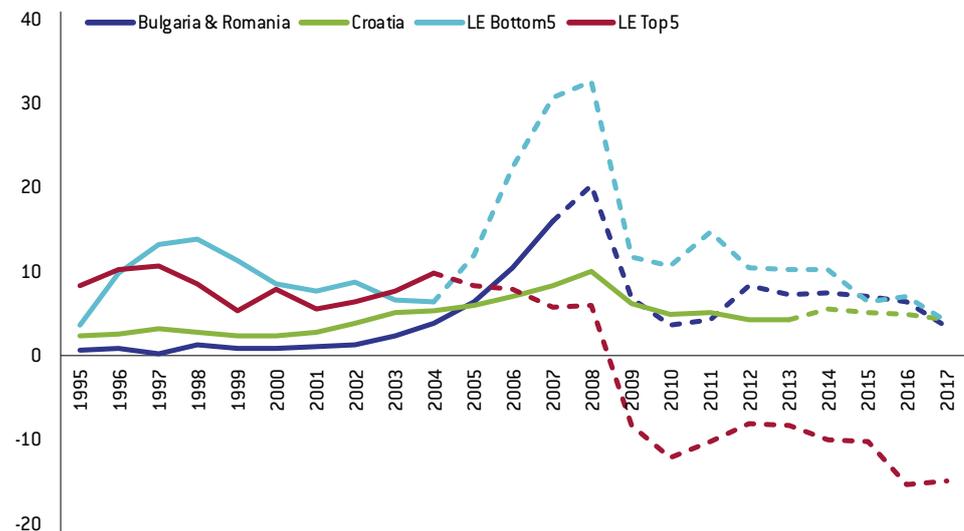
**Figure 8: EU15 bilateral trade balances with MENA4, the 10 countries of the 2004 EU enlargement and the rest, 1990-2017 (\$ billions)**



Source: Bruegel based on <https://wits.worldbank.org/>, Comtrade. Note: total trade is calculated in accordance with SITC Revision 3 nomenclature. EU15: pre-2004 EU members. LE10 = 2004 EU enlargement countries: Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia.

Figure 8 shows that the EU15's trade balance with the 10 central and eastern European countries of the 2004 EU enlargement increased following their accession. The trade balance of these economies with the EU turned into a small deficit as those countries have adjusted. Meanwhile, the EU's trade balance with the rest of the world fell into a large deficit, which has returned to balance in the wake of the financial crisis, as domestic demand slowed, especially in southern Europe.

**Figure 9: EU15 bilateral trade balance with the 10 countries of the 2004 enlargement, with Bulgaria and Romania (2007 enlargement) and Croatia (2013), 1995-2017 (\$ billions)**



Source: Bruegel based on WITS, Comtrade. Note: LE Bottom5: the five poorest 2004 enlargement countries (Estonia, Slovakia, Lithuania, Latvia and Poland) based on average PPP adjusted GDP per capita (1995-2016 or 1995-2004) reported by WDI. LE Top5: the five richest 2004 enlargement countries (Cyprus, Czech Republic, Malta, Hungary, Slovenia). Dashed lines represent post-accession trade balances.

Figure 9 shows that all countries that have joined the EU since 2004 have seen a continuing trade deficit with the EU15, with the notable exception of the five countries with average

PPP adjusted GDP per capita higher than \$23,000 (1995-2016) (Cyprus, the Czech Republic, Hungary, Malta and Slovenia), which had deficits at first, followed by surpluses<sup>9</sup>.

Since the North African countries were poorer than the countries that have joined the EU since 2004 in the respective periods, it is perhaps not surprising that their trade balances followed a pattern similar to those of the poorest new EU members. Moreover, trade complementarity indices<sup>10</sup> suggest that Morocco, for example, competes with most of the newer EU members, although less so than China and some of the largest East Asian economies. The index is not a perfect measure of complementarity because it does not take into account the potential consequences of the distance between the countries and other factors that might impact trade flows.

The largest eastern European EU countries – the Czech Republic, Poland and Hungary – and non-EU eastern European countries with no free trade agreement with the EU – Belarus, Moldova and Ukraine – all outpaced their Mediterranean partners in export growth between 1997 and 2007. The Czech Republic, Poland and Hungary’s average export growth was 18 percent, while for Belarus, Moldova and Ukraine it was 23 percent, versus 12.7 percent for the Arab countries with EU trade agreements. The same divergence held for imports from the EU. Arab countries’ imports from the EU grew by less than 10 percent between 1997 and 2007, while those of the three eastern European EU countries and the three non-EU countries countries grew by 14.6 percent and 20.1 percent respectively. This divergence occurred despite the fact that the Arab countries roughly matched the eastern European groups in aggregate growth, which should – all other things being equal – have made them equally attractive to the EU as trade partners.

Third, North African countries, along with the rest of the world, have experienced a large shift in world trade patterns and sharp declines in their export shares as a consequence of China’s emergence. From 1992 to 2017, China’s share of world trade increased from about 3 percent to about 13 percent. This has translated into substantial adjustment costs and has had distributional consequences, the effects of which are mostly visible in the industries/firms that are highly exposed to foreign competition.

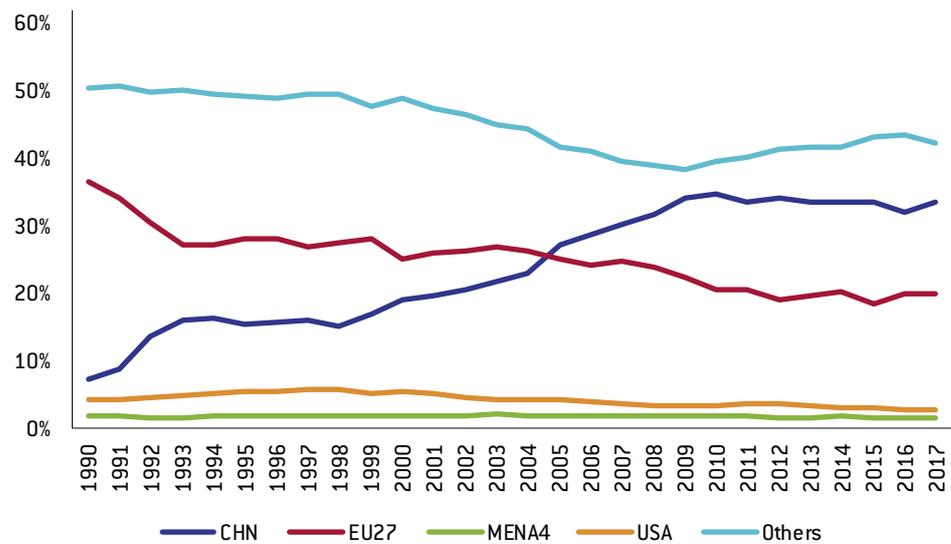
Fourth, a related external shock was the end of The Multifibre Arrangement (MFA) in 2004. The Arrangement had governed the international trade in textiles and clothing<sup>11</sup> since 1974, setting quotas for each country. Quotas were fairly broad, covering a wide range of products, and were specified not in terms of the values but in terms of the physical quantities (Harrigan and Barrows, 2009). Figure 10 shows that as quotas were removed progressively, China’s share of textile and clothing exports increased almost fivefold from about 7 percent in 1990 to 33 percent in 2017. China’s share increased massively during the final phase of quota reductions (Brambilla *et al*, 2010), but the largest increase in Chinese textile and clothing exports took place from 1991 to 1992. At the same time, the share of the four North African countries declined only slightly. Still, while North African textile and clothing exports were roughly equivalent to a quarter of Chinese exports in 1990, by 2017 North African textile and clothing exports were equivalent to only about 5 percent of Chinese textile and clothing exports. Meanwhile, textiles and clothing shares in the total manufacturing exports of the North African countries and China have been declining.

9 This is in line with the analysis of Papazoglou *et al* (2006), who attempted to quantify the potential gains of the 2004 enlargement. Both EU and accession consumers and producers were beneficiaries, but import growth relative to the export growth was higher for countries that were initially less integrated with the EU.

10 Trade complementarity index for each individual year can be obtained using the following formula; where  $x$  is the value of exports of product  $k$  from reporter country  $i$ , and  $X$  is country  $i$ 's total exports. Partner country  $j$ 's value of imports of product  $k$  is given by  $m$ , and its total imports value is denoted by  $M$ . A score of 100 points to the ideal trading partner. Computation performed at HS 2 digit level by WITS build in tool.

11 Textiles and clothing includes textile fibres, yarn/fabric/articles, and apparel/clothing/accessories, which correspond to 26, 65 and 84 two digit categories of the SITC Revision 3 nomenclature respectively.

**Figure 10: Selected economies, textile and clothing exports, shares of total textile and clothing exports**



Source: Bruegel based on <https://wits.worldbank.org/> and Comtrade.

### Slow diversification

Against the background of political uncertainty, weak competitiveness and a challenging international environment, the exports of North African countries remained overly concentrated on the EU. Within the countries' exports to the EU, there was relatively little product diversification.

North African exports include substantially fewer product types and are less diversified than were those of the 10 countries that joined the EU in 2004. For example, the Herfindahl index of concentration suggests that North African export diversification changed little even during the pre-crisis period, from 1997 to 2007.

Algeria has the most concentrated export structure. More than 95 percent of Algerian exports to the EU were and are concentrated in petroleum and gas. Growth of exports of oil and gas from Algeria to the EU from 1990 to 2016 was on average slower than the growth of exports of oil and gas to the EU from the rest of the world. The period from 2008 to 2016 was marked by a negative growth rate of gas and petroleum imported by the EU and Algerian products were not an exception. These developments reflected trends in the global energy markets and were unrelated to the workings of the Algeria-EU trade agreement.

Similarly, Tunisian exports to the EU are characterised by modest diversification. The main export categories are machinery, clothing and petroleum. But while Tunisia has gained a market share in the EU imports of machinery, the growth of the share of clothing in Tunisian exports to the EU was negative over the whole period from 1990 to 2016. At the same time the share of Tunisian petroleum exports to the EU has remained relatively unchanged, while originally growing faster than the EU imports of petroleum products from the rest of the world.

Morocco's exports to the EU are also characterised by modest diversification, which has improved in recent years. Morocco mainly exports transport equipment and machinery, fruits and vegetables to the EU. Morocco improved its market share in the EU in the 1990s. From 2008 to 2016 there were large advances in Morocco's exports of transport equipment. The average growth rate of transport equipment exports was almost 40 percent while the growth of total EU imports of transport equipment was slightly negative. There also has been a large increase in the share of electrical machinery exported from Morocco to the EU, with the share increasing almost fourfold.

Compared to Algeria, Tunisia and Morocco, Egypt's exports to the EU appear to be more

diversified, though the growth of market share of EU imports has been limited or mostly negative for some product categories. At the same time, Egypt increased its market share in petroleum goods, historically a major export sector for Egypt. In recent years, however, the most significant increase occurred in Egyptian exports of electrical machinery to the EU, with the growth rate reaching 80 percent.

### **Weaknesses of the present trade agreements**

Given the asymmetric nature of the trade liberalisation required by the agreements, it is surprising that the North African countries did not receive more as a *quid pro quo* for allowing the EU unrestricted access to their markets for manufactured products. This could have come in four main areas: agriculture, liberal rules of origin, labour mobility and increased assistance and incentives to strengthen competitiveness. In fact, while there was reciprocation in each of these areas, commitments made by the EU were less than what could have been expected. Since the original agreements were concluded, there has been further improvement in the agreements in some areas, especially in agriculture with Morocco and Egypt and on the rules of origin throughout the region. Financial assistance to Morocco and Tunisia increased after the Arab Spring but remains modest in relation to the size of those economies.

*Ad valorem* tariffs of five to 20 percent typically protect fruits and vegetables in the EU. An entry price system for those fruits and vegetables the EU deems particularly 'sensitive,' such as oranges and lemons, provides an even higher degree of protection for those products. Though the North African Countries enjoy some preferential access in agriculture, all exporters to the EU have to contend with extensive subsidies provided to EU producers. While increasingly decoupled from production under recent reforms, there nevertheless help cover overhead costs for EU agriculture. According to the OECD, EU support for farmers accounted for 24 percent of gross farm receipts and around 50 percent of value added, on average, annually in the late 2010s. For North Africa, access to the EU is especially important for goods such as fruits, vegetables and vegetable oil. The North Africa agricultural sector supports a significant part of GDP and an even larger share of employment. For example, in 2016, agriculture accounted for about 11 percent of value-added in Egypt and 13 percent in Morocco. In addition, it accounted for 25 percent and 37 percent of employment respectively in these two countries<sup>12</sup>.

In both Egypt and Morocco, the deepest poverty occurs in rural areas, implying that the restrictions on agricultural trade have much more severe social implications than their export or GDP shares might suggest. In addition, barriers to agricultural exports in their most important market reduce the ability of North African countries to promote agricultural processing industries, which could also help tackle underemployment in rural areas. Were the North African countries able to compete with the EU on an even playing field, agriculture's share of domestic value-added would almost certainly be significantly larger and rural poverty correspondingly lower.

Restrictive rules of origin and limited cumulation can restrict North African countries' effective market access to the EU. Until quite recently diagonal cumulation existed across only some countries<sup>13</sup> and rules of origin (ROO) under the agreements with the EU differed across the North African countries. The ROOs for Egypt were not the same as those for Tunisia and Morocco, for example. Adherence to specific and complex ROOs placed a burden on exporters who might not be familiar with the specific rules and requirements. The Pan-European-Mediterranean (PEM) ROO system, introduced progressively since 2010, intended to remedy many

12 On agriculture, processed agriculture and fisheries the EU has negotiated additions to the original free trade agreements with Morocco and Egypt. For these countries, the majority of their agricultural products enter the EU duty-free quota free, with only some products subject to special tariff treatment, mostly tariff rate quotas. The EU and Morocco signed an agreement on additional liberalisation of trade in agricultural and fisheries products, which came into force in 2012. Total trade in agricultural products between the EU and Morocco increased by 187 percent between 2003 and 2017, rising from €1.3 billion in 2003 to €3.7 billion in 2017.

13 The agreement with Maghreb countries allowed limited cumulation. Diagonal cumulation refers to the use of inputs from other member countries towards the value-added target.

of these problems by establishing identical ROOs and full cumulation across the region. However, integration of value chains across North Africa has been held back by individual country challenges, political instability and divisions which have resulted in closed borders, as between Algeria and Morocco.

UNCTAD (2004) suggested that the presence of restrictive ROOs might account for the failure to utilise preferences. For example, between 1996 and 2006, duties were paid on as much as 18 percent of Jordan's exports to the EU that should have been duty-free, possibly because of the high costs of obtaining certificates of origin (Ayadi *et al*, 2009). The ROO in the PEM convention are becoming outdated, no longer responding to value chain or customs facilitation realities for several products. Negotiations are ongoing to finalise the modernisation of the PEM ROO.

A major shortcoming of the current EU-North Africa trade agreements relates to the movement of workers. The EU-North Africa agreements essentially reaffirm both parties' very general obligations under the WTO General Agreement on Trade in Services, 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 contain somewhat more liberal provisions, including limited movement of intra-corporate transferees or key personnel within one organisation<sup>14</sup>.

Increased market access, the improved division of labour and increased competition are only some of the ways in which trade agreements can enhance efficiency. The agreements can generate additional, large benefits insofar as they either directly enact or at least incentivise behind-the-border reforms that make the North African countries more competitive in international markets.

To be sure, North African countries should be enacting these reforms anyway, regardless of trade agreements. But trade agreements can nudge them along, or formally include appropriate binding commitments, as they did in the case of the former EU accession countries (Box 1). By improving the business environment in North African countries and harmonising standards with EU countries, such reforms can engender trade, especially in increasingly complex intermediate products in cross-border production networks (Behar and Freund, 2011). In rough order of importance, such reforms could include:

- Increased international access to and enhanced domestic competition in services – especially backbone services, such as transport, telecommunications, power generation and finance – and services that generate large value-added, such as wholesale and retail distribution;
- More open and predictable foreign investment regimes;
- Increased competition in government procurement;
- Judicial reforms that facilitate the creation, operation and closure of businesses; investments in trade facilitation and the logistics chain;
- Improved dispute settlement procedures and clearer property rights;
- Adoption of international standards, especially in sanitation, which would allow the export of agricultural products;
- Protection of intellectual property, which many believe can help encourage innovation and the import of advanced techniques through FDI.

While the agreements between the EU and North African countries contain general expressions of intent in each of these areas, they cannot reach their full potential without new binding commitments or stronger incentives to reform.

14 'Key personnel' are defined as persons working in a senior position within an organisation or "persons working within an organisation who possess uncommon knowledge essential to the establishment's service".

---

### **Box 1: A comparison of the EU agreements with Morocco and with the Czech Republic**

A comparison of the Czech Republic's association agreement with the EU, which was signed in 1993 and paved the way for the Czech Republic's EU accession treaty in 2003, to the EU-Morocco association agreement, concluded in 2000, reveals significant differences. The Czech Republic agreement went further in a number of important areas, from agricultural market access to rules of origin to investment. Of course, initial conditions in the two countries were vastly different and Morocco is not on an accession path, whereas the Czech Republic was. The comparison is nevertheless instructive because it shows what is possible in fashioning deep agreements.

In terms of agriculture, Morocco's agreement initially covered only a subset of Morocco's potential products and even those were restricted by long lists of qualifications and exemptions. Since the 2000 agreement, new deals have been struck which have lifted many of these restrictions and only a few tariff rate quotas and specific conditions now apply. Some of the remaining tariff quotas remain unfilled, tomatoes being an exception in 2017.

Similarly, though the rules of origin in both agreements allowed for diagonal cumulation, those in the Moroccan agreement are more onerous and complex and touch on more products than those in the Czech agreement. In addition, Czech workers were granted more access to the then European Community than Moroccans, including temporary movement (a form of services reform) and explicit spousal rights. In contrast, the Moroccan agreement has a clause on reducing migratory pressures on the EU.

Another significant difference is in investment. Both agreements included the intent to improve the business environment, but only the Czech Republic agreement required that the rights to establish a business be brought into line with European Community standards. Furthermore, the Czech Republic committed to legal harmonisation with the EU in customs, banking, competition and other laws, while Morocco does not. The Czech accession protocol illustrated just how much further regional integration can go and helps explain why the Czech Republic, which less than a generation ago was a planned economy, has today trade and investment links within the EU which go so much deeper than Morocco's.

The accession agreement provided for: incorporation into the EU's Common Agricultural Policy, giving Czech producers subsidies comparable to farmers in existing members and making agricultural exports to the EU free but conditioning production by a system of quotas or by various reference prices; allocation of structural funds amounting to €26.7 billion (18 percent of the Czech Republic's 2010 GDP) over 2007-13; adoption of the EU rule book (*acquis communautaire*) in behind-the-border reforms and more, including the adoption of community-wide standards; adoption of the much lower EU common external tariff; formally unrestricted access to service producers, though access remains constrained by a host of domestic regulations; freedom of investment and general movement of capital; and, last but not least, the free movement of people.

By joining the EU, the Czech Republic also gained representation in the governance structure of the EU, and thus has a voice in decisions affecting all members. An important question, tackled in section 3, is whether, short of full EU membership, trade agreements with Morocco and the other North African countries could be broadened and deepened to reflect many of the features of accession agreements.

---

For example, the EU-Morocco association agreement on intellectual property rights (IPR) includes only weak provisions on enforcement; it is based on WTO's Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) and does not reflect the higher standards set by recent investment protection agreements. Many of the association agreements also

have very limited provisions relating to public procurement. The EU-Morocco agreement, for example, states only that the parties shall set as their objective a reciprocal and gradual liberalisation of public procurement contracts. Though the association agreements require that North African countries' laws approximate EU standards in areas such as technical rules and standards and services, no binding requirement exists. Meanwhile, business surveys reveal that international investors view the inadequacy of North African countries' judicial systems and the weakness of their investment codes as a major obstacle.

Given the highly cartelised nature of important sectors in North Africa, competition policy is especially important. But, as in other areas, while some of the EU-North Africa association agreements commit partners to introduce competition legislation similar to that of the EU, others contain only a very general statement of intent. Under the agreements with Morocco, for example, the country commits to 'import' EU legislation where it could touch upon trade with the EU (Szepesi, 2004).

Intended in part to remedy these weaknesses, the EU is currently negotiating Deep and Comprehensive Free Trade Agreements with Morocco and Tunisia, on which progress has been slow for political and technical reasons.

---

---

## 3 Conclusion

This brief review of the EU-North Africa trade agreements points to some fairly evident policy conclusions.

The single most important factor determining the region's growth and stability is what the North African countries do themselves. Their domestic reforms will ultimately determine regional success or failure. Though changes in market access and trade rules are essential, the necessary domestic reforms range much wider. To incentivise these reforms, and to gain increased and more predictable access to Arab markets, foster the region's security and therefore its own, reduce the likelihood of large disruptions in oil markets, and avoid periodic waves of refugees clamouring for help, the EU must offer concrete things. The assumption must be that, if reforms succeed, diversification will follow and trade structures will become more complementary. In turn, these will promote regional integration.

The ideal is to aim for complete free trade between the North African countries and the EU, combined with low tariffs on goods from the rest of the world. One possible exception will relate to imports of certain agricultural products which enjoy large subsidies in the EU and which the North African countries will be allowed to protect with countervailing duties or subsidies, to be renegotiated over time as the EU's agricultural subsidy regime evolves. Even though most agricultural support in the EU is decoupled from production, it is nevertheless distortive to some degree because it encourages farming that might not occur otherwise.

This also implies that the North African countries should aim to converge towards the EU's low external tariff, thus substantially lowering their average MFN tariffs on goods from the rest of the world. Such a process will also provide an incentive to other large trading partners to support the transition in various ways, and would also reduce trade diversion. It is possible that this process of internal and external liberalisation could result in a *de-facto* or *de-jure* customs union between the EU and the North African countries, similar to that between Turkey and the EU, and removing the need for origin certification, even if such a scenario appears far-fetched at present.

Further liberalisation of the North African countries' foreign investment regimes should also be part of deeper agreements. This should be done to a degree comparable to that of the EU, allowing all comers to enter the services market and other markets, with a limited negative list. Clearly, barriers to entry into service sectors deter inward FDI in those sectors.

The North African countries should also commit to undertake far-reaching behind-

the-border reforms. A possible guide to these reforms is the EU rule book (the *acquis*). The reforms required could draw on the experience of the accession countries that subsequently became EU members, allowing for longer implementation periods and with wide scope for modification to reflect the less advanced capacity and lower incomes in North African countries.

In addition to unfettered access to its markets the EU should in return, establish a generous quota for the temporary movement of skilled workers (known as Mode 4 provision of services in the WTO); and also establish a generous quota for several categories of unskilled workers ('service providers') based on need.

While the EU's size, geographic proximity and historical and economic ties to North Africa gives it a unique role in the region, the United States also has a security interest in the success of the region, as do the Gulf countries, which have a stake in the stability of their Arab neighbours. The EU should aim to coordinate efforts to accelerate the development of North African countries. Thus, the EU should establish, together with the US and the Gulf countries, a mixed loan and grant regional Fund for Trade Facilitation and Competitiveness, which would be operated by the World Bank in conjunction with other international institutions and major trading partners. The Fund would cover technical assistance and infrastructure investments, and its scale and operation would take as an example the Structural Funds allocated by the EU to accession countries. These funds amounted to €178 billion, about 19 percent of the aggregate 2010 GDP of the countries that joined the EU in 2004. The Fund would provide grants and loans and would work to leverage them with private sector investments, including via International Finance Corporation and the European Bank for Reconstruction and Development vehicles.

The Fund would pay special attention to investment in backbone services critical to trade such as transport, telecommunications and finance, which are also critical to economy-wide productivity. It would seek to promote a programme of domestic reforms in collaboration with the African Development Bank, the World Bank and the International Monetary Fund, designed to reduce behind-the-border barriers to trade and to increase competition in domestic markets – including by increasing the transparency and contestability of government procurement. These reforms would pay special attention to improving the working of customs and standard-setting bodies. The Fund's assistance would be conditional on prudent macroeconomic management, the operation of democracy and respect for human rights.

---

---

## References

- Al-Atrash, H. and T. Yousef (2000) 'Intra-Arab trade: is it too little?' *Working Paper* No. 00/10, International Monetary Fund
- Ayadi, R., M. Gasiorek, L. De Wulf, A.F. Ghoneim, E.E. Moez, J. Lopez Gonzalez, S.S. Guerin, P.M. Holmes, H. Kassal, M. Maliszewska and M. Tekce (2009) 'Economic Integration in the Euro-Mediterranean Region', *CASE Network Reports* No. 89, Center for Social and Economic Research
- Baier, S.L. and J.H. Bergstrand (2007) 'Do free trade agreements actually increase members' international trade?' *Journal of international Economics* 71(1): 72-95
- Behar, A. and C. Freund (2011) *Factory Europe? Brainier but not brawnier*, World Bank
- Brambilla, I., A.K. Khandelwal and P.K. Schott (2010) 'China's experience under the multi-fiber arrangement (MFA) and the agreement on textiles and clothing (ATC)', in R.C. Feenstra and S.J. Wei (eds) *China's Growing Role in World Trade*, University of Chicago Press
- Cestepe, H., E. Yildırım and B. Bahtiyar (2015) 'The Impact of Trade Liberalization on the Export of MENA Countries to OECD Trade Partners', *Procedia Economics and Finance* 23: 1440-1445
- Ferragina, A., G. Giovannetti and F. Pastore (2005) 'A Tale of Parallel Integration Processes: A Gravity Analysis of EU Trade with Mediterranean and Central and Eastern European Countries', *IZA Discussion Papers* No. 1829, IZA
- Freund, C. and A. Portugal-Perez (2013) 'Assessing MENA's trade agreements', in M. Gasiorek (ed) *The Arab Spring: Implications for Economic Integration*, Vox eBook
- Harrigan, J., & Barrows, G. (2009) 'Testing the theory of trade policy: Evidence from the Abrupt End of the Multifiber Arrangement', *The Review of Economics and Statistics* 91(2): 282-294
- Helpman, E., M. Melitz and Y. Rubinstein (2008) 'Estimating trade flows: Trading partners and trading volumes', *The Quarterly Journal of Economics* 123(2): 441-487
- Krugman, P.R. (2008) *International economics: Theory and policy, 8/E*, Pearson Education India
- Miniesy, R.S. (2004) 'The gravity model at work: An empirical study on the effects of governance on bilateral trade flows with special emphasis on intra-Arab trade', mimeo
- Papazoglou, C., E.J. Pentecost and H. Marques (2006) 'A gravity model forecast of the potential trade effects of EU enlargement: Lessons from 2004 and path dependency in integration', *The World Economy* 29(8): 1077-1089
- Parra, M.D., I. Martínez-Zarzoso and C. Suárez-Burguet (2016) 'The impact of FTAs on MENA trade in agricultural and manufacturing products', *Applied Economics* 48(25): 2341-2353
- Rodrick, D. (2011) 'Unconditional Convergence', *NBER Working Paper* 17546, National Bureau of Economic Research
- Sachs, J.D., A. Warner, A. Åslund and S. Fischer (1995) 'Economic reform and the process of global integration', *Brookings Papers on Economic Activity* 1995(1): 1-118
- Szepesi, S. (2004) 'Comparing EU free trade agreements: competition policy and state aid', *InBrief6E*, European Centre for Development Policy Management
- UNCTAD (2004) *Trade Preferences for LDCs: An early Assessment of Benefits and possible Improvements*, United Nations Conference on Trade and Development
- Westerlund, J. and F. Wilhelmsson (2011) 'Estimating the gravity model without gravity using panel data', *Applied Economics* 43(6): 641-649