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GLOBAL VALUE CHAINS IN THE EURO-MEDITERRANEAN:
BECOMING THE PILLAR FOR REGIONAL INTEGRATION

Chahir Zaki

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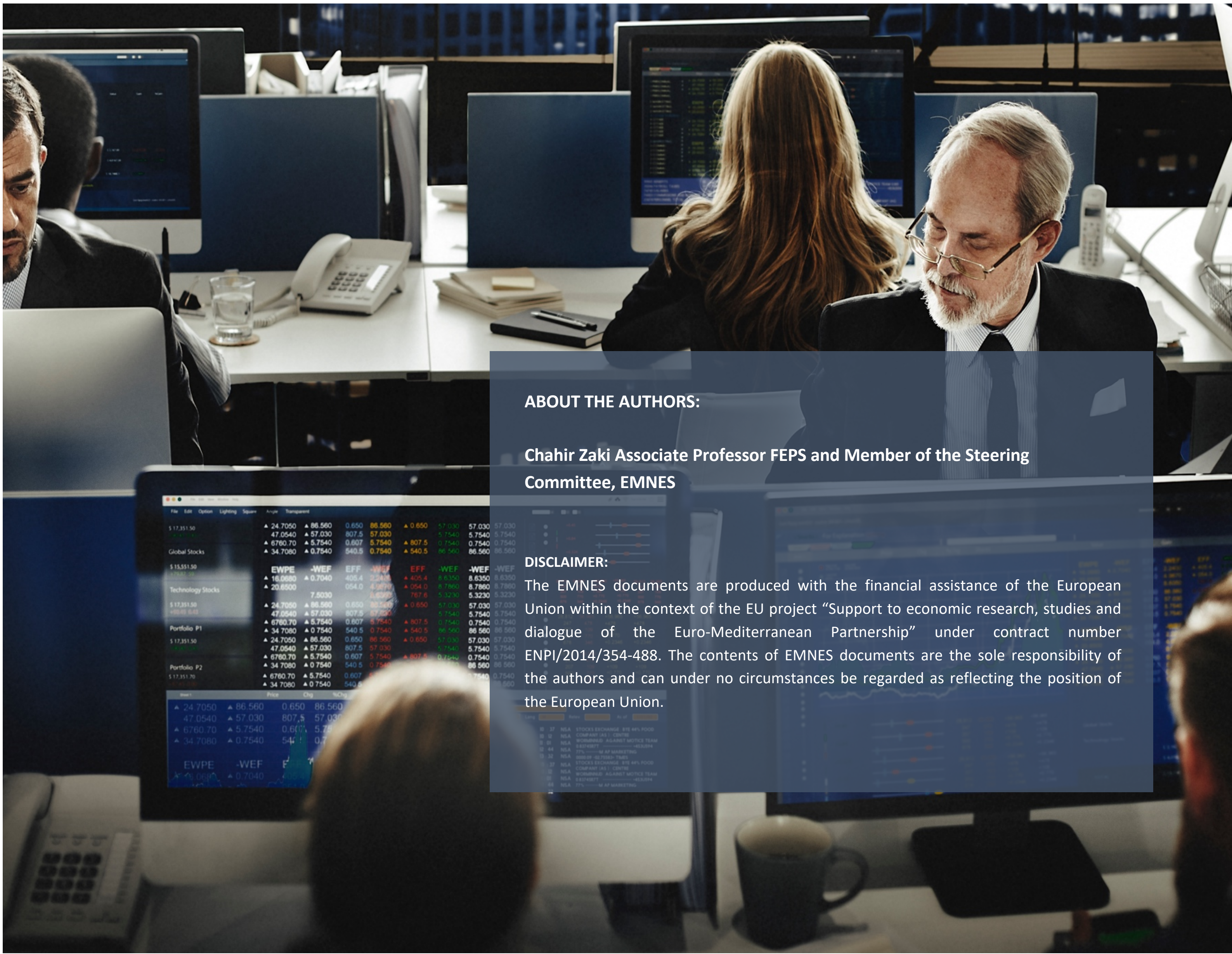

ABOUT THE AUTHORS:

Chahir Zaki Associate Professor FEPS and Member of the Steering Committee, EMNES

ABSTRACT

The objective of this policy brief is to examine the status of global value chains (GVCs) on the two shores of the Mediterranean and provide some insights on how to enhance regional integration. We argue that GVCs will help firms improve their productivity, that SMEs will become more sustainable and generally diversify exports from the region. To achieve this, addressing non-tariff measures, boosting the business environment and improving blue-collar workers skills are all essential.

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INTRODUCTION

After more than twenty years of regional integration, reshaping Euro-Mediterranean relations became a necessity, especially in the aftermath of the Arab uprisings in several South and East Mediterranean Countries (SEMCs). Indeed, regional integration remained shallow (resulting in a substantial reduction of tariff rates), as opposed to deep integration (the harmonisation of processes and market conditions) (Alcidi and Busse, 2017). However, Osnago, Rocha, and Ruta (2016) showed that signing deep agreements has a large and positive trade impact on GVCs since signing the deepest preferential trade agreement in their sample doubles the trade in parts and components and increases re-exported value added by about 22%, which is a pre-requisite for regional value chains to emerge.

A more detailed look at SEMCs shows that exports of manufacturing products remain limited due to difficulties in compliance with EU standards, the prevalence of sanitary and phyto-sanitary measures and technical barriers to trade. Additionally, exports of agricultural products and trade in services remain mostly excluded from the Association Agreements. EU investments are also heavily allocated towards the oil sector, which limits the potential for job-rich growth and hinders the creation of GVCs in general and, in particular, for Small and Medium Sized Enterprises (SMEs) that are able to compete and export. This is why the Euro-Mediterranean cooperation framework needs to better reflect necessities, priorities and to cater for opportunities in the region.

From a policy perspective, integrating into a GVC is beneficial for the Euro-Mediterranean region, for several reasons. First, the export dynamics of SEMCs have been largely unsatisfactory over the past two decades. Integrating GVCs will obviously boost their exports. Second, as highlighted by Jaud and Freund (2015), these countries have export superstars as their top firms are comparable to those of other countries. Yet, SMEs, who have the lion's share of the total number of enterprises in the region, are still excluded from internationalisation. Indeed, they remain weak, with low-value added and unsustainable business activities. This is why GVCs can be perceived as a tool to favour their growth in exports whilst building on their comparative advantage. Third, the South and East Mediterranean (SEM) region has several characteristics that can attract foreign investors: relatively cheap labour, an abundance of skilled blue-collar workers (highly sought after in most manufacturing industries, as argued by Aboushady and Zaki (2018)), a centrally strategic location between European and African Markets with several preferential trade agreements (EU association agreements, COMESA and African Continental Free Trade Agreement). Fourth, and notably for this region, the participation in GVCs, even if it is in low value-added work, like assembling imported components, also has the potential to boost employment and reduce unemployment, hence resolving one of the main structural challenges in this region. Fifth, SEMCs are still in the early stages of participation, but to trigger international linkages, governments need to pay close attention to education and training policies, to ensure the basis for future development is in place (Alcidi and Busse, 2017). This is why it is worth examining how regional and global value chains are crucial to improving the export performance of the SEM region. Sixth, at the firm level, integrating a GVC is important for SEMC firms, since it improves their productivity, especially for SMEs. In their seminal paper, Baldwin and Yan (2014) find that Canadian firms that integrated into a GVC benefited from a rise in productivity by 5% more than their counterparts during the first year and by 9% four years after that. For the MENA region, Del Prete et al. (2018) perform a micro, firm level analysis, based on World Bank Enterprise Survey data for Egypt and Morocco and show that the performance of firms, measured by several indicators, is positively associated with internationalisation and GVC participation.

Thus, the objective of this policy brief[1] is to examine the status of global value chains on the two shores of the Mediterranean and provide some insights on how to enhance regional integration. It is organised as follows: Section 2 presents an overview of GVCs on the southern shore of the Mediterranean; Section 3 is dedicated to some policy recommendations.

OVERVIEW OF GVCS IN SEMCS

Using the World Bank Enterprise Survey, Dovis and Zaki (2018) provide four definitions of GVCs from the least restrictive, where the firm exports and imports; exports, imports and has foreign certification; exports, imports and has foreign capital; and exports, imports and has both foreign certification and foreign capital. The stricter the definition, the lower the share of firms that are part of a GVC. When compared to other regions, internationally certified firms are chiefly concentrated in Europe and Central Asia, South and East Asia. The MENA region is performing slightly better than Sub-Saharan Africa, but worse than the former regions. This indicates to what extent Asian countries

[1] This paper is a result of a participatory process in which EMNES researchers worked together in groups at two policy workshops held in Brussels in July 2018 and in Piran in October 2018, to combine the findings of research which was then formulated into policy options and recommendations. The group included Cinzia Alcidi (CEPS), Emanuele Sessa (EMEA), Nooh Alshayab (Yarmouk University) and Rihab BelAkhal (Manouba University). This paper has been reviewed by Rym Ayadi (EMNES).

have a competitive advantage in terms of GVC (Kimura, 2006). Indeed, Dovis and Zaki (2018) show that the share of firms that belong to a GVC is extremely low for most of the countries and especially when the firm exports, imports and has foreign capital and foreign certification (on average 1.5%) as shown in Table 1. The problem is more pronounced for small and medium firms whose share never exceeds 0.4%, based on the strictest definition (GVC5 as shown in Table 2). These definitions have been used by Ayadi et al (2019) to examine the effect of GVCs on productivity gains. They found a positive association between productivity gains and firm GVC participation in the region. The results are consistent whether we measure productivity gains by total factor productivity (TFP) or labour productivity.

This poor performance is explained by several facts. The first reason behind such a low level of GVC involvement is **inadequate skills endowments** (blue collar workers). Indeed, Aboushady and Zaki (2017) highlighted the importance of investing in the skills of blue collar workers thanks to more exports which are innovation intensive. The authors suggest there is a positive and significant impact of exports on innovation and the adoption of technology. Furthermore, demand for skilled production workers by firms in the MENA region is likely to be higher than that for non-production workers. This demand is particularly high when a firm adopts new methods of logistics and production, new products and a new organisational structure. This shows to what extent investing in new technologies is crucial to improving a firm's involvement in trade in general and GVC in particular.

The second reason is an **inefficient business environment** that hinders the expansion of small and medium firms. The most severe obstacles in the MENA region, as reported by firms, are chiefly political instability, electricity supply, access to finance, corruption, tax rates and practices from the informal sector. This is similar to East Asia and Pacific (EAP) and Latin America and the Caribbean (LAC) where firms reported that the most severe obstacles are also tax rates, access to finance and competition from the informal sector. Hence, most developing countries are still suffering from a range of dimensions that are impeding their business environment. This, in turn, affects their performance and hence their engagement in a GVC (see Table 3). Several studies argue that the number of procedures required to obtain electricity, the lack of credit bureau coverage, the number of tax payments, the cost of resolving insolvency, the amount of documentation needed to export, the number of procedures to register property and protecting minority investors all exert a negative impact on integrating into a GVC.

The third reason is related to **unharmonised standards and regulations**. As mentioned before, such standards represent significant barriers to exports arriving from the Southern shores of the Mediterranean, which affect their exports and, hence, their insertion into a GVC. In fact, Kamal and Zaki (2018) showed that, in the case of Egypt, the extensive margin and entry probability is negatively affected by Technical Barriers to Trade (TBTs), whilst the exit probability is positively affected. Moreover, smaller firms are more adversely affected by TBTs in their export participation and entry and exit decisions. The effect of TBTs on firms' product diversification is found to be sector-dependent; positive for agricultural sectors and mixed for non-agricultural ones. Finally, firms generally tend to increase their market diversification in response to TBTs. This is especially true for large firms within their cluster of African and Asian market destinations. By contrast, there are fewer prospects of firms' diversifying into less stringent destinations within the European region.

Table 1: GVC by Country

	GVC1		GVC2		GVC3		GVC4		GVC5	
	No	YES	No	YES	No	YES	No	YES	No	YES
Egypt	26.2%	37.6%	59.9%	3.9%	62.4%	1.5%	63.2%	0.6%	63.5%	0.4%
Israel	0.9%	5.5%	4.9%	1.5%	5.1%	1.3%	6.2%	0.2%	6.3%	0.1%
Jordan	1.3%	2.5%	2.8%	1.0%	3.5%	0.2%	3.6%	0.1%	3.7%	0.1%
Lebanon	0.3%	1.4%	1.1%	0.6%	1.5%	0.2%	1.7%	0.0%	1.7%	0.0%
Morocco	2.2%	10.5%	9.9%	2.7%	11.8%	0.9%	11.7%	1.0%	12.1%	0.6%
Tunisia	1.0%	5.8%	4.4%	2.4%	5.9%	0.9%	6.0%	0.8%	6.5%	0.4%
WBG	0.4%	2.3%	1.9%	0.9%	2.6%	0.1%	2.8%	0.0%	2.8%	0.0%
Yemen	1.3%	0.8%	2.1%	0.0%	2.1%	0.0%	2.1%	0.0%	2.1%	0.0%
Total	33.6%	66.5%	87.0%	13.0%	94.9%	5.1%	97.2%	2.8%	98.5%	1.5%

Source: Authors' own elaborations, based on Dovis and Zaki (2018) using the WBES.
Note: Each column represents a definition for GVC. GVC1: exports or imports, GVC2: exports + imports, GVC3: exports + imports + certification; GVC4: exports + imports + foreign capital, GVC5: exports + imports + foreign capital + certification.

Table 2: GVC by size

		Small(<20)	Medium(20-99)	Large(100 and over)	Total
GVC1	No	20.5%	10.8%	2.2%	33.6%
	YES	33.4%	24.8%	8.3%	66.5%
GVC2	No	50.0%	30.1%	7.0%	87.0%
	YES	3.9%	5.5%	3.6%	13.0%
GVC3	No	53.1%	33.7%	8.1%	94.9%
	YES	0.8%	1.9%	2.5%	5.1%
GVC4	No	53.1%	34.9%	9.2%	97.2%
	YES	0.7%	0.7%	1.4%	2.8%
GVC5	No	53.7%	35.2%	9.6%	98.5%
	YES	0.2%	0.4%	1.0%	1.5%
Total		53.9%	35.6%	10.6%	100.0%

Source: Authors' own elaborations using the WBES.

Table 3. Biggest obstacle in the business environment (by region)

	All	EAP	ECA	H-NON	H-OECD	LAC	MENA	SA	SSA
Access to finance	15.5	11	14.2	14.8	11.7	14.3	10.2	12.4	22.5
Business licensing and permits	2.6	4.1	2.1	2	2.7	3.7	2.8	1.8	1.9
Corruption	7.4	8.7	7.9	3.7	2.6	8	7.8	9.3	8
Courts	1	1.2	1.6	0.4	1.5	1.2	1.1	0.4	0.5
Crime, theft and disorder	4	2.9	1.4	6.7	2.5	9.1	1.9	2.6	3.4
Customs and trade regulations	3.9	2.7	3.4	7	1.1	4.7	3.8	1.9	4.8
Electricity	9.3	5.9	5.4	9.6	2.5	7.8	14.1	20.3	12.8
Inadequately educated workforce	6.8	7.3	5.8	16.3	12.5	9.8	5.4	3.4	2.2
Labour regulations	3	3.1	1.8	3.5	8.7	3.6	2.8	5.1	1.1
Political instability	11.3	10.9	13.1	3	9.2	6.9	28.4	17.9	9.8
Practices of the informal	12.5	16.3	15.5	11.1	10.5	14.1	7.4	6.2	11.5

sector									
Tax administration	3.7	3.3	4.7	2.4	5.5	2.7	1.6	2.7	4.5
Tax rates	12.4	11.3	18.6	14.6	22	10.1	8.3	6.9	9.2
Transportation	2.9	4.8	2.2	4	3.8	2.5	1.4	3.6	2.8

Source: Authors' own elaboration using the WBES dataset.

Notes: (i) Figures represent share of firms reporting each aspect as the biggest obstacle to their business.
(ii) EAP (East Asia & Pacific), ECA (Europe & Central Asia), H-NON (High income: non-OECD), HOECD (High income: OECD), LAC (Latin America & Caribbean), MENA (Middle East & North Africa), SA (South-Asia), SSA (Sub-Saharan Africa).

Finally, **low investment in physical and digital infrastructure** also impedes the integration of Arab firms into GVCs. Indeed, whilst the latter is indispensable for the transportation of goods from plants to markets/ports, the former will boost e-commerce and trade with larger firms within the same regional chains.

POLICY OPTIONS AND RECOMMENDATIONS

The objective of this policy brief is to examine the status of global value chains on the two shores of the Mediterranean and provide some insights on how to improve the latter. Indeed, after more than twenty years of shallow regional integration and limited impact, the integration into a GVC becomes vital to improve export performance and to boost SMEs. Using the WBES, it was shown that GVCs are extremely limited on the Southern shores of the Mediterranean, and notably for SMEs. This is why in order to overcome this shortfall, a number of policies should be withdrawn.

First, attracting foreign direct investments in the manufacturing sector is vital. Indeed, since most European FDI is channeled to the oil sectors (that are capital intensive and have a limited value-added), they do not generate jobs or lead to any technology transfer. Investing in the manufacturing sector (especially in high-value added products) will lead to more job creation and, hence, more inclusiveness. Second, technology transfer will help firms integrate into GVCs, building trust between the firms on either side of the Mediterranean. This is also related to the development of clusters that should attract foreign investors, such as technopoles in Tunisia. Indeed, thanks to these clusters, the aerospace industry in Tunisia has experienced obvious expansion, with 81 internationally renowned companies (e.g. LATECOERE Group, SABENA TECHNICS, ZODIAC AEROSPACE) employing more than 17000 people. They specialise in activities with high value added, ranging from software/hardware engineering to the production of aircraft systems. Nearly 70% of total production is exported to the EU.

Second, improving workers' skills will help Southern economies integrate into GVCs. Indeed, more GVCs will increase the demand for skilled workers, in order to face fierce competition from international markets. Considering that most products exported from the Southern shores of the Mediterranean are intensively dependent on skilled blue-collar workers, the lack of any serious steps towards enhancing the quality of vocational training is likely to offset any trade and investment policy initiatives and to limit their outcome. This is why strengthening partnerships between business, government and academia will improve the provision of skills, boost on-the-job training and the provision of quality apprenticeships. Moreover, vocational trainings with double degrees (such as the Donbosco, an Italian-Egyptian technical school) can be useful for two reasons. First, they can raise the prestige of vocational work, since they are not well perceived at the social level in Arab countries. Second, they will improve the quality of Vocational Education and Training (VET), leading to enhanced skills matching for the needs of exporting sectors in the context of GVCs. Another important and useful stepping stone for these Southern shore countries to consider is the recognition of qualification and skills through bilateral agreements and in-house secondments between countries, in order that workers can benefit from international experiences which, in turn, will improve their skill base..

Third, improving the infrastructure and business environment (in terms of licences, business permits, red tape cost etc) will improve firms' total productivity (Seleem and Zaki, 2018) helping them export and, hence, become more eligible for GVC integration. Indeed, as it was highlighted by Rodrik (2018), we should rely more on "domestic integration". The latter means improving the capabilities and fundamentals of the economy through investment in human capital, the business environment and governance. Thus, more efforts should be deployed to strengthen the connection between highly productive global firms, potential local suppliers, and the domestic labour force. This cannot take place without improving the business environment in order to facilitate such integration. The European Investment Bank can play a crucial role in fostering physical infrastructure through cross-border projects (roads and ports), Moreover, it can seek public-private partnerships (PPP) to support this process, with a special focus on technological infrastructure, to boost e-commerce via block chains and other technologies.

Finally, there is huge potential between the two shores of the Mediterranean for two reasons. First, geographical proximity remains an important determinant of the emergence of regional value chains, as in the case of the Germany-Poland and US-Mexico couplings. Second, the two regions have impressive complementary differentials, in terms of know-how and wages, demography, as well as their endowment of resources. .

Hence, these recommendations will help avoid "business as usual" where the regional integration between the two shores of the Mediterranean remains limited and shallow. Instead, they advocate a more profound, more complementary and mutually-beneficial integration. This will lead to a region deeply integrated in terms of both goods and services within a regional/global value chain that is supported by an appropriate infrastructure (physical, digital) and an adequately skilled labour force. Consequently, this will satisfy the characteristics of deeper integration, which is innovative (relying on e-commerce, blockchains and supply chain connectivity), sustainable (sustainable cooperation and efficiency gains in the supply chain) and inclusive (improved skills for blue collars).

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EMNES areas of research include the role of institutions and institutional reforms, macro-economic policies, private sector and micro, small and medium sized enterprises and employment creation, role of education, innovation, skill mismatch and migration, finance, regulation and the real economy and regional integration.

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