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EMBEDDEDNESS OF THE MENA IN ECONOMIC GLOBALIZATION PROCESSES

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ABSTRACT

MENA countries' integration in processes of economic globalization has trailed behind many emerging markets in Asia, but also Latin America. This applies especially to the "bunker states" and "bully praetorian states" of the Arab republics and Iran, less so to Lebanon and the "globalizing monarchies" of the GCC, Morocco, and Jordan and even less to the OECD countries of Israel and Turkey. Against this heterogeneous backdrop, this paper identifies seven areas where some MENA countries show pronounced embeddedness in economic globalization processes: (1) petrochemicals and heavy industries, (2) financial services, (3) logistics and airlines, (4) light manufacturing, (5) high-tech, (6) arms trade, and (7) agriculture and food imports. In sum, MENA countries show considerable integration in economic globalization processes in selected countries and key areas, such as petrochemicals in the Gulf, high-tech in Israel, and light manufacturing in Turkey, Morocco, and Tunisia.

INTRODUCTION: THE ECONOMIC INTEGRATION OF THE MENA REGION AND THE PERIPHERALIZATION STORY

Middle East and North Africa (MENA) countries are laggards in terms of trade integration and investment flows. Henry and Springborg and other scholars have pointed out that the MENA region has fallen behind other world regions in the age of globalization, especially emerging markets in Asia, but also in Latin America (Henry and Springborg 2010, Noland and Pack 2011). This assessment chimes in with the resource curse literature. Economies of resource abundant countries tend to focus on non-tradables as a result of Dutch disease and an effective appreciation of the exchange rate. They also maintain political structures and practices that are hampering economic development, such as resource capture by elites, corruption, rent seeking and educational shortcomings (Auty 1990, Gelb et al. 1988, Ross 2012).

An analysis of trade patterns reveals a prevalence of oil and gas exports in many countries of the MENA, while manufactured goods dominate the import side of their balance sheets (McKee et al. 2017). Yet there are some striking differences and also evidence of diversification. Gulf countries such as Saudi Arabia, the United Arab Emirates (UAE) and Qatar have built up thriving heavy industries in petrochemicals and aluminum (Luciani 2012b). Dubai has pioneered diversification into trade, logistics, services and tourism and has inspired copycat projects in other Gulf countries, but also beyond, in such unlikely places as the Kurdistan Region of Iraq and Morocco (Hvidt 2009). Morocco has the largest global phosphate reserves (Woertz 2014). It has moved up the value chain by investing in fertilizer production and other chemical industries, as the Gulf countries have done

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in the case of petrochemicals (Croset 2012). There is considerable light manufacturing in Morocco, Tunisia, Egypt and above all Turkey, ranging from car manufacturing and car supplies to textiles and food processing.

Henry and Springborg observe considerable differences in MENA states' interaction with economic globalization, ranging from "bunker states" that concentrate economic prerogatives in the hands of the state (Algeria, Iraq, Libya, Syria, Sudan and Yemen) and "bully praetorian states" that leave some room for initiative to the private sector and associated rent seeking activities (Egypt, Tunisia and Iran) to the globalizing monarchies in the Gulf, Morocco and Jordan and precarious democracies in Lebanon, Turkey and Israel (Henry and Springborg 2010, Springborg 2013). The MENA region is more diverse than it often seems. A differentiation according to various levels of resource and labour endowments is necessary, ranging from the resource abundant/ labour poor states (Gulf Cooperation Council [GCC], Libya) to the resource abundant/ labour abundant ones (Algeria, Iraq, Iran) and the resource poor labour abundant countries (Jordan, Morocco, Tunisia, Lebanon). As mineral production in Syria, Yemen and Sudan has been affected by conflict and maturing oil fields, the status of these countries increasingly resembles that of resource-poor/ labour-abundant countries, too. Turkey and Israel, the only Organisation for Economic Co-operation and Development (OECD) countries in the region, are set apart by higher incomes and their diversified economic structures (Cammett et al. 2015).

Against this backdrop this article identifies seven areas where MENA countries show considerable integration in economic globalization processes: (1) heavy industries in the Gulf, Turkey and Morocco, (2) financial services and banking in the Gulf, Lebanon, Turkey and Morocco, (3) logistics ranging from airlines to shipping (Gulf, Egypt, Turkey and Morocco), (4) light manufacturing in Morocco, Tunisia and Turkey, (5) the high-tech industry of Israel, (6) the arms trade and built-up of local production capacities, especially in the Gulf, Israel, Turkey, Iran and Egypt, and finally (7) agriculture and food trade. Every MENA country is a major importer of cereals, while Turkey, Morocco and Tunisia have sizable exports of fruit and vegetables.

EMBEDDEDNESS I: HEAVY INDUSTRIES (GULF, TURKEY AND MOROCCO)

In the 1970s the nationalization of oil industries in the MENA heralded the end of vertically integrated international oil companies (Yergin 1991). Spot markets for oil and petroleum products developed to mediate between formerly integrated parts of the supply chain. Gulf countries sought to move beyond the upstream sector and enhance the value chain of their oil production by investing in downstream industries and distribution networks. They established major petrochemical companies such as Saudi Arabia's SABIC and the UAE's Borouge (Luciani 2012a). Such companies have undertaken foreign acquisitions and joint ventures. SABIC's takeover of British Huntsman Petrochemicals, US GE Plastics and Dutch DSM and investments of the Abu Dhabi-based International Petroleum Investment Company (IPIC) in Austrian Borealis and Spanish CEPSA are cases in point. Petroleum demand for transport has levelled out or is declining in OECD countries. It might suffer further with the proliferation of electric mobility, not only in the OECD countries, but also in emerging markets such as China, as some interlocutors of the business community pointed out during our interviews in Kuwait. In contrast, demand for petrochemicals is projected to grow over the coming decades. As their use does not immediately lead to harmful emissions they are

not as controversial in climate debates as the burning of hydrocarbons in transport and industry. Hence the diversification strategy into petrochemicals offers longer-term perspectives for the Gulf countries. Saudi Aramco, for example, has sought to integrate refining and petrochemical production more closely with its Rabigh deep conversion refinery that it has built in a joint venture with Japanese Sumitomo.

Since the 1980s there has been a dramatic shift of global petrochemical production capacities from OECD countries to emerging markets, especially the Gulf countries and Asia. OECD countries had a 75 per cent market share in 1980. This share declined to 37 per cent in 2010, while the share of the Middle East and China grew to 13 per cent and 17 per cent respectively (Kalkman and Keller 2012: 2). This trend in the Gulf region is buoyed up by access to cheap feedstock, but also by increasing demand in the region and the proximity to the booming Asian market. The industry has increasingly moved towards more value added and naphta-based production. Natural gas-based ethane is no longer readily available as a result of rising domestic natural gas consumption. This has led to natural gas shortages and import needs in every Gulf country except for Qatar. So far petrochemical growth rates in the Middle East and Asia continue to be stronger than in OECD countries, even after the shale revolution has led to a reinvigoration of the US petrochemical industry in the Gulf of Mexico, as a former Italian energy executive pointed out in our interviews. The concentration of petrochemical industries in the Gulf also offers potential advantages for carbon capture and sequestration, as plants are in close vicinity to oil fields where the injection of carbon dioxide could be used to maintain reservoir pressure.

Beyond petrochemicals, other energy-intensive heavy industries have also contributed to economic diversification. The Gulf countries doubled their aluminum production between 2010 and 2017 and are now the second largest producer after China, which dominates global markets with a share of 55 per cent (see Table 1). The UAE, Bahrain and Saudi Arabia are the largest producers, followed by Qatar and Oman; only Kuwait has no aluminum production (Kvande 2012). Together Gulf countries represent over 8 per cent of global production. They have also reduced their import dependence on steel.

Table 1 | Primary global aluminum production and GCC share, 2010–17, in thousand metric tons

	2010	2011	2012	2013	2014	2015	2016	2017
Africa	1,742	1.805	1,639	1,812	1,746	1,687	1,691	1,679
Asia (ex China)	2,500	2,533	2,535	2,439	2,429	3,001	3,442	3,951
GCC	2,724	3,483	3,662	3,887	4,832	5,104	5,197	5,149
China	17,331	20,072	23,534	26,534	28,317	31,518	32,641	35,905
North America	4,689	4,969	4,851	4,918	4,585	4,469	4,027	3,950
South America	2,305	2,185	2,052	1,906	1,543	1,325	1,361	1,378
Western Europe	3,800	4,027	3,605	3,616	3,596	3,745	3,779	3,776
East & Central Europe	4,253	4,319	4,323	3,995	3,764	3,829	3,981	3,999
Oceania	2,277	2,306	2,186	2,104	2,035	1,978	1,971	1,817
Total	41,621	45,699	48,387	51,211	52,847	56,656	58,090	61,604

Source: International Aluminum Institute (2018).

The MENA region is rich in oil and gas, but poor in iron ore, coal and other minerals that have played crucial roles in industrialization processes (McNeill 2013). To safeguard feedstock supplies Gulf countries have acquired access to mining production of alumina and iron ore in distant places such as Guinea, India and Mauritania (Woertz 2014). Turkey has chosen a different approach. It has become the largest global importer of scrap metal to feed its steel industry, which has doubled production since 2004.

The MENA region is an important source of global fertilizer production. It (mainly Israel and Jordan) produces 10 per cent of world potash and nitrogen-based ammonia and 25 per cent of phosphates, a figure that does not even include the recently launched Al-Jalamid project in Saudi Arabia. The dominance of the MENA in the phosphate sector is likely to grow. Morocco alone commands three-quarters of global reserves according to the International Fertilizer Development Center and the US Geological Survey (USGS), which have massively upgraded their reserve estimates for the country (Van Kauwenbergh 2010, USGS 2011: 119). Syria, Tunisia, Algeria, Egypt and Saudi Arabia have also significant reserves, and in Iraq's Al Anbar province phosphates amounting to 9 per cent of the global reserve base have been discovered (Blair 2011). This makes Iraq the second most resource-rich country after Morocco. MENA's dominance in global phosphate reserves is much more pronounced than its well-reported share of global oil and gas reserves. Phosphorus is an essential macronutrient for fertilizers and, as it is an element, it cannot be substituted, unlike the production of nitrogen fertilizer from natural gas for example. Phosphorus is essential for global food security. Hence the MENA dominance of global phosphate reserves carries long-term strategic implications. As with Gulf petrochemicals, Morocco and Saudi Arabia have sought to enhance the value chain of a primary commodity by moving downstream and producing more value-added products such as fertilizers and phosphoric acid (Woertz 2014, Croset 2012).

The large energy needs of domestic heavy industries contribute to skyrocketing domestic energy consumption in Gulf countries, alongside residential demand. Except for Qatar, all Gulf countries have a natural gas shortage. As a remedy they have recourse to liquified natural gas (LNG) imports or burn fuel and crude oil in power plants. The domestic demand growth threatens to compromise oil exports and revenues. This has led to diversification attempts into renewables and nuclear energy, especially in the UAE and Saudi Arabia. The introduction of these new sources in the local energy mix entails close cooperation with international providers and presents another aspect of integration in economic globalization dynamics.

EMBEDDEDNESS II: FINANCE (GULF, LEBANON, MOROCCO, TURKEY)

Until 1975 Lebanon was a major banking hub in the region, but in the wake of Lebanon's civil war and the oil boom, this distinction has passed on to the Gulf countries. Bahrain and the UAE have established bespoke international financial centres to attract business. Qatar has tried to do the same and the formerly closed stock market of Saudi Arabia was opened to foreign investors in 2015. MSCI upgraded the stock markets of UAE and Qatar in 2013 and included them in its emerging market index. This led to increased interest by international investors, although some of them chose not to invest and allow for the minimal tracking error, given the small share of both countries in the MSCI index, as interlocutors of the Kuwaiti stock exchange pointed out in our interviews.

Globally, financial markets have on average a balanced structure of equity, bond and bank financing. In comparison, MENA financial markets are heavily skewed towards bank financing, with a share of around 60 per cent. Bond markets are especially underdeveloped (Woertz 2012a, World Bank 2006). While bank financing dominates, access to it depends on political connections. A practice of name lending is widespread. Receiving bank loans can be challenging for small and medium sized enterprises (SMEs).

Bond and equity markets have grown, however. Gulf stock markets have opened up internationally and bonds from the Gulf countries have enjoyed considerable interest from international investors in an environment of low interest rates. Despite these examples of disintermediation, bank lending remains prevalent across the MENA. In Turkey over 90 per cent of financial assets are held by banks (IMF 2017). The role of capital markets in Turkey is limited and non-bank financial institutions are underdeveloped, notwithstanding the country's level of economic development and its OECD status. However, in recent years, foreign banks have gained more access to Turkey's financial sector as a result of a series of acquisitions. This limits the risk of market concentration as market power is more evenly distributed between private domestic, foreign-owned and state-owned banks.

Table 2 | FDI inward stocks, selected years, US million dollars

	2000	2010	2015
Algeria	3,379*	19,540*	26,232
Egypt	19,955	73,095	94,266
Libya	471*	16,334*	17,762*
Morocco	8,842*	45,082*	48,696*
Tunisia	11,545	31,364	32,911
Bahrain	5,906	15,154	27,660
Iraq	-	7,965	26,630*
Jordan	3,135	21,899	29,958
Kuwait	608	11,884	14,604
Lebanon	14,233	44,324	58,608
Oman	2,577*	14,987*	20,027
Qatar	1,912*	30,564*	33,169*
Saudi Arabia	17,577	176,378	224,050
Turkey	18,812	187,151	145,471
UAE	1,069*	63,869	111,139
Yemen	843	4,858*	697*

Note: numbers with asterisks are estimates.
Source: UNCTAD (2016: 200-201).

Lebanon is a special case, as it relies on capital inflows, mostly from overseas Lebanese and Gulf countries to finance its huge current account deficit. Foreign direct investment (FDI) inflows alone were 5 per cent of gross domestic product (GDP) in 2015 and as high as 12.3 per cent in 2005.

Lebanon has a very substantial stock of FDIs compared with its small population and GDP size (see Table 2). The Gulf countries dominate FDI stocks in the region with their capital-intensive projects in heavy industries. Turkey also has high levels, but its stocks have decreased since 2010. This leading group is followed by Egypt, Lebanon and Morocco.

Dubai Islamic Bank was the first modern Islamic bank when it was founded in 1975. Today Islamic banking has developed into an important niche market in the Gulf, which is the largest Islamic banking centre in the world, ahead of Malaysia, Iran and Western Europe (Wilson 2012). With around 15 per cent annual growth Islamic banking is one of the fastest growing sectors of the industry. This growth comes from a low statistical base and will probably slow down in the future. Yet there is considerable growth momentum today, given the large Muslim populations with growing interest in this kind of banking. Internationalization of the industry, however, is hampered by different national regulatory standards and divergent views on details of Sharia compliance in key markets such as Malaysia and the Gulf. The closure of HSBC's Islamic banking division Amanah in six key markets, among them Dubai, to where it had moved its headquarters only a few years before, is indicative of limits to growth and profitability in the sector (Jenkins and Hall 2012).

The term sovereign wealth funds (SWFs) was first coined by Andrew Rozanov in 2005 (Rozanov 2005). Since then this type of investor class has witnessed steep growth in the wake of the oil boom of the 2000s and large current account surpluses in Asian exporter nations. However, it still trails far behind the assets of Western banks, pension funds and insurance companies. Apart from Libya all MENA SWFs are located in the Gulf region. Algeria and Iran manage their more modest foreign assets mainly via their respective central banks, as does Saudi Arabia with the Saudi Arabian Monetary Agency. Older and larger funds such as the Abu Dhabi Investment Authority and the Kuwait Investment Authority follow a more passive portfolio investment approach, while others such as Mubadala and the relatively young Qatar Investment Authority undertake strategic investments, can pursue controlling stakes in companies and also invest in private equity (Woertz 2012b).

According to Sovereign Wealth Fund Institute data, the Middle East's SWF assets represented 37 per cent of global SWF assets in 2014. The main recipient of these investments has been the European Union (48 per cent), with about half of that share going to the UK. The US and Asia followed with 16.6 per cent 10.4 per cent respectively. China and Taiwan accounted for over three-quarters of the Asian investment share (Obroniecki 2017: 114).

Morocco is an interesting case of financial south–south globalization. It has sought to establish itself as an intermediary between Africa and Europe and has strengthened business relations with sub-Saharan Africa (SSA) (GMF and OCP Policy Center 2014). SSA is the only region of the world with which Morocco has a trade surplus. Moroccan companies have established themselves in strategic sectors such as telecommunication, pharmaceuticals and agro-alimentary industries. Before 2005, Moroccan banks had only a limited presence in SSA, focusing on Guinea, Mali and the Central African Republic. Since then there has been rapid expansion, helped by the retrenchment of French banks in SSA, the increase of trade flows from Morocco to West Africa and the weak activity in the Moroccan domestic market (IMF 2016, Mecagni et al. 2015). The overseas expansion of Moroccan banks has relied on the acquisition of local banks, whose local deposits largely fund

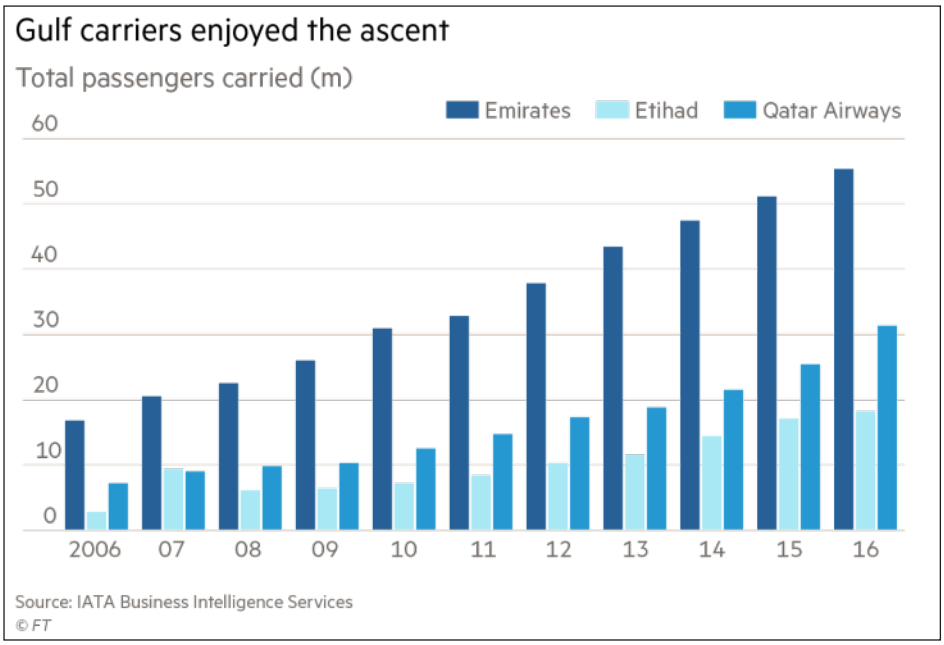
the newly acquired subsidiaries. The assets of Moroccan banks in SSA typically range between 3 and 7 per cent of host countries' GDP, with the largest concentrations in Senegal, Burkina Faso, Mali, Niger, Côte d'Ivoire, Benin and Gabon. Morocco's push into SSA has helped Casablanca to become a regional financial centre. In the MENA it is ranked right behind Dubai and Abu Dhabi and ahead of Tel Aviv. Most remarkably, Casablanca is also rated first in Africa, unseating Johannesburg (Yeandle 2017: 24, 34).

EMBEDDEDNESS III: LOGISTICS (GULF, EGYPT, MOROCCO, TURKEY)

In terms of logistics five developments in the MENA stand out: (1) The rise of super-connector airlines in the Gulf and Turkey, (2) Morocco's interconnections with SSA, (3) the rise of container traffic in the Gulf, (4) the lasting importance of the Suez Canal and other chokepoints for global trade and (5) Turkey's importance as a gas and trade transit hub.

Gulf airlines are a mixed bag. Many are only of regional importance and can be rather sleepy operations, such as Saudia Airlines, Gulf Air or Kuwait Airways, but the three airlines that have pursued the super-connector business model have developed into major players in global aviation: Emirates Airlines, Qatar Airways and Etihad. Their business strategies aim at becoming transit hubs for the long-haul routes between Europe and Asia. Two billion people live within four hours' flying time from the Gulf and twice as many within seven hours.

Figure 1 | Growth in passenger numbers of Gulf Airlines, 2006–16



Source: Powley and Kerr (2017).

Since 2006, Emirates Airlines has tripled its passenger numbers and Etihad and Qatar Airways have seen even steeper growth (see Figure 1). The Middle East had a 9.6 per cent share of the international passengers market in 2016 (IATA 2017). Gulf airlines lead global aviation growth,

both in terms of new airline capacity and revenue passenger kilometers, a measure that reflects how many of an airline's available seats were actually sold. The average age of their fleets (5.4–6.4 years) is less than half that of their American and European competitors and the three super connector airlines constantly rank among the top ten airlines in global rankings. The sector is crucial for economic diversification and feeds other related sectors, such as tourism and trade services. A study by Oxford Economics in 2014 quantified the direct and indirect contribution of aviation to Dubai's GDP at 26.7 per cent of GDP and 21 per cent of employment (Oxford Economics 2014: 4). Turkish Airlines, too, has adopted the super- connector model. Like the Gulf airlines it seeks to conquer market share in transit traffic between Europe and Asia. With many exotic destinations in Central Asia and Africa it is now the airline with most destinations globally. Its passenger numbers skyrocketed within a decade from 17 million in 2006 to 61 million in 2015 (see Table 3).

Table 3 | Total number of passengers carried by Turkish Airlines, selected years, in millions

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Passengers	16.9	19.6	22.5	25.1	29.1	32.6	39	48.3	54.7	61.2	62.7

Source: Turkish Airlines, annual reports.

The regional competition between the super-connector airlines has raised questions about their long-term growth prospects. It has been doubted whether Qatar Airways is in fact profitable and there have been reports about a possible merger between Emirates and the smaller Etihad that the companies denied (Britton 2017). Established airlines in the US and Europe that have been ruffled by the Gulf carriers' success have blamed them for thriving on fuel subsidies, low wages and unfair labour practices and have lobbied their governments to undertake protectionist and retaliatory measures. The Gulf carriers have denied such accusations but clearly feel the political headwinds. More danger could come from the economic front: with growth in global aviation it becomes increasingly profitable to provide direct connections between smaller destinations, making the whole super-connector model potentially superfluous. Many of the new plane orders of airlines now encompass planes for such medium sized connections, rather than huge airplanes for super-connections such as the Airbus 380 or the Boeing Dreamliner. Airlines that are domiciled in countries with large domestic markets in Europe, North America and Asia also have entered a number of alliances that could threaten the Gulf airlines that are domiciled in city states without such domestic market advantages (Powley and Kerr 2017, Fickling 2017).

Super-connectors apart, Morocco increased its air traffic by 160 per cent in the wake of the EU-Morocco open skies agreement of 2006 and has become a regional hub for air traffic in Africa. The national air carrier, Royal Air Maroc (RAM), developed its network of African flight destinations from six in 2003 to 30 in 2014 and from these 30 cities there are 45 more connections to other countries in Africa, making Morocco a hub between Africa and Europe and attracting logistics companies such as DHL. Currently 55 per cent of RAM's destinations are to African countries and they provide 25 per cent of the company's turnover (Morocco's Ministry of Economy 2014). Apart from its geographical location fertilizer exports are a major reason for Morocco's interest in Africa as the representative of a Moroccan research institute pointed out in one of our interviews. African fertilizer usage per hectare trails way behind other world regions. The continent will need to use

more fertilizer to increase agricultural production and feed its rapidly growing population. The state-owned phosphate company OCP launched a bespoke subsidiary for Africa in 2016. It hopes to replicate the steep growth of its fertilizer exports to other agricultural producers such as Brazil and India.

Led by Jebel Ali Port in Dubai, some Gulf countries have developed into major shipping hubs, especially for container traffic. Jebel Ali is a primary entry point to the Gulf and the wider MENA market. Other significant ports include Jeddah, on Saudi Arabia's Red Sea coast and Khor Fakkan on UAE's coast with the Indian Ocean. Sharjah, the neighbouring emirate of Dubai, also has a large harbour. In 2015, Jebel Ali was the world's ninth busiest container port with 15.6 million TEU,[2] only surpassed by Singapore and Chinese ports and ahead of European ports such as Rotterdam, Antwerp, Hamburg and Valencia, which were more important operators only a decade ago. With the completion of the East–West railway line in Saudi Arabia, over time Jeddah may be able to compete more efficiently with Jebel Ali. Currently Jeddah ranks 36th world wide in terms of container volume (4.2 million TEU), Port Said in Egypt 41st (3.6 million TEU) and Sharjah in the UAE 44th (3.4 million TEU) (World Shipping Council 2018).

When the Suez Canal was completed in 1869 it revolutionized global trade by cutting the distance between Europe and Asia by 43 per cent. For Egypt it is a major source of hard currency revenues and a catalyst for FDI in sectors and economic zones that develop around it. Around 10 per cent of the world's shipping traffic and 22 per cent of its container traffic passes through the canal (Abbas and Abd El Halim 2015: 167). The same is true for 5.6 per cent of global oil and petroleum product supplies, which is equivalent to 9.2 per cent of the world's maritime oil traffic (see Table 4).

Table 4 | Volume of crude oil and petroleum products transported through chokepoints, 2015, million b/d

Chokepoint	Oil
Strait of Hormuz	17.0
Strait of Malacca	15.5
Suez Canal and SUMED Pipeline	5.4
Bab el-Mandab	4.7
Danish Straits	3.2
Turkish Straits/ Bosporus	2.4
Panama Canal	1.0
Cape of Good Hope	5.1
World maritime oil trade	58.9
World total petroleum and other liquids supply	96.7

Source: EIA (2017).

2 TEU (twenty-foot equivalent unit) is a common measurement for container traffic. A 20-foot-long (6.1 m) ISO container equals 1 TEU.

Due to its strategic location, the Suez Canal has become one of the world's most important chokepoints for food and oil trade. A recent report by Chatham House highlights its importance for trade between Europe and several Asian economies. One-third of South Korea's wheat and maize is imported via the Suez Canal and MENA wheat imports that pass through the canal grew by 120 per cent between 2000 and 2015 (Bailey and Wellesley 2017: 54, 17). The Suez Canal also forms part of one of China's One Belt One Road maritime routes. There are only limited alternatives as the detour around the Cape of Good Hope is time- and fuel-consuming and thus expensive. The Netherlands and the Mediterranean countries of Europe also rely heavily on trade via the canal (see Table 5).

Table 5 | Northbound cargo through the Suez Canal by countries, 2017

Country (North of the Canal)	Cargo in '000 tons	%
Netherlands	97,112	10.7
Egypt	87,997	9.7
Greece	68,610	7.6
USA	64,758	7.1
Spain	63,270	7.0
Turkey	62,400	6.9
Italy	59,727	6.6
UK	47,715	5.3
Russia	45,743	5.0
Morocco	45,601	5.0
Other	265,636	29.2

Source: Suez Canal Authority (2018: 17).

The New Suez Canal is expected to increase direct revenues from shipping, but world trade figures are still sluggish and falling oil prices have made it more attractive for some ships to take the detour via the Cape to avoid the canal's hefty transit fees. To increase the economic impact of the canal, Egyptian authorities are initiating new economic zones, factories and logistics facilities around it (Kenawy 2016, Radwan 2015).

With the Blue Stream pipeline Turkey has developed into an important destination for Russian gas. The expected completion of the Trans-Adriatic pipeline in 2020 and possible future pipeline projects could transform Turkey into a gas trading hub between Russia, Central Asia and Europe. Middle Eastern gas from Iran, Iraq and the Levant could also be fed into the Turkish transit system, depending on the development of reservoirs, international agreements and the security situation. If the abandoned South Stream pipeline project via the Black Sea to Bulgaria is replaced with a successor project, Russian gas transits to Europe via Turkey could also increase. Such a successor project is currently being discussed between Turkey and Russia. Via the Strait of Bosporus Turkey is also the primary access point for trade from the Black Sea region, most notably the substantial wheat and barley exports of Russia and Ukraine that have superseded European and US exports in recent years.

EMBEDDEDNESS IV: LIGHT MANUFACTURING (TURKEY, MOROCCO, TUNISIA)

Light manufacturing in textiles, cars and car supplies, food processing and light chemicals has developed into an important aspect of some MENA economies, most notably Turkey, Morocco and Tunisia, but also Egypt (El-Said and Harrigan 2014).

Turkey belongs to the top ten agricultural economies worldwide. Sunflower oil, tree nuts, raisins, poultry, flour and pasta have diversified the already established exports of fruit and vegetables. Turkey has become the world's third-largest exporter of pasta after the EU-28 and China. It is also the world's largest exporter of flour. It is the Middle East's largest food and beverage producer and the 7th largest worldwide, a sector that accounts for 19.7 per cent of its GDP (ITE Food & Drink 2017). In 2011, the most important destinations for its food and beverage exports was Iraq (28 per cent), followed by Germany (8 per cent), Libya (3 per cent), the USA (2.6 per cent) and Saudi Arabia (2.6 per cent) (FAO 2012). Turkey seeks to diversify its export and product portfolio towards the Southern and Eastern Mediterranean countries, the countries of Central and Eastern Europe (as well as Asia and Latin America (Tozanli 2014).

Table 6 | Clothing exports as a percentage of total merchandise exports, 2000–15

	2000	2005	2010	2015
Albania	37	30	18	16
Bangladesh	79	74	77	82
Bulgaria	14	15	7	6
Cambodia	69	71	59	69
India	14	9	5	7
Indonesia	7	6	4	5
Jordan	6	24	13	18
Lesotho	73	68	21	35
Mauritius	61	35	30	29
Morocco	32	25	17	12
Pakistan	24	22	18	23
Sri Lanka	52	45	41	45
Tunisia	38	30	19	15
Turkey	23	16	11	10
Viet Nam	13	14	14	14

Source: WTO (2016).

The mostly cotton-based textile industry in Turkey remains one of the most important sectors for the economy, representing 8 per cent of GNP (USDA 2017: 7). Textiles also play an important role in Morocco, Tunisia, Jordan and Egypt. Tunisia is now the fifth largest supplier of textiles to the European Union, after China, Turkey, Bangladesh and India. The sector is the second most important provider of foreign exchange after tourism. Unlike Turkey with its cotton production, Tunisia needs to import its feedstock (Kahia 2017). Egypt still exports much of its long-staple

cotton, and imports lower quality cotton for its textile industry, which caters to a market segment with lower prices and margins. After China, the EU, India and the USA, Turkey is the fifth largest textile exporter of the world (USDA 2017). Textiles constitute 10 per cent of Turkey's exports. They play a crucial role in the exports of other MENA countries, too. The respective shares for Morocco, Tunisia and Jordan are 12, 15 and 18 per cent. These shares have declined since 2000, signalling greater diversification of the export portfolio, but also increased competition from Asian manufacturers such as Bangladesh, Cambodia and Vietnam, whose textiles' share in total exports is much higher (see Table 6).

Another major aspect of light manufacturing in the MENA region is the automobile industry. Turkey and Iran each produce about a million cars each year, which puts them in the same bracket as Italy and Slovakia and not far behind France (OICA 2017). Turkey also produces over half a million commercial vehicles annually. While the Iranian industry mainly caters to its domestic market, Turkey's export share is 75 per cent. In Morocco the automotive industry has created 80,000 jobs, representing about 10 per cent of the country's industrial workforce (Bennis 2015). Light vehicle manufacturing will increase from 43,000 in 2000 to 329,000 in 2020, equivalent to 16 per cent of French production (Saleh 2016). Morocco has positioned itself as a gateway to the emerging markets of French-speaking Africa and the MENA region. Tunisia is the second-largest manufacturer of auto parts in Africa after Morocco. It has attracted European producers such as German Leoni, but saw investments decline in the wake of the Arab spring.

The establishment of a factory for electric cars in Tanger by Chinese BYD could be particularly important for future growth of the industry in Morocco as a French-Lebanese investment banker pointed out during one of our interviews. "The Chinese are the ones who will succeed in electric cars, they are well ahead of everyone else and they are trying to go global", he argued. Electric cars fit in neatly with another major economic opportunity in the MENA and in Morocco specifically: solar power. As mobile storage devices electric cars can significantly ease the integration of intermittent renewable energy sources into electricity grids. Morocco has already launched a 160 MW/3.9 billion dollar Concentrated Solar Power plant in Ouarzazate. As a non-oil producer Morocco is not held back by considerations for stranded hydrocarbon assets in pushing for renewable energies and so could build on its first mover advantage.

The French-Lebanese investment banker was also optimistic about Turkey's growing economic role in the MENA. The country has made important strides in managing construction and engineering projects in the region and is able to stand its ground against European and Chinese competition. It is popular with tourists and investors from the Gulf and offers a less conservative Islamic way of life than countries such as Saudi Arabia that seek to open up culturally. The Achille's heel of the Turkish economy is its large current account deficit, which stems from the import of processed intermediate goods for industries rather than plain raw materials (Woertz 2014). To overcome the assembly line character of its industries, Turkey would need to move up the value chain and integrate its industrial processes more deeply. This will require investments in R&D and education. It remains to be seen to what extent the post-coup purges in Turkish academia have affected STEM departments at universities and research centres that will be crucial for this diversification effort.

EMBEDDEDNESS V: HIGH-TECH (ISRAEL)

After early beginnings in the 1960s, Israel's high-tech sector took off in the 1980s buoyed up by the growing importance of software products. A migration wave of highly skilled people from the former Soviet Union, research support by the government and the dot.com boom of the late 1990s have helped the sector to thrive. Its share in total manufacturing exports rose from 11 per cent in 1990 to 20 per cent in 2015 (World Bank 2016).

The Israeli high-tech sector has been closely linked to its military sector in terms of R&D and human resources development. The military functioned as an incubator for companies that subsequently succeeded in the private sector and civilian applications. The connection between military know-how and networks with the civilian economy has made Israel a "start-up" nation (Senor and Singer 2009). A relevant example is the 8200 Unit of the Israel Defense Forces, which gathers intelligence from electronic signals and other communication systems (Rousseau 2017). Many Unit alumni enter Israel's high-tech community to start or join entrepreneurial ventures. The alumni of the Unit have created an innovation support programme (EISP: https://www.eisp.org.il) to provide other young Israeli entrepreneurs with their expertise.

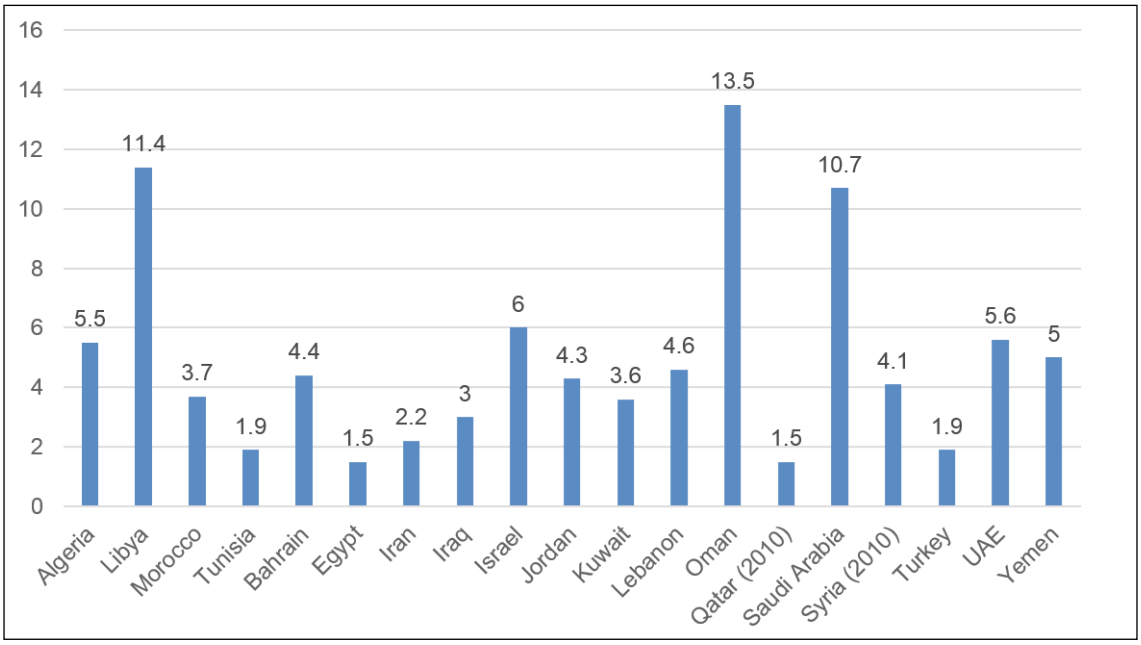
Israel has the highest share of venture capital investment per GDP globally, ahead of the USA. In absolute terms it ranks number four, after the USA, Europe and Canada and ahead of Japan and South Korea (OECD 2017: 125). The Israeli high-tech sector is closely connected internationally. After China and Canada it has the largest number of listed companies on Wall Street. There are currently 94 Israeli companies with an aggregate market cap of 70 billion dollars listed on Nasdaq, including 30 biomed companies (Yeshayahou 2017). Foreign companies that have an R&D centre in the country undertake most of the high-tech investments. Over many years they have contributed more than three-quarters of such investments. This is also seen critical. In our interviews an Israeli academic pointed out that there are concerns that the economic gains of the sector accrue too much to foreign capital and a small part of the population. More needs to be done to generate benefits from the high-tech sector for the general population, which struggles to keep pace with the inflationary pressures on the housing market that this relatively well-paid segment of the workforce has generated, he argued.

Israel's high-tech sector and its international economic integration set it apart in the region according to an Egyptian company executive in the Gulf region whom we interviewed. For the same reasons he was more circumspect about the potential of Turkey and Iran and cautiously optimistic for Saudi Arabia: he saw a failure of that country's current reform agenda as likely as its success. Gulf countries have undertaken efforts to create a high-tech sector from scratch with real estate projects such as Dubai's DuBiotech, Silicon Oasis or the King Abdullah University for Science and Technology (KAUST) north of Jeddah. However, such projects may not be successful if local talent and business ecospheres are not developed and the standards of local education systems are improved. As Israel is politically isolated in the MENA and trade with other MENA countries is limited, to date economic spillover effects from its high-tech sector in the region are limited. It remains to be seen, whether this will change after the recent détente with Saudi Arabia over common interests regarding Iran.

EMBEDDEDNESS VI: THE ARMS TRADE (GULF, ISRAEL, TURKEY, ALGERIA, EGYPT)

Military expenditure in the MENA is about double the world average, at almost 5 per cent of GDP (see Figure 2). It is well above the OECD countries where military expenditure is mostly below 2 per cent of GDP. Saudi Arabia and Oman, but also Libya, Algeria, the UAE and Israel, are above the MENA average. Between 2007 and 2017, Saudi Arabia was the world's second largest arms importer, after India; the UAE ranked fourth. Other MENA countries also occupied high ranks, such as Algeria (8th), Egypt (9th), Turkey (11th), Iraq (13th), Israel (20th) and Morocco (21th) (SIPRI 2018a). Arms fairs in the region such as IDEX in Abu Dhabi have developed into major events on the agenda of the global defence industry.

Figure 2 | Military expenditure as a percentage of GDP, 2014



Note: Figures for Iraq, Lebanon and UAE are SIPRI estimates. Figures for Libya and Iraq do not include spending on paramilitary forces.
Source: SIPRI (2018b).

Beside imports, some countries in the region have built up capacities for domestic arms production, above all Israel, followed by Turkey, Egypt, the UAE and Saudi Arabia (Biscop and Sassel 2017). Iran has sought to build an independent arms industry under embargo conditions. But the lack of economic openness might seriously hamper its longer-term perspectives. The attempts to develop defence technological and industrial bases (DTIBs) have been motivated by a wish to diminish dependence on arms imports and generate spillover effects in civilian industries. Some of these plans have been overly ambitious. With the exception of Israel and possibly Turkey and Iran, a considerable part of the DTIB of the region have an assembly line character. They rely on the licenses, know-how and intermediate goods from the respective exporter countries and cooperation partners.

MENA countries have diversified their sources of arms imports. The traditional suppliers (the USA, Western Europe and, to a lesser extent, Russia) still account for the lion's share, but emerging actors such as China, India, Indonesia, Pakistan, South Africa, Turkey and Ukraine have gained market share. Occasionally they have been more willing to transfer technology than the traditional suppliers. As arms imports are also a means to cultivate foreign alliances, such diversification has become politically prudent in an increasingly multipolar world with a growing role for emerging actors such as China.

In terms of export capacities Israel plays in a league of its own in the MENA. It has technological leadership in arms categories that play an increasingly important role such as drones and cyber warfare, beside more traditional equipment such as small arms and tanks. According to SIPRI (2017: 370), Israel was the 10th largest arms exporter in the world in 2012–2016. In 2017 the largest share of Israeli defence exports went to the Asia Pacific region, with 2.6 billion dollars, followed by Europe with 1.79 billion, North America with 1.27 billion, Latin America with 550 million and Africa with 275 million. Within Asia, India has become an essential market. Over the last five years, defence trade between the two countries has averaged more than 1 billion dollars (Ahronheim 2017).

EMBEDDEDNESS VII: AGRICULTURE AND FOOD TRADE (ALL MENA)

The MENA region is the world's largest net importer of cereals. Its agricultural production cannot be increased substantially for lack of water and arable land, while its population growth will only level out after 2050 (Mulligan et al. 2017, McKee et al. 2017). The reliance on food imports will persist and even grow, especially for water intensive cereals and fodder products. The widespread rhetoric of self-sufficiency and efforts to increase cereal production are not sufficient to counter this trend. In many cases such efforts will fall short for lack of the necessary natural resource endowments. Saudi Arabia actually phased out its wheat production between 2008 and 2015.

This import dependence is perceived as a strategic liability by MENA countries, especially at times of conflict or market turbulence. This was the case in the wake of the global food crisis of 2007/2008 when agricultural exporter nations such as Argentina, India, Vietnam and Russia declared export restrictions out of concern for their own food security (Woertz 2013). Beside the traditional grain exporter countries (North America, Eurasia, Argentina and Australia), tropical countries such as Brazil (poultry, corn and soybeans), Malaysia and Indonesia (palm oil) and rice exporters such as Pakistan, India and Thailand have gained increased prominence over the past two decades (Woertz and Keulertz 2015).

To ameliorate concerns about import dependency the cash-rich oil exporters among the MENA countries announced agricultural investments abroad in the wake of the global food crisis of 2007/2008. They hoped to gain privileged bilateral access to food production, often in food insecure countries such as Sudan or Pakistan. Actual implementation of such controversial projects has fallen short of the media announcements. Many projects were not launched at all or only at a fraction of the announced scale. When the Gulf countries actually put money on the table it was rather for established agricultural export nations such as Australia or Argentina and in the downstream sectors of food processing and distribution. Saudi state-owned SALIC, for example,

joined forces with international grain trader Bunge in 2015 and took over a majority stake in the former Canadian Wheat Board when it was privatized (Keulertz and Woertz 2016). The upstream acquisition of farmland was less interesting by comparison, as it is politically controversial and economically challenging in many developing countries.

Beside the deep integration of MENA countries in global food and cereal markets via the import side, some of them are also major exporters of fruit and vegetables. Turkey and Morocco are the only MENA countries that have an agricultural trade surplus in value terms. Like the other MENA countries they are cereal net importers, but export other foodstuffs. Turkey is the seventh largest agricultural economy globally. It is the world's biggest producer of hazelnuts, apricots, figs, cherries, quinces, raisins and poppy seeds, the second largest producer of melons, watermelons, strawberries and leeks and the third largest of lentils, apples, cucumbers, green beans, green peppers, chestnuts and pistachios (USDA 2014). Morocco, Tunisia and Egypt are also substantial exporters of fruit and vegetables to the EU (Compés López et al. 2013). Morocco is also one of the world's largest producers of strawberries. Tunisia increasingly manages to develop direct marketing channels for its olives, instead of wholesaling them to Italian olive oil producers. Despite considerable trade liberalization with the EU, quantitative restrictions for some agricultural products remain in place. MENA producers also struggle with EU food safety standards that have to be overcome to access European markets (Chaaban et al. 2017). In our interviews a Kuwaiti investment official was sceptical whether Morocco and Tunisia would be able to grow their agricultural production without better water management because of growing water scarcity. He also questioned whether the North African countries had benefitted as much from their improved market access to the EU as initially expected.

CONCLUSION

MENA countries' integration in processes of economic globalization has trailed behind many emerging markets in Asia, but also Latin America. This applies especially to the "bunker states" and "bully praetorian states" of the Arab republics and Iran, less so to Lebanon and the "globalizing monarchies" of the GCC, Morocco and Jordan and even less to the OECD countries of Israel and Turkey. Against this heterogeneous backdrop, this article has identified seven areas where MENA countries show pronounced embeddedness in economic globalization processes.

1) Petrochemicals, aluminum and fertilizer industries have been successfully established in the Gulf countries and Morocco, capitalizing on their competitive advantage of cheap feedstock (natural gas, naphta and phosphates). Turkey has established a large steel industry that uses scrap metal as feedstock.

2) In the Gulf countries, Lebanon, Morocco and Turkey, financial services have played important roles in their respective economic development and sometimes in their economic penetration of neighbouring regions, such as sub-Saharan Africa. The Gulf countries are major players in international finance via their SWFs, whose assets grew steeply during the oil boom of the 2000s.

3) Logistics and airlines have become a major diversification sector in the Gulf and Turkey. They have helped these countries to open new geographical areas of cooperation in Africa and Asia. The

same is true for Morocco, which has positioned itself as a bridge and facilitator between Africa, Latin America and Europe. Egypt has also banked on logistics with its enhancement of the Suez Canal, which is a major source of foreign exchange and a crucial part of its future development plans. However, the business model of super-connector airlines in the Gulf and Turkey faces increasing competition from direct flight connection between secondary destinations and competition from airlines in North America, Asia and Europe with their large domestic markets.

4) Light manufacturing in food processing, textiles, light chemicals, cars and car supplies plays a major role in Turkey, Morocco and Tunisia. These industries struggle at times with competition from Asia and need to manage their dependence on the import of intermediate goods but in many cases have achieved critical mass with considerable growth rates. This is especially true for Turkey. In Morocco the scheduled production of electric cars by Chinese BYD could give crucial impetus.

5) Israel is the only country in the MENA that has a prominent presence in the high-tech sector. The sector has grown since the 1980s when the importance of software increasingly superseded that of hardware. The country can draw on a unique ecosphere of military alumni networks, venture capital, close ties to international capital markets, government-supported R&D and research centres of international companies whose share in total high-tech investments hovers at and above three-quarters. Because of these unique factors, and Israel's regional isolation, its model cannot be easily replicated and regional spillovers are unlikely.

6) Military spending in the MENA is one of the highest in the world considering the size of its national economies. Some MENA countries belong to the largest arms importers (e.g. Saudi Arabia and the UAE) and have built up domestic arms industries that in turn require cooperation with international partners. Turkey and Israel have the most advanced DTIBs and also export arms.

7) Finally, the MENA is the world's largest cereal importer and its investments in international companies for food trading and processing deepens its global integration. Some MENA countries are also major exporters of fruit and vegetables, especially Turkey and Morocco.

In sum, MENA countries show considerable integration in economic globalization processes in selected countries and key areas, especially the two OECD countries of the region, Turkey and Israel. Limited domestic markets remain an issue that can deter FDI. Regional trade agreements that could have overcome this limitation, such as the Greater Arab Free trade Area, are few and far between, not meaningful enough and difficult to implement because of political differences.

Among Arab states the globalizing monarchies (GCC, Jordan and Morocco) have been in a better position to reap the benefits of global economic integration because of their greater economic openness, but also because of their resource endowments. Much of the FDI in the Gulf is related to hydrocarbon production and processing. Most large key enterprises such as Emirates, SABIC or Borouge are owned by the state, but they are efficiently run. They form "pockets of efficiency" that can react flexibly to market incentives as the state has deliberately isolated them from the bureaucratic structures of rent redistribution (Hertog 2010).

Some MENA countries are notably absent, especially the "bunker states" that have left limited space for economic activity independent of the state. Large enterprises there are mostly state owned, too, but highly politicized and often run inefficiently. Algeria, Iraq, Iran and Libya have failed to build up domestic petrochemical industries. Similarly, Egypt, Iran and Syria have lived below their potential in light manufacturing and logistics. All these countries have also shown limited integration in terms of financial services, and high-tech remains a pronounced blank, pointing to the urgent need for educational reform and support for SMEs.

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Middle East and North Africa Regional Architecture: Mapping geopolitical shifts, regional order and domestic transformations (MENARA) is a research project that aims to shed light on domestic dynamics and bottom-up perspectives in the Middle East and North Africa amid increasingly volatile and uncertain times.

MENARA maps the driving variables and forces behind these dynamics and poses a single all-encompassing research question: Will the geopolitical future of the region be marked by either centrifugal or centripetal dynamics or a combination of both? In answering this question, the project is articulated around three levels of analysis (domestic, regional and global) and outlines future scenarios for 2025 and 2050. Its final objective is to provide EU Member States policy makers with valuable insights.

MENARA is carried out by a consortium of leading research institutions in the field of international relations, identity and religion politics, history, political sociology, demography, energy, economy, military and environmental studies.

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