

## **FEMISE**

## **COMMISSIONED PAPER**

# "Analysis of International Integration in the South Med Countries"

Directed by: Dr. Michael Gasiorek (University of Sussex & InterAnalysis, UK)

With Contributions by:

Dr. Michael Gasiorek (University of Sussex & InterAnalysis, UK) Rita Caputo (InterAnalysis, UK; University of Salerno, Italy)

January 2018



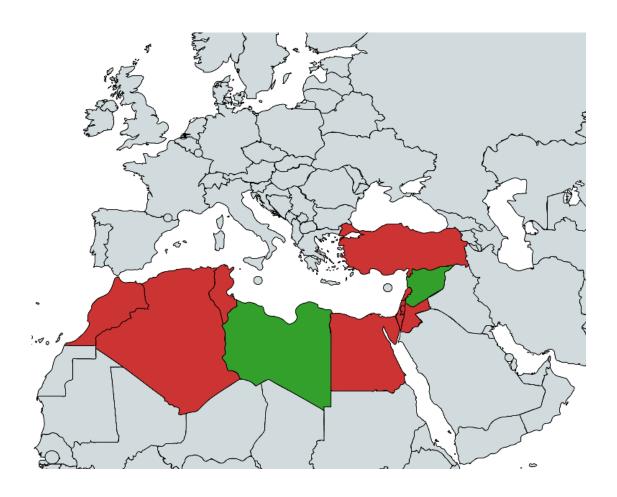
Ce rapport a été réalisé avec le soutien financier de l'Union Européenne dans le contexte du projet UE-FEMISE sur: "Support to economic research, studies and dialogue of the Euro-Mediterranean Partnership". Le contenu du rapport relève de la seule responsabilité des auteurs et ne peut en aucun cas être considéré comme reflétant l'opinion de l'Union Européenne.

This document has been produced with the financial assistance of the European Union within the context of the EU-FEMISE project "Support to economic research, studies and dialogue of the Euro-Mediterranean Partnership".. The contents of this document are the sole responsibility of the authors and can under no circumstances be regarded as reflecting the position of the European Union.

# Mediterranean Countries

## **REPORT**

MICHAEL GASIOREK AND RITA CAPUTO



## Contents

Introduction	4
Methodology and data	4
Preliminary Overview	6
Exports and export performance	6
Intra-regional trade	7
Trade Concentration Index	9
New products and partners exported	10
Technological level of exports	12
Algeria	14
Overview of Algeria's Exports	14
HS-2 digit level trade	15
HS-6 digit trade (excluding Mineral Fuels)	16
Revealed Comparative Advantage (without Mineral Fuels)	17
Similarity of Algeria's exports with the comparator countries	18
Diversification of exports	18
Technological level of exports	20
Analytical Table (without Mineral Fuels)	21
Egypt	23
Overview on Egypt's exports	23
Composition of trade	24
HS - 2 digit	24
HS - 6 digits	25
Revealed comparative advantage	26
KFI indicators – common destination	27
Diversification of exports: TCI	27
Technological level of exports	29
Analytical Table	30
Israel	32
Overview on Israel's exports	32
HS - 2 digit level trade	33
HS - 6 digits level trade	34
Revealed comparative advantage	35
Similarity of Israel's exports with the comparator coutnries	36

Diversification of exports	36
Technological level of exports	38
Analytical Table	39
Jordan	41
Overview on Jordan's exports	41
HS-2 digit level trade	42
HS - 6 digits level trade	43
Revealed comparative advantage	44
Similarity of Jordan's exports with the comparator countries	45
Diversification of exports	45
Technological level of exports	47
Analytical Table	48
Lebanon	50
Overview of Lebanon's Exports	50
HS-2 digit level trade	51
Revealed comparative advantage	53
Similarity of Lebanon's exports with the comparator countries	54
Diversification of exports	54
Technological level of exports	56
Analytical Table	57
Morocco	59
Overview of Morocco's Exports	59
HS-2 digit level trade	60
HS-6 digit level trade	61
Revealed comparative advantage	62
Similarity of Morocco's exports with the comparator countries	63
Diversification of exports	63
Technological level of exports	65
Analytical Table	65
Palestine (West Bank and Gaza)	68
Overview of Palestine's Exports	68
HS-2 digit level trade	69
HS-6 digit trade	70
Revealed comparative advantage	71
Similarity of Palestine's exports with the comparator countries	72
Diversification of exports	72

Technological level of exports	74
Analytical Table	75
Tunisia	77
Overview of Tunisia's Exports	77
HS-2 digit level trade	78
HS - 6 digits trade	79
Revealed comparative advantage	80
Similarity of Algeria's exports with the comparator countries	81
Diversification of exports	81
Technological level of exports	83
Analytical Table	84
Turkey	86
Overview of Turkey's Exports	86
HS-2 digit level trade	87
HS-6 digit trade	88
Revealed Comparative Advantage	
Similarity of Turkey's exports with the comparator countries	90
Diversification of exports	
Technological level of exports	92
Analytical Table	93
Appendix	
1. Cluster Analysis	
2. Analytical Tables: list of Missed Opportunities	
a. Algeria's analytical table (without Mineral Fuels)	
b. Egypt's Analytical Table	
c. Israel's Analytical Table	
d. Jordan's Analytical Table	102
e. Lebanon's Analytical Table	
f. Morocco's Analytical Table	
g. Palestine's Analytical Table	
h. Tunisia's Analytical Table	
i. Turkey's Analytical Table	107

### Introduction

The aim of this report is to provide an analytical overview of the trade and international engagement of the southern Mediterranean countries. The questions which we address concern.

## Methodology and data

The countries analysed in this report are: Algeria, Egypt, Israel, Jordan, Lebanon, Morocco, West Bank and Gaza, Tunisia and Turkey. Geographically 8 of our countries are in the Middle East & North Africa region, while Turkey is in the Europe and Central Asia region.

Table 1 below classifies the Mediterranean countries by income group according to 2015 gross national income (GNI) per capita, calculated using the World Bank Atlas method. 1 It shows also the GDP per capita in current US\$, in 20152. Four of these countries are classified as lower middle income countries, four are classified as upper middle income countries, and one is a high income country.

Table 1: Classification of countries by income status

Country	Income group	GDP per capita (current US\$)	GDP (current US\$ Billion)
West Bank and Gaza	Lower middle income	2,866.80	13.40
Jordan	Upper middle income	4,940.05	38.65
Tunisia	Lower middle income	3,822.36	42.06
Lebanon	Upper middle income	8,047.65	47.54
Morocco	Lower middle income	2,878.20	101.45
Algeria	Upper middle income	4,154.12	156.08
Israel	High income	35,729.37	318.74
Egypt, Arab Rep.	Lower middle income	3,614.75	336.30
Turkey	Upper middle income	9,125.69	857.75
European Union average		32017.85	32,017.85

In analysing the changing patterns of trade we compare the performance of the Southern Mediterranean with comparator country groups. In turn this requires an appropriate selection of comparator countries. For this we undertake a cluster analysis which groups countries according to a set of criteria. For this the criteria we used were: Political Stability and absence of violence and terrorism, fuel exports as a % of merchandise exports, GDP per capita, inflation, female labour force participation rate, and trade in services as a % of GDP. The data for the cluster analysis comes from

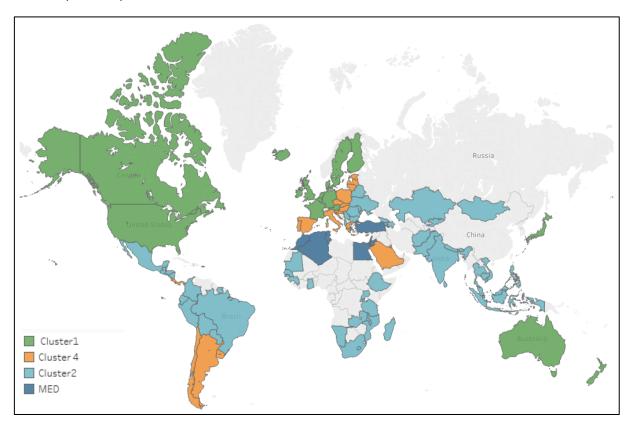
Data source: <a href="http://data.worldbank.org/indicator/NY.GDP.PCAP.CD">http://data.worldbank.org/indicator/NY.GDP.PCAP.CD</a>
For EU GDP: <a href="http://data.worldbank.org/region/european-union">http://data.worldbank.org/region/european-union</a>

<sup>&</sup>lt;sup>1</sup>World Bank list of economies (March 2017). The groups are: low income, \$1,025 or less; lower middle income, \$1,026–4,035; upper middle income, \$4,036–12,475; and high income, \$12,476 or more.

<sup>&</sup>lt;sup>2</sup>GDP per capita is gross domestic product divided by mid year population. Data are in current U.S. dollars.

the World Bank WDI database<sup>3</sup>, and a detailed description of the methodology can be found in the Appendix to this report.

The clustering analysis results in four groups of countries, and the division of countries by cluster can be seen in the map below. The full list of countries in each cluster is given in the Appendix to this report. All the Mediterranean countries which we focus on in this report are all contained in the 2<sup>nd</sup> cluster (identified in blue), except for Israel, which is contained in the 1<sup>st</sup> cluster. Geographically the 2<sup>nd</sup> cluster is broad and therefore for the purposes of the comparative analysis we subdivide this cluster into the following regions: East Asia and Pacific (EAP), Europe and Central Asia (ECA), Latin America and Caribbean (LAC), South Asia (SA), and Sub-Saharan Africa (SSA). In selected tables we also compare the performance of the Mediterranean countries with Clusters 1 and 4.



<sup>&</sup>lt;sup>3</sup>http://databank.worldbank.org/data/databases.aspx?orderby=alphabetical&direction=desc

<sup>&</sup>lt;sup>4</sup> Note that we exclude the third cluster from the map as this is not used in the subsequent analysis. The countries in grey were excluded from the clustering analysis due to a lack of data. The map was produced using Tableau software.

<sup>&</sup>lt;sup>5</sup> Small Island Developing States are excluded from the analysis.

## **Preliminary Overview**

In this part of the report we provide some comparator statistics for all the Mediterranean countries considered in this report as well as all the comparator country groups. In the subsequent sections of the report we go into more detail with regard to each of the Mediterranean countries.

### **Exports and export performance**

Table 2 below provides some summary information on export structure and export performance, where: % *Export* gives the share of each country or country group in total world exports in 2015<sup>6</sup>; *AAGR* is the average annual growth rate in each country's exports over the period 2010 to 2015; *AAGR* (*excl. Fuels*) is the average annual growth rate for each country excluding the exports of fuels corresponding to Chapter 27, of the HS classification; *Export share to the EU* is the share of the total exports of each single country that goes to the EU market; and  $\triangle$  *export share to the EU* gives the change in the export shares going to the EU market in over the period 2010-2015.

Table 2: Export Structure for selected countries / country groups

	% Export in 2015	AAGR 2010 - 2015	AAGR (excl. Fuels) 2010 - 2015	Export share to the EU27 in 2015	Δ export share to EU 27 (2010-2015)
MED countries					
Algeria	0.24%	-6.49%	11.13%	66.24%	17.14%
Egypt	0.15%	-2.93%	-0.37%	27.25%	-3.14%
Israel	0.43%	2.04%	2.06%	25.27%	-1.02%
Jordan	0.05%	2.86%	3.09%	2.51%	-1.19%
Lebanon	0.02%	-5.70%	-5.96%	11.18%	-6.70%
Morocco	0.15%	4.90%	5.13%	63.37%	3.56%
Palestine	0.01%	19.01%	18.99%	2.08%	-0.36%
Tunisia	0.10%	-2.70%	-1.29%	74.63%	1.47%
Turkey	0.97%	5.21%	5.34%	44.49%	-2.82%
Country Groups					
Cluster1	40.20%	0.76%	0.79%	41.48%	-1.11%
Cluster2-EAP	4.06%	5.33%	6.50%	13.14%	0.89%
Cluster2-ECA	1.53%	0.93%	2.34%	54.26%	5.39%
Cluster2-LAC	4.71%	2.74%	3.96%	10.05%	-2.03%
Cluster2-SA	2.02%	4.90%	5.65%	18.27%	-1.71%
Cluster2-SSA	0.70%	-0.26%	-0.80%	21.26%	-1.36%
Cluster4	12.23%	1.73%	2.41%	54.45%	2.57%
WORLD	100%	1.98%	2.84%	33.60%	-3.15%

Notes: EAP - East Asia & Pacific; ECA - Europe & Central Asia; LAC – L. America & Caribbean; SA - South Asia: SSA - Sub-Saharan Africa.

The first column in good part reflect country size and shows the wide differences in the share of world exports each country accounts for, with Turkey representing nearly 1% of world trade and Palestine around 0.1% of world trade. In terms of the annual average growth of exports over 2010-2015 we again see wide divergences with four countries (Algeria, Egypt, Lebanon and Tunisia)

-

<sup>&</sup>lt;sup>6</sup> For Lebanon the year is 2014.

experience an average annual decline. We also see the substantial increase in the average annual growth in the exports of Palestine of nearly 20%. In contrast all of the other Cluster 2 countries, other than Sub-Saharan Africa, experienced a positive annual average growth in exports, with the highest rates for the East Asian and Pacific countries (5.33%) and Southern Asia (4.9%). Only two of the Mediterranean countries experience higher rates of growth and these were Turkey and Palestine. The pattern of changes is very similar for most countries if we exclude fuel exports, except for Algeria which now experiences a much more substantial increase in (non-oil) exports of 11.13%. Egypt sees a smaller fall in exports than previously.

In terms of trade relations with the EU several interesting messages emerge. First we see considerable variation in the share of exports going to the EU with the share being greater than 60% for three countries (Algeria, Morocco and Tunisia), while being less than 3% for Jordan and Palestine. In contrast among the 2<sup>nd</sup> cluster countries the highest average share of trade with the EU is for the Europe and Central Asian countries (54.26%), followed by Sub-Saharan Africa (21.26%). Second for six of the Mediterranean countries we see a shift away in the relative importance of the EU as a destination market for their exports, while for Algeria, Morocco and Tunisia we see the increased importance of the EU. In comparison for the Cluster 2 countries three groups (LAC, SA, and SSA) saw a reorientation away from the EU, while two groups saw the growing importance of the EU as a destination and notably for the Europe and Central Asian Countries.

## **Intra-regional trade**

We now consider the geographical direction of trade, and changes in intra-regional trade between 2010 and 2015. The top panel of Table 3 gives the share of trade going to different regions in 2010, and the bottom panel for 2015. Note that there is overlap between some of the columns. Hence the first column separately identifies the EU, and most of the EU countries also appear in cluster 1. Similarly, the second column is the sum of the nine Mediterranean countries which form the focus of this report, and four of these countries also the Agadir Agreement countries. Hence the last four columns of the table are mutually exclusive groups.

The relative importance of the EU as a destination has already been discussed, and this is replicated in the first column. The second column identifies the relative significance of the entire group of Mediterranean countries, and the third column the sub-group of Agadir countries. Each of these therefore captures intra-regional trade. It is worth identifying that intra-regional trade for clusters 1, 2, and 4 in 2015 was 50%, 14.4% and 19.5% respectively and these intra-regional shares changed very little since 2010. In contrast, and other than for Palestine and Egypt we see that the share of intra-regional trade is lower than the average for the other cluster 2 countries, and even more so when comparing with cluster 1 and cluster 4. As already noted the average cluster 2 intra-regional trade share scarcely changed over the six year period, whereas for three of the Mediterranean countries (Algeria, Egypt, and Morocco) the share of intra-Med trade increased by between 2-3% percentage points. For Jordan and Lebanon the share of intra-Med trade declined.

**Table 3: Intra-regional Trade** 

	Intra-regional Trade in 2010					
	%EU	%MED	%AGADIR	%Cluster1	%Cluster2	%Cluster4
MED countries						
Algeria	49.10%	7.77%	2.98%	51.07%	7.36%	28.49%
Egypt	30.34%	12.33%	5.01%	20.10%	10.44%	24.43%
Israel	26.29%	2.84%	0.59%	53.57%	11.51%	8.32%
Jordan	3.69%	11.31%	2.72%	18.22%	19.55%	13.94%
Lebanon	18.05%	13.60%	7.83%	16.63%	11.83%	11.16%
Morocco	59.74%	4.55%	1.65%	40.67%	14.86%	25.62%
Palestine	2.41%	89.29%	8.19%	4.28%	0.08%	2.57%
Tunisia	73.20%	6.33%	2.04%	49.93%	4.74%	25.86%
Turkey	47.12%	7.38%	3.65%	32.75%	12.01%	17.97%
Country Groups						
Cluster1	43.21%	2.54%	0.78%	50.19%	10.25%	13.14%
Cluster2	19.07%	2.66%	0.76%	43.12%	13.50%	10.16%
Cluster4	51.83%	4.00%	1.48%	39.12%	8.34%	18.61%

	Intra-Regional Trade in 2015					
	%EU	%MED	%AGADIR	Cluster1	Cluster2	Cluster4
MED countries						
Algeria	66.24%	10.99%	5.75%	39.16%	6.29%	37.06%
Egypt	27.21%	15.72%	4.88%	21.29%	9.25%	25.38%
Israel	25.05%	3.02%	0.37%	50.42%	11.42%	6.15%
Jordan	2.53%	9.32%	1.97%	23.38%	12.75%	21.95%
Lebanon	11.09%	12.38%	7.07%	10.15%	13.24%	17.60%
Morocco	63.36%	6.11%	1.75%	37.73%	13.95%	30.97%
Palestine	1.57%	90.84%	6.35%	2.28%	0.05%	3.40%
Tunisia	74.57%	6.78%	1.85%	50.18%	3.40%	26.71%
Turkey	44.32%	7.96%	4.25%	33.00%	11.16%	17.11%
Country Groups						
Cluster1	41.11%	2.50%	0.70%	50.00%	11.05%	12.81%
Cluster2	18.12%	2.68%	0.88%	45.05%	14.37%	9.44%
Cluster4	54.27%	4.60%	1.67%	42.08%	8.61%	19.46%

Notes: Cluster 2 in this table is not divided into sub-regions, but excludes the Mediterranean countries; data for Lebanon is 2014. Notes: EAP - East Asia & Pacific; ECA - Europe & Central Asia; LAC – L. America & Caribbean; SA - South Asia: SSA - Sub-Saharan Africa.

## **Trade Concentration Index**

Also of interest is the degree of export concentration of the Mediterranean Countries and the cluster country groups, both from the point of view of the number of exports destinations and also from the point of view of the number of products/sectors being exported.

In order to do this analysis we use the Trade Concentration Index, calculated over 6 years, from 2010 to 2015. The TCI, indeed, can be used to investigate the degree of concentration of a given country's exports in terms of the number of different products exported (TCI by product) or in term of the number of trade partners (TCI by country). When the TCI=1 the country is exporting only a single product, or to a single partner. The closer the TCI approaches to 0 the more diversified is the export structure either by product or partner country.

- **TCI by product:** We calculate the index at 6 digit level<sup>7</sup>. We take into consideration as partner country the World and the European market.
- TCI by country: We calculate the index taken into consideration all the country in the World. In the single countries analysis we will also choose a selected number of countries. In particular we choose the top partners by exports, which account for more than 90% of each single country's total exports.

In terms of diversification of products the most diversified groups are the primarily high income countries in cluster 1, as well as the East Asia and Pacific cluster 2 group of countries. All of the Mediterranean countries, except for Turkey have a more concentrated export structure in 2015. Other than Turkey the greatest degree of product diversification among the Mediterranean countries can be seen for Egypt and Tunisia where the degree of diversification is similar to that in the other cluster 2 country groups. The least diversified countries are the Europe and Central Asia countries, with similar or lower levels of diversification in Algeria, Israel, Jordan, and Palestine.

All of the comparable cluster 2 country groups see an increase in diversification except for the East Asia and Pacific countries where there was no change. Six of the Mediterranean countries also see an increase in diversification while three (Israel, Jordan and Turkey) see a decline and therefore some move towards more specialisation.

Consistent with the discussion of Table 3, we see a high degree of variation in the trade concentration by destination, with Palestine showing a very highly concentrated geographical orientation of their export in 2015, and with a relatively high concentration for Algeria, Israel, Morocco and Tunisia. This is no doubt driven by the concentration of these countries' trade with the EU. The Mediterranean countries which are most diversified are Egypt and Lebanon. Out of the Mediterranean countries four of them experience an increase in geographical diversification most notably for Algeria and Turkey, while the remaining countries saw a modest (except for Palestine) decline in geographical diversification.

9

<sup>&</sup>lt;sup>7</sup> The TCI is sensitive to the level of aggregation. The lower is the number of products the higher will be its value.

Table 4: Trade concentration by country and cluster country groups

		TCI by p	TCI by co	ountries		
	Wo	rld	EU27 M	EU27 Members		rtners
	2010	2015	2010	2015	2010	2015
MED country						
Algeria	0.253	0.199	0.238	0.283	0.114	0.093
Egypt	0.024	0.017	0.044	0.032	0.034	0.036
Israel	0.066	0.074	0.029	0.045	0.120	0.106
Jordan	0.033	0.040	0.082	0.076	0.085	0.098
Lebanon	0.051	0.020	0.201	0.028	0.056	0.051
Morocco	0.024	0.022	0.020	0.026	0.094	0.102
Palestine	0.051	0.033	0.139	0.185	0.635	0.709
Tunisia	0.026	0.017	0.035	0.024	0.140	0.142
Turkey	0.006	0.008	0.010	0.010	0.114	0.093
Country group						
Cluster1	0.005	0.005	0.005	0.005	0.041	0.043
Cluster2-EAP	0.008	0.008	0.009	0.023	0.060	0.059
Cluster2-ECA	0.060	0.032	0.102	0.052	0.050	0.046
Cluster2-LAC	0.023	0.012	0.025	0.022	0.234	0.285
Cluster2-SA	0.024	0.015	0.026	0.007	0.045	0.049
Cluster2-SSA	0.013	0.010	0.021	0.020	0.039	0.033
Cluster4	0.021	0.012	0.004	0.004	0.047	0.044

Notes: EAP - East Asia & Pacific; ECA - Europe & Central Asia; LAC – L. America & Caribbean; SA - South Asia: SSA - Sub-Saharan Africa.

## New products and partners exported

In the preceding sub-section we examined the change in diversification either by product or by country. Change in diversification can either take place because of changes in the shares of *existing* products, or markets, or could take place because of exporting new products and/or to new markets. Identifying the extent to which countries may be engaged in trade in new product or to new markets is one way of shedding light on the structural changes which may be driving the dynamics of trade.

We consider these issues in Table 5 below which for each country gives the number of new products being exported, or the number of new partner countries being exported to. In each case we take the top 200 products exported in the most recent year, and compare this to the top 200 exported in 2010.<sup>8</sup>

The first column of the table undertakes the analysis on exports to the world. The second column of the table replicates this on exports to the EU; and the third column then identifies the number of common new products which are being exported to both the EU and the World. Hence if you take the first row of the table, for Algeria there were 104 new products being exported to the world in comparison to 2010, and 117 new products to the EU. Out of these two lists of products there are 42

-

<sup>&</sup>lt;sup>8</sup> The latest year for which data was available was: Algeria, 2015; Egypt, 2016; Israel, 2016; Jordan, 2016; Lebanon, 2014; Morocco, 2016, Palestine, 2015; Tunisia, 2015; Turkey, 2016.

common products – ie new products being exported to both the world and the EU. The final column of the table gives the number of new partners.

**Table 5: New Products and Partners** 

	NEW PRODUCTS (2010 to latest year available)			NEW PARTNERS
	World	EU27	World&EU27	
MED country				
Algeria	104	117	42	34
Egypt	63	81	28	5
Israel	59	72	33	1
Jordan	75	117	19	13
Lebanon	49	88	14	8
Morocco	54	57	36	18
Palestine	94	180	10	14
Tunisia	56	53	22	11
Turkey	39	48	11	4
Country group			•	
Cluster1	29	40	14	3
Cluster2-EAP	74	88	21	3
Cluster2-ECA	68	61	31	4
Cluster2-LAC	42	50	8	3
Cluster2-SA	58	56	18	3
Cluster2-SSA	55	57	11	3
Cluster4	30	35	15	3

Notes: EAP - East Asia & Pacific; ECA - Europe & Central Asia; LAC – L. America & Caribbean; SA - South Asia: SSA - Sub-Saharan Africa

This table is interesting in several regards. First, overall the table underlines the high degree of change in the composition of countries' exports. Hence, even for the cluster 1 countries there were 29 new products (out of 200) being exported to the world in comparison to 2010, and 40 new products to the EU. Out of the cluster 2 sub-groups the biggest changes over this time period were for the East Asia and Pacific group of countries, followed by the Europe and Central Asian countries. Compared to the EAP countries most of the Mediterranean countries (except Algeria, Jordan and Palestine) saw smaller changes in new products being exported to both the World and the EU. In contrast, however, when we look at the third column for most of the cluster 2 countries, and even more so for the cluster 1 and cluster 4 countries the number of common product is typically lower than is the case for the Mediterranean countries. This suggests that the Mediterranean countries have more of a tendency to export the same products to the EU and the World, in comparison to the other countries.

The final column of this table is also informative in that it shows a very high degree of stability for the comparator cluster 2 countries, and the cluster 1 and 4 countries in terms of the countries being exported to, whereas for five of the Mediterranean countries (Algeria, Jordan, Morocco, Palestine, Tunisia) the changes are significantly greater. So while in terms of the aggregate degree of geographical diversification as given by the TCI index we saw little change for Morocco and Tunisia, we see that this masks the fact that these two countries respectively exported to 18 and 11 new markets in the most recent year.

## **Technological level of exports**

The final table in this section of the report compares the trade across countries and country groups by level of technological intensity. The products are divided into "High", "Medium-high", "Medium-low" and "Low" technology. The "Unallocated" column shows the percentage of trade which is not allocated to any of the four classes.

Table 6: Trade by Technological Intensity for the most recent year

	Unall.	High	Med-high	Med-low	Low		
MED country	MED country						
Algeria	68.9%	0.0%	4.5%	26.0%	0.6%		
Egypt	23.7%	5.2%	18.4%	25.1%	27.6%		
Israel	6.8%	36.9%	20.5%	7.7%	28.2%		
Jordan	22.8%	8.4%	25.8%	8.4%	34.6%		
Lebanon	13.3%	3.4%	24.0%	22.3%	36.9%		
Morocco	15.9%	4.5%	43.7%	6.1%	29.7%		
Palestine	17.8%	2.5%	6.0%	36.1%	37.7%		
Tunisia	8.8%	11.0%	33.3%	10.4%	36.5%		
Turkey	7.1%	3.4%	29.3%	27.7%	32.4%		
Country Group							
Cluster1	9.5%	20.0%	39.3%	16.8%	14.4%		
Clust2-EAP	13.2%	22.4%	20.9%	11.5%	32.0%		
Clust2-ECA	29.4%	4.3%	22.3%	25.2%	18.8%		
Clust2-LAC	24.5%	14.0%	31.9%	12.5%	17.1%		
Clust2-SA	6.9%	8.5%	18.5%	24.7%	41.5%		
Clust2-SSA	30.1%	3.0%	19.9%	33.0%	14.0%		
Cluster4	15.7%	10.2%	33.7%	19.6%	20.8%		

Notes: EAP - East Asia & Pacific; ECA - Europe & Central Asia; LAC – L. America & Caribbean; SA - South Asia: SSA - Sub-Saharan Africa

In the table in bold we identify the category (other than unallocated) which accounts for the highest share of trade for each country. From this we see that for six of the Mediterranean countries (Egypt, Jordan, Lebanon, Palestine, Tunisia and Turkey) low-technology exports are their most significant export category, and this is also the case for the East Asia and Pacific cluster 2 group of countries as well as for the South Asian group cluster 2 group of countries. The other three Mediterranean countries are all somewhat different in their specialisation by technological intensity. Israel is more specialised in high-technology goods and more so than both the cluster 1 and cluster 4 country groups as well. Morocco is relatively specialised in medium-high technology exports which account for nearly 44% of exports, while Algeria's has 26% of exports in the medium to low category (though one needs to bear in mind that nearly 70% of Algeria's trade is unallocated).

12

<sup>&</sup>lt;sup>9</sup> This classification is base on the OECD's STAN industry list. http://www.oecd.org/sti/ind/stanstructuralanalysisdatabase.htm

## **Algeria**

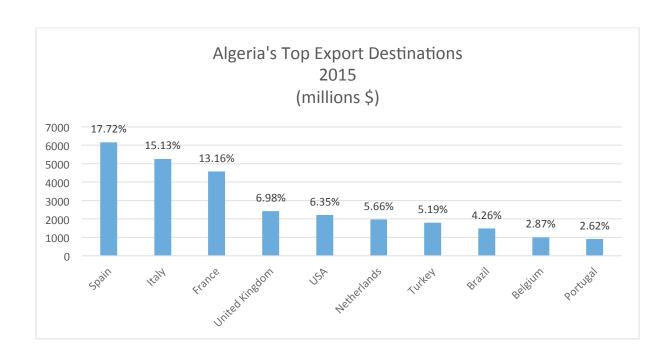
## **Overview of Algeria's Exports**

Year	Total Export (\$B)	%EU
2010	57.05	49.1%
2011	73.44	50.8%
2012	71.87	55.3%
2013	66.00	65.0%
2014	60.39	63.9%
2015	34.80	66.2%

Algeria's exports account for 0.24% of World exports. From the table it can be seen that while there was an increase in exports between 2010 and 2011, subsequently Algeria's exports saw a decline, with a contraction of more than 42% between 2014 and 2015. During the last five years the exports of Algeria have decreased at an Average Annual Rate of Growth of -6.5%, from \$57.05B in 2010 to \$34.80B in 2015.

We can see that the EU market is the most important destination for Algeria's exports. In 2015 more than 66% of its total exports went to the European market – with an increase in the export share of more than 17% over the last 6 years.

In 2015 the top export destinations for Algeria were Spain (17.72%), Italy (15.13%) and France (13.16%). The top 10 list of destination countries, alone account for almost 80% of Algeria's total exports, and 9 out of 10 of these destinations are European countries. Over the last 5 years the list of Algeria's top export destinations has changed little, with the declining importance of Canada, and a significant decrease in exports to the USA, which dropped from \$15.03B in 2011 to \$2.21B in 2015.



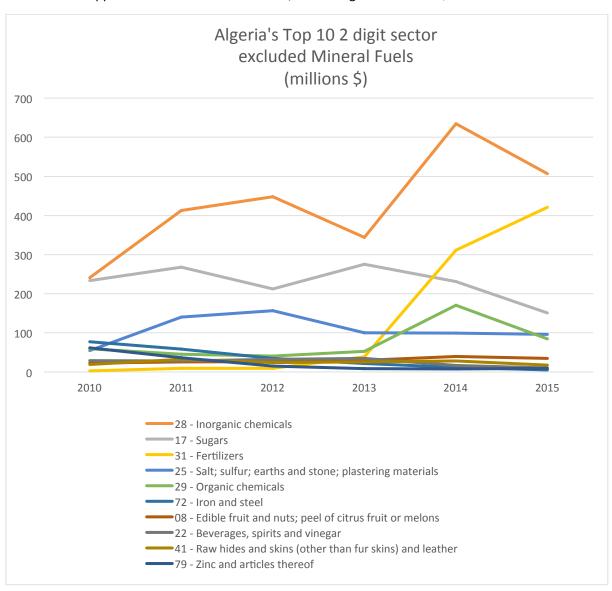
## **HS-2 digit level trade**

	27 - Mineral fuels				
Year	Export	Export			
	value	share			
	(\$B)				
2010	56.09	98.31%			
2011	72.21	98.33%			
2012	70.72	98.40%			
2013	64.90	98.34%			
2014	58.71	97.23%			
2015	33.35	95.84%			

In terms of the composition of trade, Algeria's exports are dominated by the "Mineral fuels, mineral oils and products of their distillation" (HS27), which represent over 95% of Algerian exports. Once again we see a deep contraction of exports from 2011.

The chart below identifies Algeria's top exports excluding HS Chapter 27 over the last 5 years. We see that Algeria's top exported products on average were *Inorganic chemicals*, whose exports increased by nearly 85% between 2013 and 2014; and Fertilizers, whose exports increased in the last 5 years with an annual rate of 177% - going from \$2.59B in 2010 from \$420.99B in 2015. The biggest growth in export

of fertilizers happened between 2013 and 2014, increasing of more than \$272B.



## **HS-6 digit trade (excluding Mineral Fuels)**

At a more disaggregated level we see the top 20 Algeria's exported products in 2015, at the 6-digit level in the table below.<sup>10</sup> Note that while the average annual growth rate of exports for these 20 products was 18.5%, this masks considerable variation. Six of the top 20 products saw an annual average decline in exports while four of the products saw a rate of growth in excess of 100%. We also see the significance of the EU as a destination. For eight of the top 20 products the share of exports going to the EU is greater than 80%.

Product Code	Product Name	2015Export Value (millions \$)	Export share to the World	AAGR	2015 export share to the EU
310210	Urea, whether or not in aqueous sol	418.8	1.20%	698.77%	87.01%
281410	Anhydrous ammonia	251.91	0.72%	142.02%	100.00%
281420	Ammonia in aqueous solution	226.88	0.65%	137.74%	72.03%
170199	Cane/beet sugar & chemically pure s	150.41	0.43%	-5.24%	13.75%
251020	Natural calcium phosphates, nat. al	95.65	0.27%	34.62%	47.63%
080410	Dates, fresh/dried	34.8	0.10%	9.86%	57.13%
290511	Methanol (methyl alcohol)	29.4	0.08%	5.64%	99.99%
280429	Rare gases other than argon	27.38	0.08%	-2.91%	87.39%
290220	Benzene	22.17	0.06%	-5.94%	82.22%
290244	Mixed xylene isomers	14.4	0.04%	-11.45%	34.97%
290243	p-Xylene	14.03	0.04%	-	0.00%
790111	Zinc, not alloyed, unwrought, cont.	9.09	0.03%	21.23%	100.00%
700529	Float glass & surface ground/polish	8.95	0.03%	-12.57%	9.16%
410411	Tanned/crust hides & skins of bovin	7.55	0.02%	73.02%	67.43%
180400	Cocoa butter, fat & oil	7.42	0.02%	44.33%	100.00%
890190	Vessels for the tpt. of gds. & for	5.86	0.02%	30.88%	0.00%
470790	Recovered (waste & scrap) paper/pap	5.24	0.02%	40.27%	32.92%
220210	Waters, incl. min. waters & aerated	4.95	0.01%	16.78%	35.02%
880330	Parts of aeroplanes/helicopters, ot	4.78	0.01%	223.11%	1.84%
220290	Non-alcoholic beverages other than	4.57	0.01%	-20.18%	12.19%
Grand total		1,344.25	3.86%	18.45%	72.08%

Notes: The product description has been shortened to 35 characters for purposes of legibility.

<sup>&</sup>lt;sup>10</sup> If we were to include Mineral Fuels then 9 of of the top 20 products would come from Chapter 27 with the most important being Petroleum oils (270900), and Natural gas, in gaseous state (271121), which alone account for almost 55% of Algeria's total exports, and they are mostly exported to the European market.

## **Revealed Comparative Advantage (without Mineral Fuels)**

In the following table we give the normalized revealed comparative advantage<sup>11</sup> (nRCA) for Algeria's top 20 exported products (calculated excluding Chapter 27 Mineral Fuels) for the latest available year (2015). The products are ranked by degree of revealed comparative advantage, and where below the double line in the table Algeria has a negative revealed comparative advantage. The three biggest export sectors are identified in red. We also give the normalized revealed comparative advantage for each of our the comparator country other country groups. In bold we identify the country-product combinations which also have a positive nRCA, and the purpose of this is to see which country groupings are most likely to compete with Algeria by product.

		N	ORMALI	IZED RCA	- 2015				
Code	Product Name	Algeria	C1	C2 EAP	C2 ECA	C2 LAC	C2 SA	C2 SSA	C4
281420	Ammonia in aqueous	0.993	-0.422	-0.956	-0.359	-0.991	-0.470	-0.528	-0.477
251020	Natural calcium phos	0.965	-0.800	-0.518	0.245	-0.829	-0.729	0.726	-0.951
310210	Urea, whether or not	0.878	-0.553	-0.233	0.566	-0.917	-0.999	-0.099	0.131
080410	Dates, fresh/dried	0.876	-0.474	-0.999	-0.856	-0.722	0.622	-0.003	0.104
281410	Anhydrous ammonia	0.871	-0.293	0.191	0.442	-0.900	-0.982	-0.849	0.225
280429	Rare gases other tha	0.836	0.299	-0.946	0.309	-0.846	-0.779	-0.559	-0.495
170199	Cane/beet sugar & ch	0.707	-0.271	0.553	0.578	0.654	0.700	0.116	-0.165
290244	Mixed xylene isomers	0.684	0.288	0.073	-1.000	-0.121	-0.997	-0.876	-0.921
290511	Methanol (methyl alc	0.383	-0.269	-0.493	-0.051	-0.984	-0.801	-0.855	0.322
700529	Float glass & surfac	0.237	-0.003	0.095	0.560	-0.190	-0.737	-0.395	-0.187
290220	Benzene	0.174	-0.053	0.244	-0.236	-0.286	0.590	-0.994	-0.447
410411	Tanned/crust hides &	0.077	0.074	-0.837	0.333	0.753	-0.962	0.685	-0.073
470790	Recovered (waste & s	-0.003	0.295	-0.672	-0.158	-0.355	-0.351	-0.667	-0.207
180400	Cocoa butter, fat &	-0.254	0.116	0.573	-0.523	0.081	-0.392	-0.995	-0.671
790111	Zinc, not alloyed, u	-0.287	0.001	-0.981	0.717	0.300	0.637	0.419	0.029
290243	p-Xylene	-0.361	-0.139	-0.142		-0.889	0.370	-0.998	-0.562
220210	Waters, incl. min. w	-0.553	0.261	-0.363	0.099	-0.012	-0.937	0.234	-0.007
220290	Non-alcoholic bevera	-0.683	0.030	0.446	-0.021	-0.297	-0.797	0.123	-0.049
890190	Vessels for the tpt.	-0.894	-0.216	-0.056	0.008	-0.948	-0.379	-0.977	-0.265
880330	Parts of aeroplanes/	-0.944	0.232	-0.450	-0.676	-0.558	-0.151	-0.409	-0.186
		1			1	1	1	1	

Notes: The product description has been shortened to 20 characters for purposes of legibility; Notes: EAP - East Asia & Pacific; ECA - Europe & Central Asia; LAC – L. America & Caribbean; SA - South Asia: SSA - Sub-Saharan Africa

There are two main messages which emerge from this table. First, it is interesting that out of Algeria's top 20 non-oil exports, for eight of the products Algeria has a negative revealed comparative advantage which suggests a lack of competitiveness in world markets for these products. Conversely there are only 12 HS 6-digit products for which Algeria has a positive revealed

<sup>&</sup>lt;sup>11</sup> The RCA gives an indication of those industries in which a given country may have a comparative advantage. The standard calculation of revealed comparative advantage measures how much a country is exporting a given good relative to its total trade, in comparison to the share of that good in world trade. Country i is said to have a "revealed comparative advantage" in a good when the share of that good in its exports is bigger than the share of that good in world exports. An alternative version of the index which is often also used therefore is the normalized RCA. This is an approximation of the log transformation of the RCA index, and now ranges from between -1 to 1. An index of less than 0 suggests a revealed comparative disadvantage in a given product, and an index of greater than suggest revealed comparative advantage in the product. The normalisation means the index is suitable for cross country, cross sector and cross time comparisons.

comparative advantage. Second, in terms of possible competitor countries we see that the group of countries most likely to be competitors for Algeria in world markets are those in the Europe and Central Asia group, as they have a positive nRCA in 10 of the 20 sectors, and in 7 of the 12 sectors for which Algeria had a positive nRCA. The country groups least likely to be competing with Algeria in world markets are the Latin American and Caribbean countries, and the South Asian countries.

## Similarity of Algeria's exports with the comparator countries

Another way of addressing the issue of competing countries is to look at the overall degree of similarity of Algeria's exports with the exports of the comparator countries. A useful indicator for this purpose is the Finger-Kreinin<sup>12</sup> indicator which ranges between 0 and 1. When the indicator is equal to 1, this means that the structure of trade between Algeria and the comparator country (or country group) is identical. When the indicator is equal to zero this means that they do not export any of the same products and hence the structure is completely different. The indicator can then be calculated at different levels of disaggregation of trade, and in the table below we report on the similarity at the 2, 4 and 6-digit levels, and do so for both 2010 and 2015.

	2dig		4d	4dig		6dig	
	2010	2015	2010	2015	2010	2015	
Cluster1	0.094	0.095	0.074	0.073	0.070	0.068	
Cluster2 - EAP	0.155	0.103	0.103	0.066	0.097	0.059	
Cluster2 - ECA	0.345	0.289	0.328	0.252	0.323	0.247	
Cluster2 LAC	0.183	0.126	0.164	0.104	0.160	0.100	
Cluster2 - SA	0.176	0.127	0.158	0.117	0.126	0.113	
Cluster2 -SSA	0.104	0.127	0.042	0.054	0.035	0.044	
Cluster4	0.217	0.173	0.203	0.157	0.199	0.152	

Consistent with the nRCA analysis we see that the group of countries whose structure of trade has the greatest degree of similarity with Algeria are Europe and Central Asian group, and this is true at all levels of aggregation. Hence at the 6-digit level we see that the degree of similarity in trade is close to 25% in 2015. We also see however, that the degree of similarity with the ECA cluster has significantly declined over time as it was over 32% in 2010. The decline in similarity is true with regard to all the comparator country groups. Perhaps not surprisingly the lowest degree of similarity is with the Cluster 1 groups of countries, followed by the Sub-Saharan African countries.

## **Diversification of exports**

We turn now to considering in more detail the degree of Algeria's export diversification and how it has evolved over time. We proceed by first analysing the degree of concentration of Algeria's exports in terms of different products (TCI by product, at the HS 6-digit level) and then in term of the

<sup>&</sup>lt;sup>12</sup> The Finger-Kreinin (FK) index provides a way of measuring how similar are two sets of numbers. In principle it can be used to compare the similarity between either the structure of a country's imports or exports with any two partner countries, to indicate how similar is a country's export pattern to its import pattern, whether geographically or by product; or to compare the structure of production in two different countries.

number of trade partners (TCI by country). For the TCI by country we do the calculation taking into consideration all the export partners, and then the most significant export partners in 2015 by exports, where we see that 16 countries account for more than 90% of Algeria's total exports.

From the table it can be seen that there has been an increased diversification of Algeria's exports to the world, while in contrast less diversification in terms of exports to the EU. This differential pattern of changes in interesting. With regard to geographical diversification we again see an increase in diversification over time when considering all partners as well as when considering the top 16 partners.

	TCI by product		TCI by c	ountries
	World	EU27 Members	All partners	Top 16 partners
2010	0.253	0.238	0.114	0.133
2011	0.283	0.269	0.097	0.120
2012	0.277	0.291	0.088	0.104
2013	0.276	0.332	0.087	0.098
2014	0.206	0.288	0.082	0.097
2015	0.199	0.283	0.093	0.110

In table 5 earlier in the report we identified that there were 104 new products exported by Algeria when comparing 2010-2015, out of the list of top 200 products in 2015. This is a big change and either reflects considerable dynamism, or considerable volatility in Algeria's exports. The table below identified the top 10 products by value of exports out of this list of 104. What is interesting is that the first item on the list (Urea) is a new product compared to 2010, and by 2015 has become the top non-oil export for Algeria with a high revealed comparative advantage as given in the earlier tables.

List of the top 10 new products exported to the WORLD in 2015 (compared to 2010)

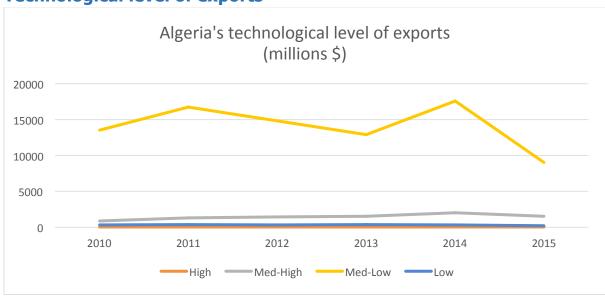
Code	Product Name	Export Value	Exports Share
310210	Urea, whether or not in aqueous solution	418.80	1.20%
290243	p-Xylene	14.03	0.04%
890190	Vessels for the tpt. of gds. & for the tpt. of both persons & gds. (excl. o	5.86	0.02%
880330	Parts of aeroplanes/helicopters, other than propellers, rotors, under-carri	4.78	0.01%
190230	Pasta (excl. of 1902.11-1902.20)	3.37	0.01%
700729	Laminated safety glass, n.e.s. in 70.07	3.25	0.01%
121210	Locust beans, incl. locust bean seeds, fresh/chilled/frozen/dried, whether	3.20	0.01%
411200	Leather furth. prepd. after tanning/crusting, incl. parchment-dressed leath	3.18	0.01%
290230	Toluene	1.65	0.00%
030623	Shrimps & prawns, whether or not in shell, other than frozen	1.54	0.00%

In a comparable fashion, the table below gives the list of most significant by value new export destinations, when comparing 2010 with 2015.

Partner	Exports Value	Exports Share
Bahamas	22.62	72.94%
Guatemala	4.57	14.75%
Saint Kitts and Nevis	2.97	9.59%
Bangladesh	0.60	1.94%
Hungary	0.06	0.20%
Trinidad and Tobago	0.05	0.17%
Cambodia	0.05	0.15%
South Sudan	0.03	0.10%
Antigua and Barbuda	0.03	0.09%
Mauritius	0.02	0.06%

Note: the export share is calculated out of total exports to the new partners.

## **Technological level of exports**



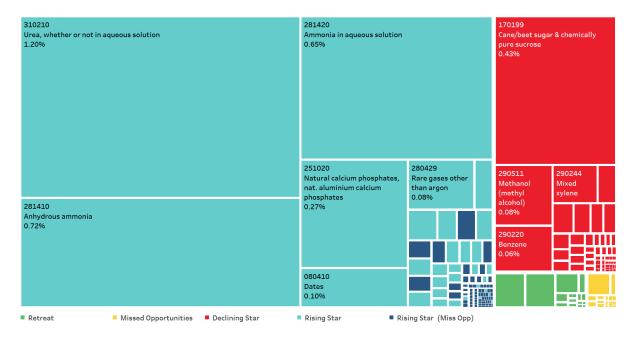
		Change % (2010-2015)					
Reporter	Unall.	High	Med-high	Med-low	Low		
Algeria	68.9%	0.0%	4.5%	26.0%	0.6%		
Cluster1	-0.80%	0.80%	0.40%	-0.90%	0.40%		
Clust2-EAP	-6.40%	6.80%	0.20%	-2.80%	2.20%		
Clust2-ECA	-4.40%	0.10%	4.20%	-3.60%	3.70%		
Clust2-LAC	-5.60%	0.40%	6.30%	-1.50%	0.40%		
Clust2-SA	-2.40%	2.10%	2.50%	-5.10%	2.90%		
Clust2-SSA	1.20%	0.90%	0.60%	-2.60%	0.00%		
Cluster4	-3.90%	-0.20%	3.60%	-1.80%	2.20%		

## **Analytical Table (without Mineral Fuels)**

The table below takes Algeria's top 200 exported products (excluding Chapter 27), and cross-classifies them in terms of the changes in their relative importance in Algeria's trade, with their changing relative importance in world demand. Hence if you look at the bottom left-hand cell here we identify that there are 19 products which Algeria exports, where relative world demand has risen, but where their share in Algeria's exports has declined. Hence these are products which could be considered as 'missed opportunities' . Now consider the bottom right hand cell. From this we see that there are 98 products where their share in Algeria's exports has risen *and* where there has been an increase in relative world demand. We therefore classify these as Rising Stars. Of these 98 products there are 31 products (the figure given in brackets), where the change in their share in Algeria's exports has increase by more than the change in world demand. These are really the rising stars because these are the ones where the change Algeria's exports has exceeded the relative changes in world demand. However, conversely this means that there are 98 minus 31 = 67 products where although Algeria's exports have increased this is less than the change in world demand. These products could also be considered as missed opportunities. In total therefore there are up to 86 products (19 + 67) which could be considered as missed opportunities.

Comparing 2010 with 2015		Change in Algeria's Exports Share to the World		
		Negative	Positive	
		Retreat	Declining Star	
	Negative	16	55	
Change in relative		0.08%	0.74%	
world demand		Missed Opp	Rising Star	
	Positive	19	98 (31)	
		0.03%	3.25% (3.17%)	

The graphic below identifies the commodities in the four cells of the cross-classification table, and the full list of products which are missed opportunities, and missed opportunities from the rising starts is given in the Appendix to this report.



Finally the table below takes the list of 86 missed opportunities, and for each of our country clusters identifies how many of these products saw an increase in their export share. What we see is interesting – for each of the clusters a very high proportion of the products increased their export share. So a possible reason for the lack of Algerian success could be the success of these countries in exporting these products.

### Export performance of the other country groups in Algeria's Missed Opportunities

Country Group	No of products with positive Δ export share (2010 - 2015)
Cluster1	69
Cluster2 -EAP	57
Cluster2 - ECA	67
Cluster2 - LAC	61
Cluster2 - SA	67
Cluster2 - SSA	60
Cluster4	71

# **Egypt**Overview on Egypt's exports

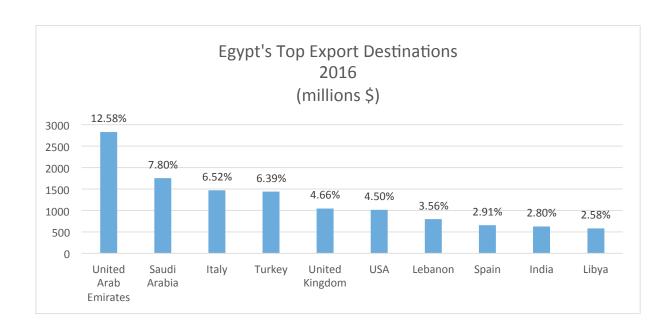
Year	Total exports (billions \$)	Exports Share to the EU27
2010	26.26	30.40%
2011	31.53	30.67%
2012	29.38	26.77%
2013	28.58	28.27%
2014	26.53	29.54%
2015	21.76	27.25%
2016	22.25	25.73%

Egypt's exports account for 0.18% of the World's total volume of exports, in 2016. Having a look at the evolution of Egypt's Total Trade with the World in the last 6 years we can see that its total value of exports gradually decreased from 2011 to 2015, decreasing by almost \$10B, with an average annual growth rate of -2.93%. In the last year we can see a mild growth, while the World saw a contraction on the value of exports.

We can also notice that the share of Egypt's exports that goes to the EU market decreased by almost 5 percentage points over the last 6 years, from 30.4% in 2010 to 25.73% in 2016.

In the following graph we can see Egypt's top 10 export destinations. In 2016 54.30% of its total export were directed to these markets. Over the last 6 years the destination markets didn't change much. If we look at the average Egypt's export from 2010 to 2016, we find the same countries in the top 10 list, except for Lebanon, which replaced the place of France: exports to both of these countries diminished between 2011 and 2015, but in the last year exports to Lebanon almost doubled.

We can also see that the exports to Italy, India and Libya had a strong contraction, while on the other hand the value of exports to United Arab Emirates growth from \$1.11B to \$2.83B, which is nowadays, the most important export destination, with 12.58% of the Egypt total exports.



## Composition of trade

## HS - 2 digit

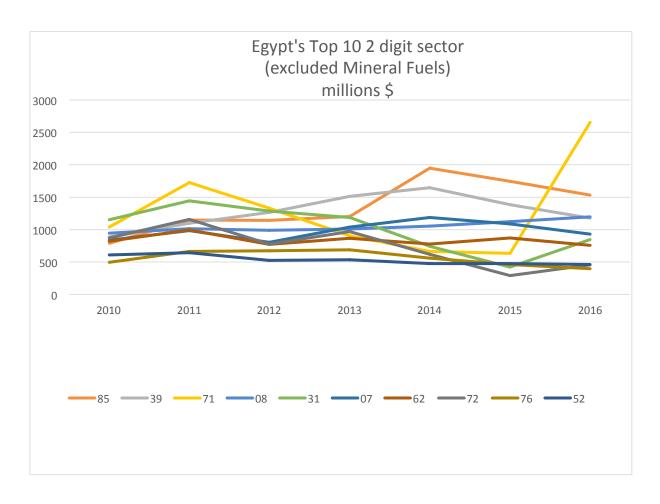
Code	Product Name	Export value (\$B)	Export share
27	Mineral fuels, mineral oils	3.22	14.48%
71	Natural or cultured pearls	2.65	11.93%
85	Electrical machinery and equipment	1.53	6.89%
08	Edible fruit and nuts	1.2	5.38%
39	Plastics and articles thereof	1.18	5.29%
07	Edible vegetables	0.93	4.19%
31	Fertilizers	0.85	3.81%
62	Articles of apparel	0.76	3.40%
52	Cotton	0.46	2.08%
72	Iron and steel	0.46	2.05%
33	Essential oils and resinoids	0.44	1.97%

In terms of the composition of trade, the most important exported sector at 2 digit level is "Mineral Fuel, mineral oils and products of their distillation" (HS27). This is still the most exported product, even thus the export in this sector had a strong contraction from 2011: the export share of this sector helved, going from 30.20% in 2012 14.48% in 2016.

The chart below identifies Egypt's top 10 exports excluding HS Chapter 27 over the last 6 years, which account for almost 47% of Egypt's total exports in 2016.

Besides we can notice a strong growth in the exports of *Natural or cultured pearls, precious or* 

semi-precious stones in the last year - with a rate of growth in the last year of 319.05% - together with Fertilizers, whose exports more than doubled in one year.



### HS - 6 digits

At a more disaggregated level we see the top 20 Egypt's exported products in 2016, at the 6-digit level in the table below. These products account for 45.45% of Egypt's total exports. In particular Egypt export Gold — exclusively to non-European countries, and Petroleum oils. We can also notice an important increase in the exports of product 854420, (*Reception app. for television*) with an average annual rate of growth in the last 6 years of 212.76%. Other important growth were registered for product 330290 and product 390210.

Note that while the average annual growth rate of exports for these 20 products was 2.36%, this masks considerable variation. Six of the top 20 products saw an annual average decline in exports while one of the products saw a rate of growth in excess of 100%. We also see also that for five of the top 20 products the share of exports going to the EU is near 0% - they are nearly not exported at all in the European market.

Product	Product Description	2016 Exports	Exports	AARG	<b>2016</b> Share
Code		value	Share	(2010-2016)	of export to
		(millions \$)	to World		the EU
710812	Gold (incl. gold plated with platinum)	2,588.09	11.63%	52.92%	0.00%
270900	Petroleum oils & oils obt. from bit	1,808.11	8.13%	4.47%	37.11%
271011	Light petroleum oils & preps.	738.92	3.32%	-3.07%	37.65%
310210	Urea, whether or not in aqueous sol	720.57	3.24%	10.63%	64.57%
852812	Reception app. for television, whet	564.71	2.54%	177.30%	1.14%
080510	Oranges, fresh/dried	501.85	2.26%	1.13%	18.82%
854420	Co-axial cable & oth. co-axial elec	337.16	1.52%	5.72%	59.97%
940360	Wooden furniture (excl. of 94.01 &	328.65	1.48%	7.93%	3.78%
570190	Carpets & oth. textile floor coveri	285.33	1.28%	-2.15%	28.99%
330290	Mixtures of odoriferous subs. & mix	269.27	1.21%	56.62%	0.23%
300490	Medicaments (excl. of 30.02/30.05/3	215.2	0.97%	-0.17%	9.40%
080610	Grapes, fresh	212.76	0.96%	2.14%	71.79%
481840	Sanitary towels & tampons, napkins	209.47	0.94%	11.45%	0.09%
680221	Worked monumental/building stone &	207.62	0.93%	24.14%	8.43%
271019	Petroleum oils & oils obt. from bit	205.57	0.92%	-25.31%	45.24%
070310	Onions & shallots, fresh/chilled	197.82	0.89%	2.22%	13.18%
390210	Polypropylene, in primary forms	191.29	0.86%	47.53%	12.80%
620349	Men's/boys' trousers, bib & brace o	185.78	0.83%	9.98%	22.24%
040630	Processed cheese, not grated/powder	177.08	0.80%	-3.14%	0.03%
170199	Cane/beet sugar & chemically pure s	168.22	0.76%	18.25%	0.12%
	Grand total	10,113.49	45.45%	2.36%	21.65%

Notes: The product description has been shortened to 35 characters for purposes of legibility.

## Revealed comparative advantage

In the following table we give the normalized revealed comparative advantage (nRCA) for Egypt's top 20 exported products for the latest available year (2016). The products are ranked by degree of revealed comparative advantage, and where below the double line in the table Egypt has a negative revealed comparative advantage. The three biggest export sectors are identified in red. We also give the normalized revealed comparative advantage for each of our comparator country. In bold we identify the country-product combinations which also have a positive nRCA, and the purpose of this is to see which country groupings are most likely to compete with Algeria by product.

	NORMALIZED RCA - 2016								
Code	Product Name	Egypt	Cl1	CI2 EAP	CI2 ECA	Cl2 LAC	CI2 SA	CI2 SSA	Cl 4
570190	Carpets & oth. texti	0.993	-0.818	-0.921	-0.993	-0.987	0.87	-0.219	-0.72
680221	Worked monumental/bu	0.975	-0.952	-0.424	-0.471	-0.623	0.445	-0.851	0.436
620349	Men's/boys' trousers	0.974	-0.671	0.46	0.315	-0.861	0.876	-0.046	-0.293
080510	Oranges, fresh/dried	0.97	-0.304	-1	-0.903	-0.706	-0.786	0.905	0.544
310210	Urea, whether or not	0.966	-0.54	0.396	0.186	-0.905	-0.994	-0.064	-0.33
040630	Processed cheese, no	0.961	0.227	-0.898	-0.375	-0.857	-0.823	-0.328	0.052
070310	Onions & shallots, f	0.956	-0.325	-0.957	-0.546	0.585	0.744	0.42	-0.041
854420	Co-axial cable & oth	0.953	-0.27	0.242	0.423	-0.069	-0.668	0.013	0.079
330290	Mixtures of odorifer	0.911	0.105	-0.06	-0.893	-0.37	0.137	-0.839	-0.335
080610	Grapes, fresh	0.897	-0.373	-0.999	-0.341	0.441	0.185	0.818	0.536
170199	Cane/beet sugar & ch	0.802	-0.305	-0.721	0.452	0.674	0.714	-0.146	-0.067
481840	Sanitary towels & ta	0.794	0.038	-0.402	-0.399	0.033	-0.834	-0.101	0.315
940360	Wooden furniture (ex	0.794	-0.352	0.386	0.42	-0.444	-0.059	-0.487	0.404
710812	Gold (incl. gold pla	0.776	-0.293	-0.371	-0.541	0.136	0.009	0.277	-0.574
390210	Polypropylene, in pr	0.773	-0.023	-0.625	-0.08	-0.078	0.275	0.545	0.069
852812	Reception app. for t	0.72	-0.756	0.005	-0.393	0.642	-0.821	-0.538	0.354
270900	Petroleum oils & oil	0.587	-0.238	0.092	0.699	0.476	-0.975	-0.872	-0.914
271011	Light petroleum oils	0.501	-0.044	-0.853	0.254	-0.44	0.538	0.34	-0.062
300490	Medicaments (excl. o	-0.313	0.192	-0.834	-0.345	-0.728	0.297	-0.701	0.006
271019	Petroleum oils & oil	-0.376	-0.105	-0.826	0.225	-0.459	0.469	-0.65	-0.085

Notes: The product description has been shortened to 20 characters for purposes of legibility; Notes: EAP - East Asia & Pacific; ECA - Europe & Central Asia; LAC – L. America & Caribbean; SA - South Asia: SSA - Sub-Saharan Africa

There are two main messages which emerge from this table. First, it is interesting that out of Algeria's top 20 non-oil exports, only two of the products Egypt has a negative revealed comparative advantage which suggests a lack of competitiveness in world markets for these products. Conversely there are 18 HS 6-digit products for which Egypt has a positive revealed comparative advantage. Second, in terms of possible competitor countries we see that the group of countries most likely to be competitors for Egypt in world markets are those in the South Asia group, as they have a positive nRCA in 12 of the 20 sectors, and in 10 of the 18 sectors for which Egypt had a positive nRCA. The country groups least likely to be competing with Egypt in world markets are the ones in Cluster 1 and the East Asia & Pacific countries of Cluster 2.

#### KFI indicators – common destination

Another way of addressing the issue of competing countries is to look at the overall degree of similarity of Egypt's exports with the exports of the comparator countries. A useful indicator for this purpose is the Finger-Kreinin indicator which ranges between 0 and 1. When the indicator is equal to 1, this means that the structure of trade between Egypt and the comparator country (or country group) is identical. When the indicator is equal to zero this means that they do not export any of the same products and hence the structure is completely different. The indicator can then be calculated at different levels of disaggregation of trade, and in the table below we report on the similarity at the 2, 4 and 6-digit levels, and do so for both 2010 and 2015.

	2dig		4dig		6dig	
	2010	2015	2010	2015	2010	2015
Cluster1	0.431	0.488	0.249	0.263	0.189	0.194
Cluster2 - EAP	0.483	0.489	0.295	0.256	0.226	0.183
Cluster2 - ECA	0.646	0.581	0.362	0.379	0.273	0.288
Cluster2 LAC	0.499	0.493	0.302	0.325	0.239	0.257
Cluster2 - SA	0.567	0.516	0.327	0.316	0.264	0.241
Cluster2 -SSA	0.454	0.457	0.244	0.261	0.165	0.193
Cluster4	0.568	0.592	0.357	0.399	0.285	0.324

We see that the group of countries whose structure of trade has the greatest degree of similarity with Algeria are the countries in Cluster 4, and this is true at all levels of aggregation. Hence at the 6-digit level we see that the degree of similarity in trade is 32.4% in 2015. We may notice that also Europe and Central Asia and South Asian countries of Cluster 2 have a high degree of similarity with Egypt, consistently with the nRCA analysis. The lowest degree of similarity at 6 digit level is with Europe and Central Asia group.

## Diversification of exports: TCI

We turn now to considering in more detail the degree of Egypt's export diversification and how it has evolved over time. We proceed by first analysing the degree of concentration of Egypt's exports in terms of different products (TCI by product, at the HS 6-digit level) and then in term of the number of trade partners (TCI by country). For the TCI by country we do the calculation taking into consideration all the export partners, and then the most significant export partners in 2015 by exports, where we see that 38 countries account for more than 90% of Algeria's total exports.

From the table it can be seen that there has been less diversification of Egypt's exports to the world, while in contrast an increased diversification in terms of exports to the EU. This differential pattern of changes in interesting. With regard to geographical diversification we again see less diversification over time when considering all partners as well as when considering the top 38 partners.

	TCI by product		TCI by c	ountries
	World	EU27 Members	All partners	Top 38 partners
2010	0.024	0.044	0.034	0.048
2011	0.027	0.042	0.036	0.049
2012	0.027	0.037	0.037	0.049
2013	0.023	0.041	0.038	0.051
2014	0.023	0.035	0.037	0.049
2015	0.017	0.032	0.036	0.047
2016	0.027	0.030	0.044	0.054

In table 5 earlier in the report we identified that there were 63 new products exported by Egypt when comparing 2010-2016, out of the list of top 200 products in 2016. This is a big change and either reflects considerable dynamism, or considerable volatility in Egypt's exports. The table below identified the top 10 products by value of exports out of this list of 63. What is interesting is that the first item on the list (Reception app. for television) is a new product compared to 2010, and by 2016 has become the fifth top export for Egypt with a high revealed comparative advantage as given in the earlier tables.

#### New exported products in 2016

Code	Product Name	Exports	Exports
		Value	Share
852812	Reception app. for television, whether or not incorp. radio-broadcast recei	564.71	2.54%
621139	Track suits (excl. knitted or crocheted), men's/boys'; oth. garments, n.e.s	129.58	0.58%
854459	Electric conductors (excl. of 8544.11-8544.30), for a voltage >80V but not	112.02	0.50%
520942	Woven fabrics of cotton, cont. 85%/more by wt. of cotton, denim, weighing >	109.17	0.49%
290511	Methanol (methyl alcohol)	94.19	0.42%
701990	Glass fibres (incl. glass wool) & arts. thereof (excl. of 7019.11-7019.59)	83.45	0.38%
330510	Shampoos	70.28	0.32%
320820	Paints & varnishes (incl. enamels & lacquers) based on acrylic/vinyl polyme	59.59	0.27%
710813	Gold (incl. gold plated with platinum), non-monetary, in semi-manufactured	55.91	0.25%
151590	Fixed vegatable fats & oils (excl. of 1515.11-1515.50), incl. jojoba oil &	55.82	0.25%

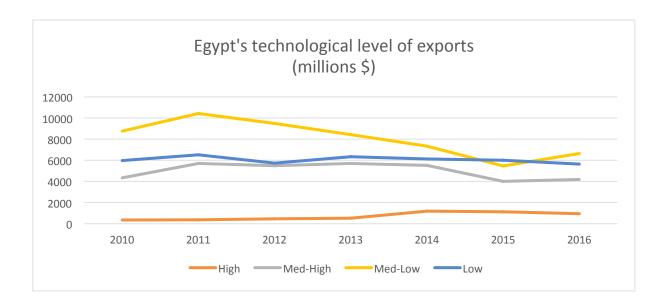
#### New export destination in 2016 (millions)

In a comparable fashion, the table below gives new export destinations, when comparing 2010 with 2016, which are only 5. The most relevant is Sudan.

Partner	Exports Value	Exports Share
Sudan	545.33	99.94%
San Marino	0.29	0.05%
Curacao	0.03	0.00%
Papua New Guinea	0.02	0.00%
Antigua and Barbuda	0.00	0.00%

Note: the export share is calculated out of total exports to the new partners.

## Technological level of exports



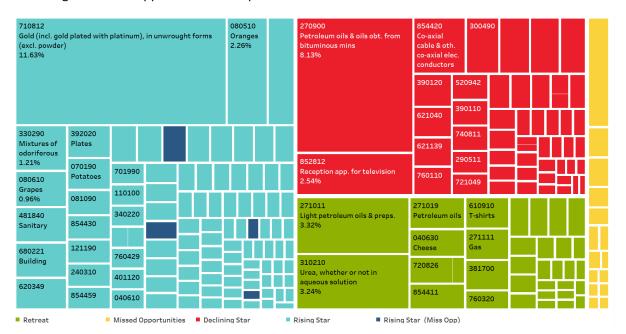
	Change % (2010-2015)						
Reporter	Unall.	High	Med-high	Med-low	Low		
Egypt	23.7%	5.2%	18.4%	25.1%	27.6%		
Cluster1	-0.8%	0.8%	0.4%	-0.9%	0.4%		
Clust2-EAP	-6.4%	6.8%	0.2%	-2.8%	2.2%		
Clust2-ECA	-4.4%	0.1%	4.2%	-3.6%	3.7%		
Clust2-LAC	-5.6%	0.4%	6.3%	-1.5%	0.4%		
Clust2-SA	-2.4%	2.1%	2.5%	-5.1%	2.9%		
Clust2-SSA	1.2%	0.9%	0.6%	-2.6%	0.0%		
Cluster4	-3.9%	-0.2%	3.6%	-1.8%	2.2%		

## **Analytical Table**

The table below takes Egypt's top 200 exported products, and cross-classifies them in terms of the changes in their relative importance in Egypt's trade, with their changing relative importance in world demand. Hence if you look at the bottom left-hand cell here we identify that there are 15 products which Egypt exports, where relative world demand has risen, but where their share in Egypt's exports has declined. Hence these are products which could be considered as 'missed opportunities'. Now consider the bottom right hand cell. From this we see that there are 100 products where their share in Egypt's exports has risen *and* where there has been an increase in relative world demand. We therefore classify these as Rising Stars. Of these 100 products there are 96 products (the figure given in brackets), where the change in their share in Egypt's exports has increase by more than the change in world demand. These are really the rising stars because these are the ones where the change Egypt's exports has exceeded the relative changes in world demand. However, conversely this means that there are 100 minus 96 = 4 products where although Egypt's exports have increased this is less than the change in world demand. These products could also be considered as missed opportunities. In total therefore there are up to 19 products (15 + 4) which could be considered as missed opportunities.

Comparing 2010 wit	:h 2016	Change in Exports Share between Egypt & World			
		Negative	Positive		
		Retreat	Declining Star		
	Negative	34	51		
Change in Exports Share between		16.81%	26.42%		
World & World	Positive	Missed Opp	Rising Star		
		15	100 (96)		
		3.42%	41.67% (40.66%)		

The graphic below identifies the commodities in the four cells of the cross-classification table, and the full list of products which are missed opportunities, and missed opportunities from the rising starts is given in the Appendix to this report.



Finally the table below takes the list of 19 missed opportunities, and for each of our country clusters identifies how many of these products saw an increase in their export share. What we see is interesting – for each of the clusters a very high proportion of the products increased their export share. So a possible reason for the lack of Egypt success could be the success of these countries in exporting these products.

### Export performance of the other country groups in Egypt's Missed Opportunities

Country Group	No of products with positive Δ export share (2010 - 2016)
Cluster1	10
Cluster2 -EAP	7
Cluster2 - ECA	15
Cluster2 - LAC	12
Cluster2 - SA	12
Cluster2 - SSA	13
Cluster4	18

# Israel Overview on Israel's exports

Year	Total exports	Exports Share
	(billions \$)	to the EU27
2010	58.39	26.29%
2011	67.73	27.67%
2012	62.66	27.15%
2013	66.17	27.57%
2014	68.07	27.55%
2015	63.44	25.27%
2016	58.89	26.51%

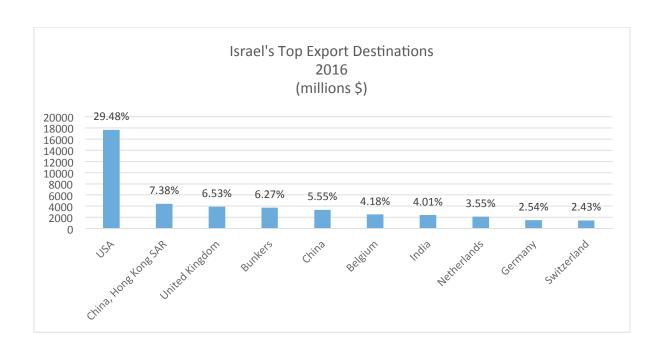
Israel's exports account for 0.43% of World exports. From the table it can be seen that while there was an increase in exports between 2010 and 2011 and between 2012 and 2014, subsequently Israel's exports saw a decline, with a contraction of almost 7% between 2014 and 2016. Over the last six years the exports of Israel have increased at an Average Annual Rate of Growth of 2.04%, from \$58.39B in 2010 to \$58.89B in 2016.

We can see that in the last six years 27% of its total exports on narket. The percentage of export to the EU remained quite stable

average went to the European market. The percentage of export to the EU remained quite stable over the years.

In 2016 the top export destinations for Israel was USA, which account for almost 29.5% of Israel's total exports. Export to USA were constant; around \$18B. Only in 2016 were exports to Bunkers registered. Looking at the top 10 destinations on average in the last 6 years we can see that at  $6^{th}$  place there is "unspecified" as partner. From 2014 we can see a contraction of export both in Turkey and China.

The top 10 list of destination countries, alone account for almost 72% of Israel's total exports, and 3 out of 10 of these destinations are European countries.

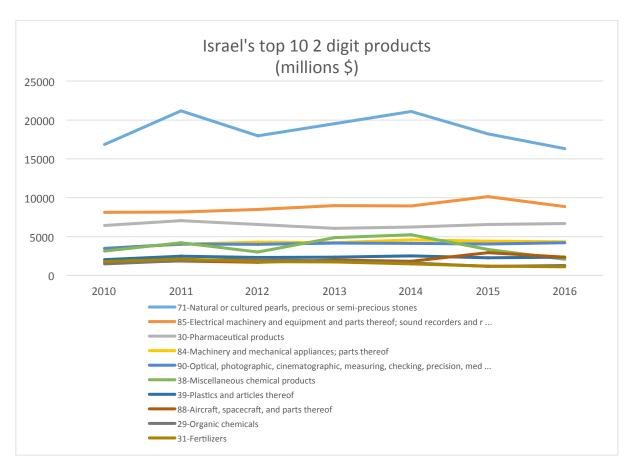


## **HS - 2 digit level trade**

Code	Product Name	Export value (\$B)	Export share
71	Natural or cultured pearls	16.31	27.69%
85	Electrical machinery	8.88	15.08%
30	Pharmaceutical products	6.69	11.35%
84	Machinery	4.34	7.36%
90	Optical, photographic	4.21	7.15%
39	Plastics and articles	2.36	4.00%
88	Aircraft, spacecraft	2.35	4.00%
38	Miscellaneous chemical prod	2.07	3.52%
29	Organic chemicals	1.27	2.16%
31	Fertilizers	1.1	1.87%
	Tot	49.58	84.19%

In terms of the composition of trade, the most important Israel's exports are "Natural or cultures pearls" (HS71), "Electrical machinery" (HS85) and "Pharmaceutical products" (HS30), which alone represent more than 54% of Israel's total exports.

The chart below identifies Israel's top exports over the last 6 years. We see that Israel's exports were dominated by "Natural or cultures pearls" (HS71) for all the past 6 years. We see a decline in the export of this product in the last 2 years, going from \$21.1B in 2014 to \$16.3B in 2016.



## **HS - 6 digits level trade**

At a more disaggregated level we see the top 20 Israel's exported products in 2016, at the 6-digit level in the table below. Note that while the average annual growth rate of exports for these 20 products was 2.7%, this masks considerable variation. Five of the top 20 products saw an annual average decline in exports while three of the products saw a rate of growth in excess of 100%. In particular we notice an average annual growth rate of more than 1749% for "Petroleum oils" (HS 271019). We also see the significance of the EU as a destination for "Medicaments" (HS300390), almost entirely exported in the EU market. Almost the 96% of the exports in this product were directed to the EU market. For all the other products the share of exports to the EU is less than 50%. Only for five products we have a share greater than 40%.

Product Code	Product Description	2016 Exports value (millions \$)	Exports Share to World	AARG (2010-2016)	2016 Share of export to the EU
710239	Diamonds, non-industrial other than	12,653.06	21.48%	0.89%	12.27%
300490	Medicaments (excl. of 30.02/30.05/3	3,840.66	6.52%	-3.62%	17.55%
854221	Monolithic integrated circuits, dig	3,071.10	5.21%	9.24%	1.72%
710231	Diamonds, non-industrial, unwkd./si	2,967.21	5.04%	-0.68%	33.10%
300390	Medicaments (excl. of 30.02/30.05/3	2,502.61	4.25%	20.84%	95.70%
880330	Parts of aeroplanes/helicopters, ot	1,913.92	3.25%	13.15%	1.24%
854389	Other electrical machines & app., h	1,199.88	2.04%	189.41%	2.21%
382490	Other chem. prods. & preps. of the	933.81	1.59%	-1.11%	47.32%
901890	Instruments & appls. used in medica	870.21	1.48%	13.74%	25.36%
851750	Apparatus for carrier-current line	759.41	1.29%	487.71%	23.08%
310590	Mineral/chem. fertilisers cont. 2/3	714.86	1.21%	-9.17%	8.45%
820900	Plates, sticks, tips and the like f	691.1	1.17%	1.79%	39.12%
271019	Petroleum oils & oils obt. from bit	569.07	0.97%	1749.34%	43.82%
380830	Herbicides, anti-sprouting prods. &	551.8	0.94%	5.77%	48.97%
732690	Articles of iron/steel, n.e.s.	431.57	0.73%	39.78%	3.58%
851719	Telephone sets other than those of	421.73	0.72%	83.75%	19.85%
844359	Printing mach. n.e.s. in 84.43	412.76	0.70%	1.92%	48.78%
851790	Parts of the app. & equip. of 85.17	408.54	0.69%	-9.56%	25.35%
392690	Articles of plastics & arts. of oth	400.87	0.68%	20.69%	35.77%
854290	Parts of the electronic integrated	389.9	0.66%	81.78%	2.32%
Grand tot	al	35,704.06	60.63%	2.70%	22.27%

Notes: The product description has been shortened to 35 characters for purposes of legibility.

## **Revealed comparative advantage**

In the following table we give the normalized revealed comparative advantage (nRCA) for Israel's top 20 exported products for the latest available year (2016). The products are ranked by degree of revealed comparative advantage, and where below the double line in the table Israel has a negative revealed comparative advantage. The three biggest export sectors are identified in red. We also give the normalized revealed comparative advantage for each of our the comparator countries. In bold we identify the country-product combinations which also have a positive nRCA, and the purpose of this is to see which country groupings are most likely to compete with Algeria by product.

	NORMALIZED RCA - 2016									
Code	Product Name	Israel	Cl1	CI2 EAP	CI2 ECA	Cl2 LAC	Cl2 SA	CI2 SSA	Cl 4	
310590	Mineral/chem. fertil	0.979	-0.485	-0.984	-0.792	-0.459	-0.501	0.478	0.367	
300390	Medicaments (excl. o	0.969	0.001	-0.993	-0.653	-0.945	0.127	-0.581	0	
710239	Diamonds, non-indust	0.963	-0.398	-	-0.87	-0.949	0.901	0.176	-0.96	
844359	Printing mach. n.e.s	0.96	-0.076	-0.833	-0.707	-0.809	-0.563	-0.06	0.186	
820900	Plates, sticks, tips	0.931	0.187	-0.987	-0.944	-0.721	-0.415	-0.883	-0.59	
710231	Diamonds, non-indust	0.907	-0.016	-0.915	-0.962	-0.982	0.385	0.829	-0.998	
851719	Telephone sets other	0.852	-0.059	-0.759	0.079	0.162	-0.342	-0.16	-0.006	
854389	Other electrical mac	0.836	-0.05	-0.819	-0.413	0.214	-0.872	-0.493	-0.342	
380830	Herbicides, anti-spr	0.832	0.118	-0.376	-0.274	-0.518	0.401	0.031	-0.21	
854290	Parts of the electro	0.798	-0.076	0.442	-0.822	-0.99	-0.889	-0.955	-0.857	
880330	Parts of aeroplanes/	0.716	0.208	-0.177	-0.589	-0.647	0.031	-0.378	-0.134	
382490	Other chem. prods. &	0.69	0.184	-0.288	-0.183	-0.672	-0.59	-0.507	0.077	
901890	Instruments & appls.	0.657	0.195	-0.736	-0.473	0.264	-0.268	-0.634	-0.183	
300490	Medicaments (excl. o	0.559	0.192	-0.834	-0.345	-0.728	0.297	-0.701	0.006	
732690	Articles of iron/ste	0.483	-0.051	-0.745	0.07	-0.198	-0.085	-0.065	0.272	
851750	Apparatus for carrie	0.288	-0.214	-0.96	-0.608	0.451	-0.834	-0.783	-0.271	
392690	Articles of plastics	0.265	0.031	-0.619	-0.226	-0.184	-0.274	-0.622	0.111	
854221	Monolithic integrate	0.259	-0.367	0.327	-0.884	-0.827	-0.99	-0.991	-0.823	
851790	Parts of the app. &	0.018	-0.619	-0.617	-0.264	-0.156	-0.606	-0.908	-0.459	
271019	Petroleum oils & oil	-0.357	-0.105	-0.826	0.225	-0.459	0.469	-0.65	-0.085	

Notes: The product description has been shortened to 20 characters for purposes of legibility; Notes: EAP - East Asia & Pacific; ECA - Europe & Central Asia; LAC – L. America & Caribbean; SA - South Asia: SSA - Sub-Saharan Africa

There are two main messages which emerge from this table. First, it is interesting that out of Israel's top 20 non-oil exports, only for one of the products Algeria has a negative revealed comparative advantage which suggests a lack of competitiveness in world markets for these products. Conversely there are only 19 HS 6-digit products for which Israel has a positive revealed comparative advantage. Second, in terms of possible competitor countries we see that the group of countries most likely to be competitors for Israel in world markets are those in the Cluster 1, as they have a positive nRCA in 7 of the 20 sectors, in all sectors for which Israel had a positive nRCA. Others possible competitor countries for Israel in world markets are the South Asian countries in Cluster 2, as they have a positive nRCA in 7 of the 20 sectors, and in 6 of the 7 sectors for which Israel had a positive nRCA. Also the country groups least likely to be competing with Israel in world markets are the Europe and Central Asia countries, and the East Asian and Pacific countries.

## Similarity of Israel's exports with the comparator coutnries

Another way of addressing the issue of competing countries is to look at the overall degree of similarity of Israel's exports with the exports of the comparator countries. A useful indicator for this purpose is the Finger-Kreinin indicator which ranges between 0 and 1. When the indicator is equal to 1, this means that the structure of trade between Israel and the comparator country (or country group) is identical. When the indicator is equal to zero this means that they do not export any of the same products and hence the structure is completely different. The indicator can then be calculated at different levels of disaggregation of trade, and in the table below we report on the similarity at the 2, 4 and 6-digit levels, and do so for both 2010 and 2015.

	2dig		40	lig	6dig	
	2010	2015	2010	2015	2010	2015
Cluster1	0.500	0.498	0.340	0.333	0.273	0.265
Cluster2 - EAP	0.404	0.433	0.231	0.244	0.168	0.189
Cluster2 - ECA	0.288	0.313	0.145	0.155	0.109	0.116
Cluster2 LAC	0.409	0.402	0.206	0.222	0.154	0.156
Cluster2 - SA	0.413	0.423	0.275	0.282	0.220	0.228
Cluster2 -SSA	0.409	0.383	0.177	0.178	0.131	0.134
Cluster4	0.387	0.390	0.253	0.258	0.197	0.197

Consistent with the nRCA analysis we see that the group of countries whose structure of trade has the greatest degree of similarity with Israel are the countries in Cluster 1, and this is true at all levels of aggregation. Hence at the 6-digit level we see that the degree of similarity in trade is more than 26% in 2015. We also see however, that the degree of similarity with the ECA cluster has slightly declined over time at all digit levels. The decline in similarity is true with regard to L. America & Caribbean countries and Sub-Saharan African countries. The lowest degree of similarity is with the European Central Asia groups of countries, followed by the Sub-Saharan African countries.

## **Diversification of exports**

We turn now to considering in more detail the degree of Israel's export diversification and how it has evolved over time. We proceed by first analysing the degree of concentration of Israel's exports in terms of different products (TCI by product, at the HS 6-digit level) and then in term of the number of trade partners (TCI by country). For the TCI by country we do the calculation taking into consideration all the export partners, and then the most significant export partners in 2015 by exports, where we see that 23 countries account for more than 90% of Israel's total exports.

From the table it can be seen that there has been an increased diversification of Algeria's exports to the world, while in contrast less diversification in terms of exports to the EU. This differential pattern of changes in interesting. With regard to geographical diversification we again see an increase in diversification over time when considering all partners as well as when considering the top 23 partners.

	TCI by	y product	TCI by countries		
	World	EU27 Members	All partners	Top 16 partners	
2010	0.066	0.029	0.120	0.172	
2011	0.075	0.034	0.105	0.152	
2012	0.066	0.033	0.100	0.146	
2013	0.072	0.041	0.093	0.137	
2014	0.078	0.042	0.098	0.142	
2015	0.074	0.045	0.106	0.148	
2016	0.061	0.043	0.113	0.146	

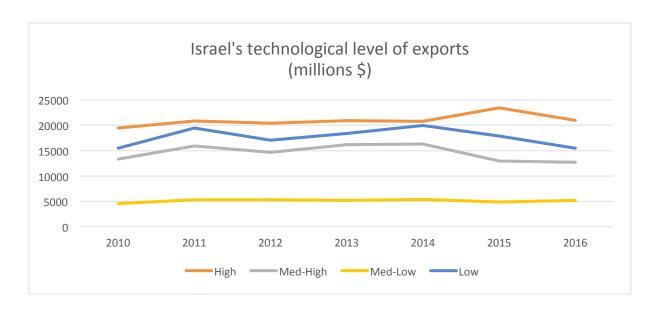
In table 5 earlier in the report we identified that there were 59 new products exported by Israel when comparing 2010-2016, out of the list of top 200 products in 2016. This is a big change and either reflects considerable dynamism, or considerable volatility in Israel's exports. The table below identified the top 10 products by value of exports out of this list of 59. What is interesting is that the first item on the list (Monolithic integrated circuits) is a new product compared to 2010, and by 2016 has become the 3<sup>rd</sup> top exported product for Israel with a positive revealed comparative advantage as given in the earlier tables.

List of the top 10 new products exported to the WORLD in 2016 (compared to 2010)

Product	Product Name	Exports	Exports
Code		Value	Share
854221	Monolithic integrated circuits, digital	3,071.10	5.21%
851750	Apparatus for carrier-current line systems/digital line systems (excl. of 8	759.41	1.29%
380810	Insecticides, put up in forms or packings-RS/as preps./arts.	177.06	0.30%
847790	Marts for the machines of 84.77	164.30	0.28%
847150	Digital processing units other than of 8471.41/8471.49, whether or not cont	122.11	0.21%
401161	New pneumatic tyres, of rubber, having a herring-bone/sim. tread, of a kind	114.92	0.20%
381800	Chemical elements doped for use in electronics, in the form of discs/wafers	110.15	0.19%
330510	Shampoos	108.42	0.18%
321519	Printing ink (excl. black)	107.90	0.18%
251020	Natural calcium phosphates, nat. aluminium calcium phosphates & phosphatic	102.34	0.17%

We may notice as new partner when comparing 2010 with 2015 only Curacao with \$0.24B of export value in 2016.

# **Technological level of exports**



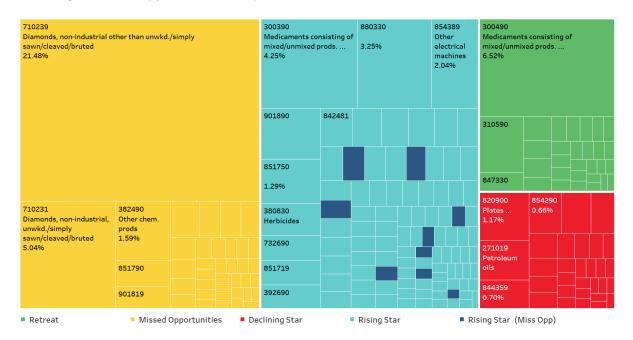
	Change % (2010-2015)						
Reporter	Unall.	High	Med-high	Med-low	Low		
Israel	6.8%	36.9%	20.5%	7.7%	28.2%		
Cluster1	-0.8%	0.8%	0.4%	-0.9%	0.4%		
Clust2-EAP	-6.4%	6.8%	0.2%	-2.8%	2.2%		
Clust2-ECA	-4.4%	0.1%	4.2%	-3.6%	3.7%		
Clust2-LAC	-5.6%	0.4%	6.3%	-1.5%	0.4%		
Clust2-SA	-2.4%	2.1%	2.5%	-5.1%	2.9%		
Clust2-SSA	1.2%	0.9%	0.6%	-2.6%	0.0%		
Cluster4	-3.9%	-0.2%	3.6%	-1.8%	2.2%		

## **Analytical Table**

The table below takes Israel's top 200 exported products , and cross-classifies them in terms of the changes in their relative importance in Israel's trade, with their changing relative importance in world demand. Hence if you look at the bottom left-hand cell here we identify that there are 39 products which Israel exports, where relative world demand has risen, but where their share in Israel's exports has declined. Hence these are products which could be considered as 'missed opportunities' . Now consider the bottom right hand cell. From this we see that there are 99 products where their share in Israel's exports has risen *and* where there has been an increase in relative world demand. We therefore classify these as Rising Stars. Of these 99 products there are 90 products (the figure given in brackets), where the change in their share in Israel's exports has increase by more than the change in world demand. These are really the rising stars because these are the ones where the change Israel's exports has exceeded the relative changes in world demand. However, conversely this means that there are 99 minus 90 = 9 products where although Israel's exports have increased this is less than the change in world demand. These products could also be considered as missed opportunities. In total therefore there are up to 48 products (39 + 9) which could be considered as missed opportunities.

Comparing 2010 with	2016	Change in Exports Share between Israel & World			
		Negative	Positive		
		Retreat	Declining Star		
	Negative	30	31		
Change in Exports Share between		11.49%	7.78%		
World & World		Missed Opp	Rising Star		
	Positive	39	99 (90)		
		34.09%	30.89% (29.28%)		

The graphic below identifies the commodities in the four cells of the cross-classification table, and the full list of products which are missed opportunities, and missed opportunities from the rising starts is given in the Appendix to this report.



Finally the table below takes the list of 48 missed opportunities, and for each of our country clusters identifies how many of these products saw an increase in their export share. What we see is interesting – for each of the clusters a very high proportion of the products increased their export share. Only for the East Asian and Pacific countries we can see a positive export share only in 14 out of 48 products.

#### **Export performance of the other country groups in Algeria's Missed Opportunities**

Country Group	No of products with positive Δ export share (2010 - 2016)
Cluster1	37
Cluster2 -EAP	14
Cluster2 - ECA	37
Cluster2 - LAC	32
Cluster2 - SA	37
Cluster2 - SSA	28
Cluster4	40

#### **Jordan**

## **Overview on Jordan's exports**

Year	Total exports (billions \$)	Exports Share to the EU27
2010	5.94	3.70%
2011	6.73	4.61%
2012	6.68	4.49%
2013	6.78	3.54%
2014	7.27	4.13%
2015	6.76	2.51%
2016	6.15	2.60%

Jordan's exports account for 0.05% of the World's total volume of exports, in 2015. Having a look at the evolution of Egypt's Total Trade with the World in the last 6 years we can see that its total value of exports increased from 2010 to 2016, with an average annual growth rate of 2.86%. The maximum level of exports was in 2014, with \$7.27B. After this we can see a mild decline to \$6.15B.

We can also notice that the EU market is not an important destination for Jordan, with a decrease in the share of

Jordan's exports going to the EU market of more than 1 percentage points over the last 6 years, from 3.7% in 2010 to 2.6% in 2016.

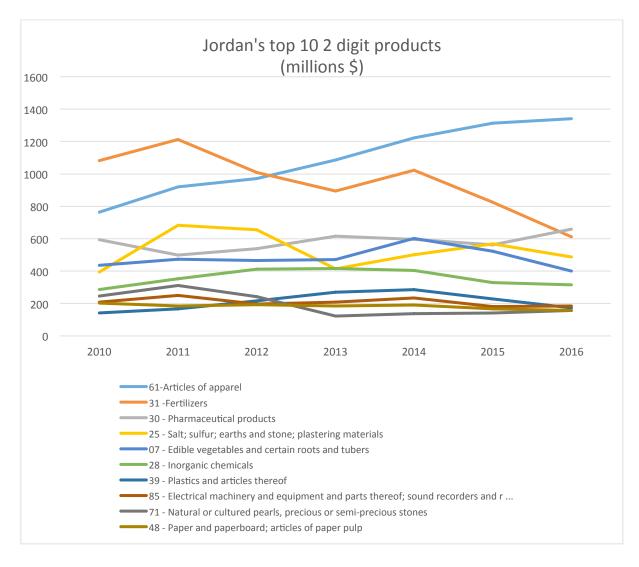
In the following graph we can see the top 10 export destinations, which account for 82.51% of Jordan's total exports in 2016. Export to the USA gradually increased over the last 6 years. Export to Iraq had a strong contraction between 2014 (\$1.17B) and 2015 (\$0.69B) with a negative rate of growth on average over the last 3 years equal to -26.38%. Also exports to India diminished from 2014. The exports to Saudi Arabia increased more than 76% from 2010 to 2015, but in the last year we saw a contraction of almost 18%. Over the last 6 years these four countries (USA, Iraq, Saudi Arabia and India) were the most important destinations for Jordan's exports. Added to this, we can see a gradual increase of exports to United Arab Emirates and Kuwait, while exports to Indonesia, Lebanon, China and Syria had a contraction. Indonesia and Syria dropped out of the top 10 list in 2016.



# **HS-2 digit level trade**

Code	Product Name	Export value (\$B)	Export share
61	Articles of apparel	1.34	21.81%
30	Pharmaceutical products	0.66	10.71%
31	Fertilizers	0.61	9.94%
25	Salt; sulfur; earths and stone	0.49	7.93%
07	Edible vegetables	0.4	6.50%
28	Inorganic chemicals	0.32	5.13%
85	Electrical machinery	0.19	3.01%
39	Plastics and articles thereof	0.17	2.82%
71	Natural or cultured pearls	0.16	2.55%
48	Paper and paperboard	0.16	2.55%
	Tot	4.49	72.95%

In terms of the composition of trade, the most important exported sector at 2 digit level is "Articles of apparel and clothing accessories, knitted or crocheted" (HS61), which account for almost 22% of Jordan's total exports, which registered a gradual increase over the last 6 years, while we can see a drop in the exports of Fertilizers (HS31). The other sectors remained quite stable and the top 10 sectors exported by Jordan over the last 6 years didn't change.



# **HS** - 6 digits level trade

At a more disaggregated level we see the top 20 Jordan's exported products in 2015, at the 6-digit level in the table below. Note that while the average annual growth rate of exports for these 20 products was 3.77%, this masks considerable variation. Five of the top 20 products saw an annual average decline in exports while two of the products saw a rate of growth in excess of 100%. In particular for "Bromides & bromide oxides" we see an average annual rate of growth of more thn 611%. We also see that the EU is not significant as export destination. For 17 of the top 20 products the share of exports going to the EU is less than 3%.

Product Code	Product Description	2016 Exports value (millions \$)	Exports Share to World	AARG (2010-2016)	2016 Share of export to the EU
611420	Garments, n.e.s., knitted or croche	803.41	13.06%	15.30%	2.84%
251010	Natural calcium phosphates, nat. al	434.39	7.06%	7.73%	2.02%
310490	Potassic min./chem. fertilisers (ex	425.6	6.92%	-4.53%	2.92%
300490	Medicaments (excl. of 30.02/30.05/3	378.35	6.15%	0.40%	0.70%
611490	Garments, n.e.s., knitted or croche	363.28	5.90%	16.89%	0.97%
070200	Tomatoes, fresh/chilled	255.55	4.15%	3.47%	0.01%
300390	Medicaments (excl. of 30.02/30.05/3	227.51	3.70%	14.09%	0.09%
010410	Live sheep	136.78	2.22%	48.39%	0.00%
711319	Articles of jewellery & parts there	135.09	2.20%	3.93%	11.40%
310290	Nitrogenous min./chem. fertilisers	124.24	2.02%	-10.74%	5.94%
610910	T-shirts, singlets & oth. vests, kn	119.9	1.95%	15.67%	6.94%
282759	Bromides & bromide oxides other tha	91.39	1.49%	611.21%	0.00%
854420	Co-axial cable & oth. co-axial elec	90.1	1.46%	17.69%	0.00%
761290	Aluminium casks&sim. conts.,incl	85.89	1.40%	-2.45%	1.85%
080930	Peaches, incl. nectarines, fresh	85.86	1.40%	18.70%	0.00%
280920	Phosphoric acid & polyphosphoric ac	83.57	1.36%	2.30%	0.00%
480300	Toilet/facial tissue stock, towel/n	65.86	1.07%	-0.72%	0.00%
852390	Prepared unrecorded media for sound	62.95	1.02%	156.34%	0.00%
280130	Fluorine; bromine	60.78	0.99%	62.60%	0.05%
210690	Food preps., n.e.s.	58.11	0.94%	-1.33%	13.20%
Grand tot	al	4,088.59	66.45%	3.77%	2.22%

Notes: The product description has been shortened to 35 characters for purposes of legibility.

## **Revealed comparative advantage**

In the following table we give the normalized revealed comparative advantage (nRCA) for Jordan's top 20 exported products for the latest available year (2016). The products are ranked by degree of revealed comparative advantage, and where below the double line in the table Jordan has a negative revealed comparative advantage. The three biggest export sectors are identified in red. We also give the normalized revealed comparative advantage for each of our the comparator country other country groups. In bold we identify the country-product combinations which also have a positive nRCA, and the purpose of this is to see which country groupings are most likely to compete with Jordan by product.

	NORMALIZED RCA - 2016										
Code	Product Name	Jordan	Cl1	CI2 EAP	CI2 ECA	CI2 LAC	CI2 SA	CI2 SSA	Cl 4		
310490	Potassic min./chem.	0.999	-0.327	-0.893	-0.959	-0.943	-0.996	0.244	-0.679		
611420	Garments, n.e.s., kn	0.998	-0.59	-0.192	-0.333	-0.575	0.776	-0.793	-0.267		
282759	Bromides & bromide o	0.997	-0.417	-0.987	-0.902	-0.944	0.312	-0.991	-0.813		
251010	Natural calcium phos	0.996	-0.997	-1 <sup>13</sup>	-1	0.544	-0.936	0.102	-0.997		
280130	Fluorine; bromine	0.996	-0.332	-0.999	-1	-0.998	0.223	-0.865	-0.95		
310290	Nitrogenous min./che	0.996	-0.111	-0.989	-0.782	-0.424	-0.956	0.887	0.322		
611490	Garments, n.e.s., kn	0.996	-0.424	0.401	-0.487	-0.976	0.7	-0.212	0.298		
010410	Live sheep	0.994	-0.199	-0.995	0.896	-0.998	-0.271	0.539	0.369		
080930	Peaches, incl. necta	0.977	-0.452	-1	0.333	-0.979	-0.996	0.35	0.693		
070200	Tomatoes, fresh/chil	0.976	-0.398	-0.989	0.215	0.734	-0.256	-0.339	0.308		
280920	Phosphoric acid & po	0.964	-0.333	-0.999	-0.699	-0.351	-0.969	0.853	-0.815		
300390	Medicaments (excl. o	0.964	0.001	-0.993	-0.653	-0.945	0.127	-0.581	0		
761290	Aluminium casks&s	0.961	0.087	-0.292	0.303	0	-0.433	0.22	0.304		
480300	Toilet/facial tissue	0.953	-0.102	0.806	0.39	-0.072	-0.536	-0.19	0.214		
854420	Co-axial cable & oth	0.951	-0.27	0.242	0.423	-0.069	-0.668	0.013	0.079		
610910	T-shirts, singlets &	0.868	-0.337	0.6	-0.137	0.239	0.68	-0.482	0.149		
852390	Prepared unrecorded	0.736	-0.335	-0.952	-0.917	-0.677	-0.433	-0.534	-0.108		
210690	Food preps., n.e.s.	0.609	0.16	-0.031	-0.224	-0.352	-0.292	-0.083	0.089		
711319	Articles of jeweller	0.594	-0.256	0.548	-0.883	-0.772	0.701	-0.622	-0.214		
300490	Medicaments (excl. o	0.538	0.192	-0.834	-0.345	-0.728	0.297	-0.701	0.006		

Notes: The product description has been shortened to 20 characters for purposes of legibility; Notes: EAP - East Asia & Pacific; ECA - Europe & Central Asia; LAC – L. America & Caribbean; SA - South Asia: SSA - Sub-Saharan Africa

There are two main messages which emerge from this table. First, it is interesting that out of Jordan's top 20 non-oil exports, for 15 of the products Jordan has a positive revealed comparative advantage of more than 0.9 which suggests a strong competitiveness in world markets for these products. Second, in terms of possible competitor countries we see that the group of countries most likely to be competitors for Jordan in world markets are those in the Cluster 4 group, as they have a positive nRCA in 12 of the 20 sectors for which Jordan had a positive nRCA. The country groups least likely to be competing with Algeria in world markets are the Latin American and Caribbean countries.

-

<sup>&</sup>lt;sup>13</sup> Data in *italic* refers to RCA in 2014 due to data availability

## Similarity of Jordan's exports with the comparator countries

Another way of addressing the issue of competing countries is to look at the overall degree of similarity of Jordan's exports with the exports of the comparator countries. A useful indicator for this purpose is the Finger-Kreinin indicator which ranges between 0 and 1. When the indicator is equal to 1, this means that the structure of trade between Jordan and the comparator country (or country group) is identical. When the indicator is equal to zero this means that they do not export any of the same products and hence the structure is completely different. The indicator can then be calculated at different levels of disaggregation of trade, and in the table below we report on the similarity at the 2, 4 and 6-digit levels, and do so for both 2010 and 2015.

	2dig		40	lig	6dig	
	2010	2015	2010	2015	2010	2015
Cluster1	0.361	0.339	0.206	0.183	0.149	0.137
Cluster2 - EAP	0.314	0.298	0.181	0.151	0.111	0.094
Cluster2 - ECA	0.297	0.294	0.185	0.165	0.101	0.090
Cluster2 LAC	0.296	0.275	0.171	0.144	0.116	0.092
Cluster2 - SA	0.340	0.327	0.169	0.178	0.119	0.130
Cluster2 -SSA	0.321	0.308	0.156	0.125	0.100	0.088
Cluster4	0.336	0.328	0.214	0.198	0.145	0.139

Consistent with the nRCA analysis we see that the group of countries in Cluster 4 has a structure of trade with a great degree of similarity with Jordan at all levels of aggregation. Hence at the 6-digit level we see that the degree of similarity in trade is close to 25% in 2015. We also see however, that the degree of similarity with the ECA cluster has significantly declined over time as it was over 32% in 2010. The decline in similarity is true with regard to all the comparator country groupsThe lowest degree of similarity is with the Latin American & Caribbean countries, followed by the European and Central Asian countries at 2 digit level.

#### **Diversification of exports**

We turn now to considering in more detail the degree of Jordan's export diversification and how it has evolved over time. We proceed by first analysing the degree of concentration of Jordan's exports in terms of different products (TCI by product, at the HS 6-digit level) and then in term of the number of trade partners (TCI by country). For the TCI by country we do the calculation taking into consideration all the export partners, and then the most significant export partners in 2015 by exports, where we see that 19 countries account for more than 90% of Jordan's total exports.

From the table it can be seen that there has been a reduced diversification of Jordan's exports to the world, while in contrast an increased diversification in terms of exports to the EU. This differential pattern of changes in interesting. With regard to geographical diversification we again see a reduction in diversification over time when considering all partners as well as when considering the top 19 partners.

	TCI by product		TCI by countries		
	World	EU27 Members	All partners	Top 19 partners	
2010	0.033	0.082	0.085	0.134	
2011	0.040	0.099	0.081	0.126	
2012	0.035	0.116	0.083	0.123	
2013	0.031	0.079	0.096	0.138	
2014	0.033	0.078	0.092	0.135	
2015	0.040	0.076	0.098	0.132	
2016	0.041	0.056	0.103	0.137	

In table 5 earlier in the report we identified that there were 75 new products exported by Jordan when comparing 2010-2016, out of the list of top 200 products in 2016. This is a big change and either reflects considerable dynamism, or considerable volatility in Jordan's exports. The table below identified the top 10 products by value of exports out of this list of 75. What is interesting is that the first item on the list (Bromides & bromide oxides other than bromides of sodium/potassium) is a new product compared to 2010, and by 2016 has become the top 12<sup>th</sup> exports for Jordan with a high revealed comparative advantage as given in the earlier tables.

List of the top 10 new products exported to the WORLD in 2016 (compared to 2010)

Product	Product Name	Exports	Exports
Code		Value	Share
282759	Bromides & bromide oxides other than bromides of sodium/potassium	91.39	1.49%
852390	Prepared unrecorded media for sound recording/sim. recording of oth. phenom	62.95	1.02%
481820	Handkerchiefs, cleansing/facial tissues & towels, of paper pulp/paper/cellu	30.58	0.50%
610610	Women's/girls' blouses, shirts & shirt-blouses, knitted or crocheted, of co	30.10	0.49%
250590	Natural sands other than silica & quartz, whether or not coloured, other th	26.69	0.43%
630291	Toilet linen & kitchen linen other than of terry fabrics, of cotton	15.09	0.25%
848180	Taps, cocks, valves & sim. appls. for pipes/boiler shells/tanks/vats or the	14.02	0.23%
382490	Other chem. prods. & preps. of the chem./allied industries (incl. those con	13.87	0.23%
170490	Sugar confectionery other than chewing gum (incl. white chocolate), not con	13.28	0.22%
090240	Tea, black (fermented) & partly fermented tea, whether or not flavoured, in	12.75	0.21%

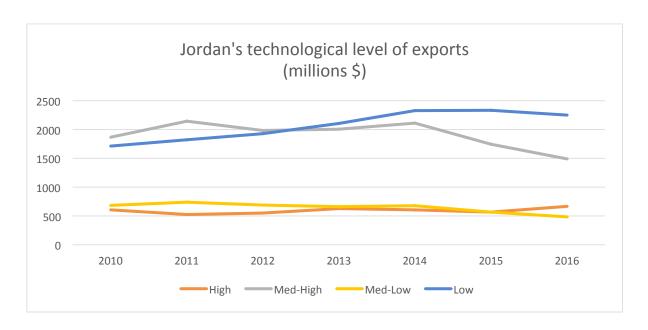
In a comparable fashion, the table below gives the list of most significant by value new export destinations, when comparing 2010 with 2016.

Partner	Exports Value	Exports Share
Sudan	64.06	97.81%
Paraguay	0.47	0.71%
South Sudan	0.39	0.60%
Sierra Leone	0.23	0.35%
Myanmar (Burma)	0.12	0.18%
Mongolia	0.06	0.09%
Brunei Darussalam	0.04	0.06%
Guinea-Bissau	0.03	0.05%

Madagascar	0.03	0.04%
Iceland	0.02	0.03%

Note: the export share is calculated out of total exports to the new partners.

# Technological level of exports



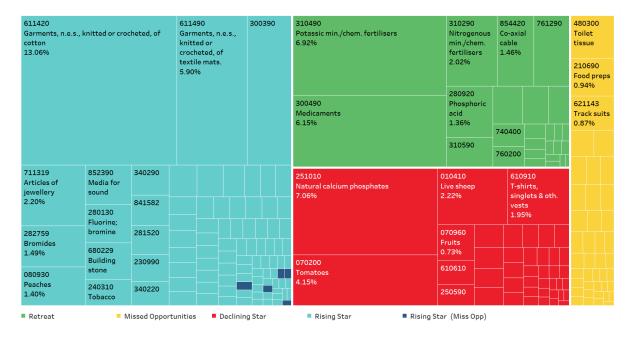
	Change % (2010-2015)								
Reporter	Unall.	High	Med-high	Med-low	Low				
Jordan	22.8%	8.4%	25.8%	8.4%	34.6%				
Cluster1	-0.8%	0.8%	0.4%	-0.9%	0.4%				
Clust2-EAP	-6.4%	6.8%	0.2%	-2.8%	2.2%				
Clust2-ECA	-4.4%	0.1%	4.2%	-3.6%	3.7%				
Clust2-LAC	-5.6%	0.4%	6.3%	-1.5%	0.4%				
Clust2-SA	-2.4%	2.1%	2.5%	-5.1%	2.9%				
Clust2-SSA	1.2%	0.9%	0.6%	-2.6%	0.0%				
Cluster4	-3.9%	-0.2%	3.6%	-1.8%	2.2%				

#### **Analytical Table**

The table below takes Jordan's top 200 exported products and cross-classifies them in terms of the changes in their relative importance in Jordan's trade, with their changing relative importance in world demand. Hence if you look at the bottom left-hand cell here we identify that there are 41 products which Jordan exports, where relative world demand has risen, but where their share in Jordan's exports has declined. Hence these are products which could be considered as 'missed opportunities'. Now consider the bottom right hand cell. From this we see that there are 92 products where their share in Jordan's exports has risen *and* where there has been an increase in relative world demand. We therefore classify these as Rising Stars. Of these 92 products there are 87 products (the figure given in brackets), where the change in their share in Jordan's exports has increase by more than the change in world demand. These are really the rising stars because these are the ones where the change Jordan's exports has exceeded the relative changes in world demand. However, conversely this means that there are 92 minus 87 = 5 products where although Jordan's exports have increased this is less than the change in world demand. These products could also be considered as missed opportunities. In total therefore there are up to 46 products (41 + 5) which could be considered as missed opportunities.

Comparing 2010 with 2016		Change in Exports Share between Jordan & World			
		Negative	Positive		
		Retreat	Declining Star		
Change in	Negative	26	41		
Exports Share		23.54%	21.38%		
between World & World	Positive	Missed Opp	Rising Star		
		41	92 (87)		
		7.28%	44.00% (43.79%)		

The graphic below identifies the commodities in the four cells of the cross-classification table, and the full list of products which are missed opportunities, and missed opportunities from the rising starts is given in the Appendix to this report.



Finally the table below takes the list of 46 missed opportunities, and for each of our country clusters identifies how many of these products saw an increase in their export share. What we see is interesting – for each of the clusters a very high proportion of the products increased their export share. So a possible reason for the lack of Jordanian success could be the success of these countries in exporting these products.

#### Export performance of the other country groups in Jordan's Missed Opportunities

Country Group	No of products with positive Δ export share (2010 - 2016)
Cluster1	36
Cluster2 -EAP	29
Cluster2 - ECA	38
Cluster2 - LAC	31
Cluster2 - SA	38
Cluster2 - SSA	33
Cluster4	42

# Lebanon

#### **Overview of Lebanon's Exports**

Year	Total exports	Exports Share
	(billions \$)	to the EU27
2010	4.25	17.88%
2011	4.26	11.97%
2012	4.44	9.91%
2013	3.93	8.91%
2014	3.31	11.18%

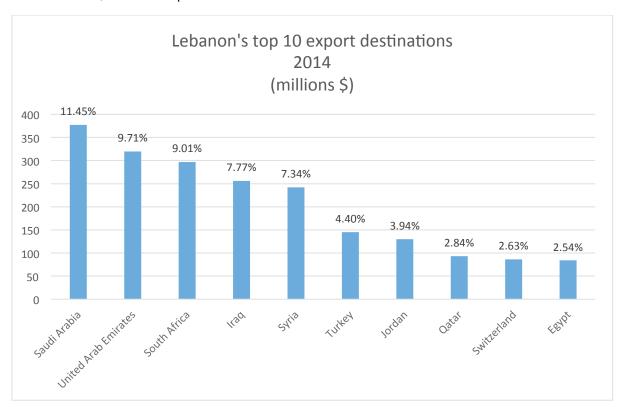
Lebanon's exports account for 0.02% of World exports. From the table it can be seen that while there was an increase in exports between 2010 and 2012, subsequently Lebanon's exports saw a decline, with a contraction of more than 25% between 2012 and 2014 (latest year available).

During the last five years Lebanese exports have decreased at an Average Annual Rate of Growth of -5.7%, from \$4.25B in

2010 to \$3.31 in 2014.

We can see that the EU market is not an important destination for Lebanon's export. In 2014 only 11% of its total exports went to the European market – with a contraction in the export share of almost 7% between 2010 and 2014.

In 2014 the top export destinations for Lebanon were Saudi Arabia (11.45%), UAE (9.71%) and South Africa (9.01%). The top 10 list of destination countries alone account for almost 62% of Lebanon's total exports, and only 2 out of 10 of these destinations are European countries. Over the year exports to South Africa had a big increase in 2012, but after this they saw a rapid drop. Also the exports to Switzerland decreased rapidly after 2012. Lebanon exported a lot to France in 2010, but from 2011 exports to France had a contraction and went out of the top 10 list of exports destinations. Qatar took its place.

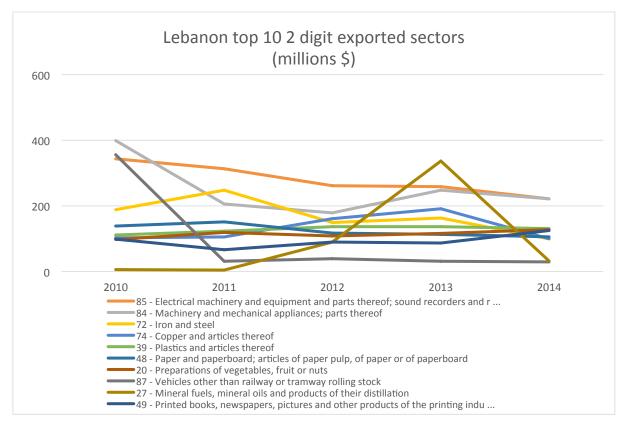


#### **HS-2 digit level trade**

Code	Product Name	Export	Export
		value	share
		(\$B)	
71	Natural or cultured pearls	0.54	16.38%
84	Machinery	0.22	6.70%
85	Electrical machinery	0.22	6.70%
39	Plastics and articles thereof	0.13	3.95%
20	Vegetables, fruit or nuts	0.13	3.86%
49	Printed books, newspapers	0.12	3.76%
33	Essential oils and resinoids	0.12	3.48%
48	Paper and paperboard	0.11	3.19%
22	Beverages, spirits and vinegar	0.1	3.08%
74	Copper and articles thereof	0.1	3.01%
	Grand total	1.79	54.11%

Most important Lebanon's sector, from the point of view of exports, is sector 71 - Natural or cultured pearls, precious or semi-precious stones — which account in 2014 for 16.38% of Lebanon's total exports. The exports in this sector had a big increase from 2010 to 2012, but then we can see a deep drop of exports in the following two years, with a negative average rate of growth of -42.5% over the last 2 years. In the following graph we have the top 10 exported sectors between 2010 and 2014, calculated on average. For purpose of legibility we exclude sector 71 from the graph. We can see that among the top 10, on average, we have Mineral Fuels. This sector had a big growth from

2010 to 2013, but in 2014 we registered a fall at the 28<sup>th</sup> place in 2014, as the value of exports decreased from \$336.91M to \$32.3M. Also the exports in Vehicles - product 87 – had a deep contraction between 2010(\$356.03M) and 2011 (\$30.88M), now stable around \$32M, and falling in the 32<sup>nd</sup> position. Exports in Iron and steel gradually diminished over the 5 years taken in to consideration, going out of the top 10 list of exported products in 2014. Even thus still in the top 10, sector 84 and 85 had a gradual contraction over the last years as well.



#### HS-6 digit trade

At a more disaggregated level we see the top 20 Lebanon's exported products in 2014, at the 6-digit level in the table below. Note that while the average annual growth rate of exports for these 20 products was -3.84%, this masks considerable variation. 13 of the top 20 products saw an annual average increase in exports with a rate of growth in excess of almost 500% for two of these products. We also see that the EU is not a significant export destination, except for "Phosphoric acid & polyphosphoric..." where the export share is over 60%. For si9x of the top 20 products the share of exports going to the EU is less than 1%.

Product Code	Product Description	2014 Exports value (millions \$)	Exports Share to World	AARG (2010-2014)	2014 Share of export to the EU
710812	Gold (incl. gold plated with platin	365.79	11.06%	-8.56%	0.00%
490199	Printed books, brochures, leaflets	112.16	3.39%	14.96%	3.18%
740400	Copper waste & scrap	96.93	2.93%	6.50%	19.85%
710239	Diamonds, non-industrial other than	77.89	2.36%	-1.44%	20.04%
720410	Waste & scrap of cast iron	76.42	2.31%	-10.34%	0.00%
310310	Superphosphates	72.51	2.19%	-5.48%	32.95%
711319	Articles of jewellery & parts there	56.14	1.70%	2.03%	10.49%
070190	Potatoes other than seed potatoes,	48.78	1.47%	48.35%	0.00%
850211	Electric generating sets with C-I i	46.19	1.40%	-1.56%	0.06%
280920	Phosphoric acid & polyphosphoric ac	45.92	1.39%	17.81%	62.20%
841829	Household-type refrigerators (excl.	45.66	1.38%	6.31%	0.20%
210390	Sauces & preps. therefor, n.e.s.; m	40.63	1.23%	473.09%	19.79%
330300	Perfumes & toilet waters	39.18	1.18%	34.62%	0.10%
180690	Chocolate & oth. food preps. cont.	37.34	1.13%	23.87%	1.04%
940360	Wooden furniture (excl. of 94.01 &	36.76	1.11%	-7.40%	4.65%
200819	Nuts (excl. ground-nuts), incl. mix	36.08	1.09%	7.34%	10.98%
300490	Medicaments (excl. of 30.02/30.05/3	35.97	1.09%	36.05%	10.51%
850213	Electric generating sets with C-I i	35.09	1.06%	19.42%	0.03%
170199	Cane/beet sugar & chemically pure s	33.84	1.02%	505.90%	0.92%
220290	Non-alcoholic beverages other than	33.76	1.02%	13.96%	4.18%
	Grand Total	1,373.04	41.52%	-3.84%	8.49%

Notes: The product description has been shortened to 35 characters for purposes of legibility.

# Revealed comparative advantage

In the following table we give the normalized revealed comparative advantage (nRCA) for Lebanon's top 20 exported products for the latest available year (2014). The products are ranked by degree of revealed comparative advantage, and where below the double line in the table Lebanon has a negative revealed comparative advantage. The three biggest export sectors are identified in red. We also give the normalized revealed comparative advantage for each of our the comparator country other country groups. In bold we identify the country-product combinations which also have a positive nRCA, and the purpose of this is to see which country groupings are most likely to compete with Algeria by product.

	NORMALIZED RCA - 2014									
Code	Product Name	Jordan	Cl1	CI2 EAP	CI2 ECA	CI2 LAC	CI2 SA	CI2 SSA	Cl 4	
841829	Household-type refri	0.993	-0.328	-0.492	-0.929	-0.993	0.025	0.662	-0.38	
720410	Waste & scrap of cas	0.992	0.224	-0.621	-0.634	-0.342	-0.964	-0.07	0.176	
310310	Superphosphates	0.99	-0.706	-0.726	0.475	0.112	-0.978	-0.767	-0.708	
850211	Electric generating	0.982	-0.055	-0.632	-0.812	-0.668	-0.13	0.003	0.074	
070190	Potatoes other than	0.976	0.163	-0.926	0.089	-0.828	0.434	0.561	-0.219	
280920	Phosphoric acid & po	0.967	-0.257	-0.829	-0.881	-0.473	-0.913	0.723	-0.751	
200819	Nuts (excl. ground-n	0.960	-0.046	0.062	-0.193	-0.46	0.121	-0.727	-0.1	
490199	Printed books, broch	0.955	0.201	-0.847	-0.366	-0.382	-0.776	-0.312	0.027	
850213	Electric generating	0.935	0.193	-0.429	-0.827	-0.659	-0.356	-0.277	-0.324	
740400	Copper waste & scrap	0.923	0.194	-0.033	0.064	0.066	-0.505	0.134	0.136	
210390	Sauces & preps. ther	0.919	0.098	0.419	-0.417	-0.087	-0.676	0.138	0.141	
220290	Non-alcoholic bevera	0.884	0.068	0.419	0.035	-0.359	-0.831	-0.146	-0.101	
180690	Chocolate & oth. foo	0.868	0.195	-0.909	0.223	-0.117	-0.568	-0.545	0.228	
170199	Cane/beet sugar & ch	0.865	-0.187	0.501	0.528	0.675	0.578	0.464	-0.13	
330300	Perfumes & toilet wa	0.844	0.248	-0.638	-0.471	-0.422	-0.419	-0.645	0.217	
710812	Gold (incl. gold pla	0.818	-0.149	-0.323	-0.865	0.245	-0.234	0.164	-0.549	
940360	Wooden furniture (ex	0.754	-0.325	0.41	0.264	-0.489	-0.149	-0.587	0.347	
710239	Diamonds, non-indust	0.740	-0.419	-0.05	-0.91	-0.951	0.896	0.315	-0.961	
711319	Articles of jeweller	0.441	-0.465	0.014	-0.956	-0.77	0.66	-0.872	-0.37	
300490	Medicaments (excl. o	-0.179	0.239	-0.898	-0.362	-0.649	0.206	-0.767	0.008	

Notes: The product description has been shortened to 20 characters for purposes of legibility; Notes: EAP - East Asia & Pacific; ECA - Europe & Central Asia; LAC – L. America & Caribbean; SA - South Asia: SSA - Sub-Saharan Africa

There are two main messages which emerge from this table. First, it is interesting that out of Algeria's top 20 non-oil exports, only of the products Lebanon has a negative revealed comparative advantage which suggests a lack of competitiveness in world markets for these products. Besides there are only 11 HS 6-digit products for which Lebanon has a positive revealed comparative advantage superior of 0.9. Second, in terms of possible competitor countries we see that the group of countries most likely to be competitors for Lebanon in world markets are those in Sub-Sharan Africa group, as they have a positive nRCA in 9 of the 20 sectors. The country groups least likely to be competing with Lebanon in world markets are the Latin American and Caribbean countries.

## Similarity of Lebanon's exports with the comparator countries

Another way of addressing the issue of competing countries is to look at the overall degree of similarity of Lebanon's exports with the exports of the comparator countries. A useful indicator for this purpose is the Finger-Kreinin indicator which ranges between 0 and 1. When the indicator is equal to 1, this means that the structure of trade between Lebanon and the comparator country (or country group) is identical. When the indicator is equal to zero this means that they do not export any of the same products and hence the structure is completely different. The indicator can then be calculated at different levels of disaggregation of trade, and in the table below we report on the similarity at the 2, 4 and 6-digit levels, and do so for both 2010 and 2014.

	2dig		40	lig	6dig		
	2010	2014	2010	2014	2010	2014	
Cluster1	0.546	0.469	0.272	0.289	0.212	0.224	
Cluster2 - EAP	0.497	0.452	0.285	0.268	0.195	0.184	
Cluster2 - ECA	0.445	0.434	0.199	0.233	0.141	0.168	
Cluster2 LAC	0.524	0.447	0.248	0.261	0.175	0.177	
Cluster2 - SA	0.473	0.451	0.208	0.258	0.148	0.193	
Cluster2 -SSA	0.613	0.545	0.264	0.320	0.184	0.189	
Cluster4	0.570	0.497	0.278	0.315	0.212	0.247	

Consistent with the nRCA analysis we see that the group of countries whose structure of trade has the greatest degree of similarity with Lebanon are Sub Saharan Africa group, and this is true at 2 and 4 digit levels of aggregation. Hence at the 6-digit level we see that the degree of similarity in trade is close to 19% in 2014, while it is close to 25% and 22% for Cluster 4 and Cluster 1 respectively. The lowest degree of similarity is with the European and Central Asia group of countries, at all level of aggregation.

# **Diversification of exports**

We turn now to considering in more detail the degree of Lebanon's export diversification and how it has evolved over time. We proceed by first analysing the degree of concentration of Lebanon's exports in terms of different products (TCI by product, at the HS 6-digit level) and then in term of the number of trade partners (TCI by country). For the TCI by country we do the calculation taking into consideration all the export partners, and then the most significant export partners in 2014 by exports, where we see that 38 countries account for more than 90% of Lebanon's total exports.

From the table it can be seen that there has been an increased diversification of Lebanon's exports to the world in the last two years. The same happened in term of exports to the EU. With regard to geographical diversification we again see an increase in diversification over time when considering all partners as well as when considering the top 38 partners.

	TCI by	product	TCI by countries		
	World	EU27 Members	All partners	Top 38 partners	
2010	0.051	0.201	0.056	0.068	
2011	0.083	0.046	0.065	0.079	
2012	0.105	0.052	0.078	0.092	
2013	0.033	0.031	0.057	0.070	
2014	0.020	0.028	0.051	0.063	

In table 5 earlier in the report we identified that there were 49 new products exported by Lebanon when comparing 2010-2014, out of the list of top 200 products in 2014. This is a big change and either reflects considerable dynamism, or considerable volatility in Lebanon's exports. The table below identified the top 10 products by value of exports out of this list of 49. What is interesting is that the first item on the list (Sauces & preps. therefor, n.e.s.) is a new product compared to 2010, and by 2014 has become the 12<sup>th</sup> top export for Lebanon with a high revealed comparative advantage as given in the earlier tables.

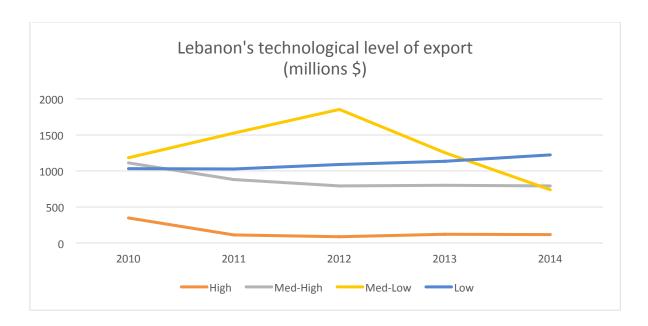
List of the top 10 new products exported to the WORLD in 2014 (compared to 2010)

Product	Product Name	Exports	Exports
Code		Value	Share
210390	Sauces & preps. therefor, n.e.s.; mixed condiments & mixed seasonings, n.e	40.63	1.23%
170199	Cane/beet sugar & chemically pure sucrose, in solid form, not cont. added f	33.84	1.02%
271113	Butanes, liquefied	12.32	0.37%
320649	Colouring matter & oth. preps. as spec. in Note 3 to Ch.32, n.e.s. in Ch.32	9.96	0.30%
382490	Other chem. prods. & preps. of the chem./allied industries (incl. those con	8.40	0.25%
320820	Paints & varnishes (incl. enamels & lacquers) based on acrylic/vinyl polyme	7.15	0.22%
842833	Continuous-action elevators & conveyors, for gds./mats., belt type (excl. o	6.29	0.19%
110100	Wheat/meslin flour	6.04	0.18%
321290	Pigments (incl. metallic powders & flakes) dispersed in non-aqueous media/i	5.98	0.18%
340119	Soap & organic surface-active prods. & preps., in the form of bars/cakes/mo	5.90	0.18%

In a comparable fashion, the table below gives the list of most significant by value new export destinations, when comparing 2010 with 2014.

Partner	Exports Value	Exports Share
Sudan	15.34	98.91%
Myanmar (Burma)	0.07	0.43%
Bolivia	0.05	0.33%
Mongolia	0.04	0.28%
Saint Vincent and the Grenadines	0.01	0.04%
TFYR of Macedonia	0.00	0.00%
El Salvador	0.00	0.00%
Papua New Guinea	0.00	0.00%

# **Technological level of exports**



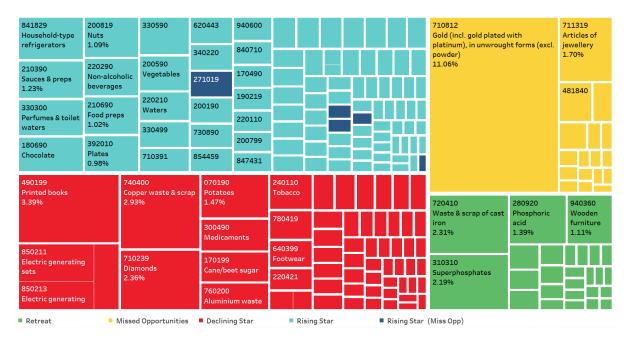
		Change % (2010-2014)				
Reporter	Unall.	High	Med-high	Med-low	Low	
Lebanon	13.3%	3.4%	24.0%	22.3%	36.9%	
Cluster1	-0.8%	0.8%	0.4%	-0.9%	0.4%	
Clust2-EAP	-6.4%	6.8%	0.2%	-2.8%	2.2%	
Clust2-ECA	-4.4%	0.1%	4.2%	-3.6%	3.7%	
Clust2-LAC	-5.6%	0.4%	6.3%	-1.5%	0.4%	
Clust2-SA	-2.4%	2.1%	2.5%	-5.1%	2.9%	
Clust2-SSA	1.2%	0.9%	0.6%	-2.6%	0.0%	
Cluster4	-3.9%	-0.2%	3.6%	-1.8%	2.2%	

#### **Analytical Table**

The table below takes Lebanon's top 200 exported products, and cross-classifies them in terms of the changes in their relative importance in Lebanon's trade, with their changing relative importance in world demand. Hence if you look at the bottom left-hand cell here we identify that there are 18 products which Lebanon exports, where relative world demand has risen, but where their share in Lebanon's exports has declined. Hence these are products which could be considered as 'missed opportunities'. Now consider the bottom right hand cell. From this we see that there are 94 products where their share in Lebanon's exports has risen *and* where there has been an increase in relative world demand. We therefore classify these as Rising Stars. Of these 94 products there are 89 products (the figure given in brackets), where the change in their share in Lebanon's exports has increase by more than the change in world demand. These are really the rising stars because these are the ones where the change Lebanon's exports has exceeded the relative changes in world demand. However, conversely this means that there are 94 minus 89 = 5 products where although Lebanon's exports have increased this is less than the change in world demand. These products could also be considered as missed opportunities. In total therefore there are up to 23 products (18 + 5) which could be considered as missed opportunities.

Comparing 2010 with 2014		Change in Exports Share between Lebanon & World			
		Negative	Positive		
Change in		Retreat	Declining Star		
Exports	Negative	26	61		
Share		10.32%	26.80%		
between		Missed Opp	Rising Star		
World & World	Positive	18	94 (89)		
vvoria		15.63%	30.53% (29.44%)		

The graphic below identifies the commodities in the four cells of the cross-classification table, and the full list of products which are missed opportunities, and missed opportunities from the rising starts is given in the Appendix to this report.



Finally the table below takes the list of 23 missed opportunities, and for each of our country clusters identifies how many of these products saw an increase in their export share. What we see is interesting – for each of the clusters a very high proportion of the products increased their export share. So a possible reason for the lack of Lebanon success could be the success of these countries in exporting these products.

#### Export performance of the other country groups in Lebanon's Missed Opportunities

Country Group	No of products with positive Δ export share (2010 - 2014)
Cluster1	18
Cluster2 -EAP	13
Cluster2 - ECA	15
Cluster2 - LAC	18
Cluster2 - SA	17
Cluster2 - SSA	17
Cluster4	17

#### **Morocco**

# **Overview of Morocco's Exports**

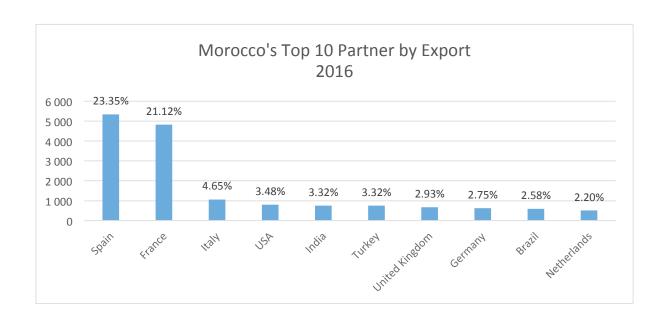
Year	Total exports (billions \$)	Exports Share to the EU27
2010	17.74	59.8%
2011	21.65	58.7%
2012	21.39	56.8%
2013	21.96	60.5%
2014	23.81	63.5%
2015	22.03	63.4%
2016	22.86	64.8%

Morocco's exports account for 0.15% of the World's total volume of exports. From the table it can be seen that while there was an increase in exports between 2010 and 2014, subsequently Morocco's exports saw a decline. Its total value of exports increased with an Average Annual rate of growth of 4.9%, almost 3 percentage points more than the World's average annual rate of growth. In 2014 we have the highest recorded level for Morocco, which is \$23.82 billion of total exports. In particular, in the last year, we register a further increase in its total exports, which went from \$22.03 billion to

\$22.86 billon, while the World total export recorded a contraction, decreasing from \$14,643.07 to \$12,469.53 billion.

We can see that the EU market is the most important destination for Morocco's exports. In 2016 almost 65% of its total exports went to the European market – with an increase in the export share of more than 5% over the last 6 years.

The 2 most important partners by export are Spain (23.35%) and France (21.12%). In particular for Spain, we can see a strong increase in the volume of exports between 2012 and 2014, reaching the \$5,336.41 million in 2016, thereby becoming the most important export partner for Morocco. The top 10 list of destination countries, alone account for almost 70% of Morocco's total exports, and 7 out of 10 of these destinations are European countries. Over the last 6 years the list of Morocco's top export destinations has changed little, with the declining importance of Belgium, and a significant increase in exports to Turkey from 2013, which took the place of Belgium in the top 10 list of Morocco's partners by export from 2014.



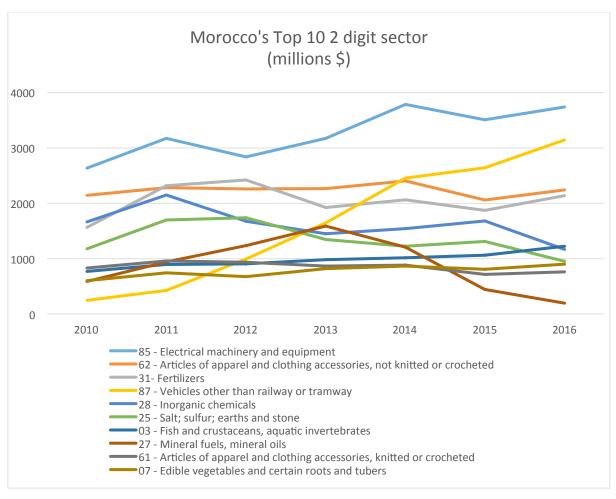
# **HS-2 digit level trade**

Code	Product Name	Export value (\$B)	Export share
85	Electrical machinery	3.74	16.36%
87	Vehicles other than railway	3.14	13.73%
62	Articles of apparel not knitted	2.24	9.80%
31	Fertilizers	2.13	9.34%
03	Fish and crustaceans	1.22	5.35%
28	Inorganic chemicals	1.16	5.09%
25	Salt; sulfur; earths and stone	0.95	4.15%
07	Edible vegetables	0.9	3.94%
61	Articles of apparel knitted	0.76	3.33%
08	Edible fruit and nuts	0.74	3.25%

In 2016 the most important sector, from the point of view of exports, was "Electrical machinery and equipment and parts thereof..." (HS85), which account for the 16.36% of Morocco's total export.

The chart below identifies Morocco's top 10 exports over the last 6 years, which account for almost 72% of Morocco's total exports in 2016. Besides we can notice that the leading sector was Electrical machinery and equipment for all the years taken into consideration, and that Vehicles (HS87) saw an important increase from 2010 to 2016, becoming the second Morocco's most

important exported sector, which account for the 13.73% of total exports, in 2016. On the other hand we see that the level of exported mineral fuel had a contraction, dropping to the 20<sup>th</sup> place in the list of top Morocco's exported products in 2016, with an export shares of 0.85%.



#### **HS-6 digit level trade**

At a more disaggregated level we see the top 20 Morocco's exported products in 2016, at the 6-digit level in the table below. Note that while the average annual growth rate of exports for these 20 products was 8.24%, this masks considerable variation. Four of the top 20 products saw an annual average decline in exports while we saw an exceptional rate of growth for two products which belong to the Vehicles sector. The most important is product 870322, Vehicles, mostly imported to the EU market, with an AARG equal to 4557.56%. The exports in this product jumped from \$0.22M in 2010, to \$1,396.13M in 2016. Another remarkable increase in export can be noticed for product 310559, "Mineral/chem. Fertilisers", whit an AARG of 17452.44% in the last 6 years. The value of export of this products jumped indeed from \$0.009M in 2010 to \$287.62M in 2016.

We also see the significance of the EU as a destination. For seven of the top 20 products the share of exports going to the EU is greater than 80%.

Product Code	Product Description	2016 Exports value (millions \$)	Exports Share to World	AARG (2010-2016)	2016 Share of export to the EU
870322	Vehicles (excl. of 87.02 & 8703.10)	1,396.13	6.11%	4557.56%	94.8%
854430	Ignition wiring sets &oth. wiring	1,361.41	5.96%	4.95%	99.9%
280920	Phosphoric acid &polyphosphoric ac	1,138.95	4.98%	-3.67%	24.4%
870332	Vehicles princ. designed for the tp	1,119.06	4.90%	739.31%	77.3%
251010	Natural calcium phosphates, nat. al	756.3	3.31%	-2.64%	20.0%
310540	Ammonium dihydrogen or thophosphate	715.93	3.13%	14.00%	10.4%
854441	Electric conductors (excl. of 8544.	715.07	3.13%	26.68%	96.7%
310530	Diammonium hydrogen or thophosphate	607.32	2.66%	-2.61%	37.1%
070200	Tomatoes, fresh/chilled	512.01	2.24%	10.64%	88.2%
030759	Octopus (Octopus spp.), other than	432.77	1.89%	10.20%	76.3%
880330	Parts of aeroplanes/helicopters, ot	421.95	1.85%	22.82%	88.8%
160413	Sardines, sardinella& brisling/spr	417.45	1.83%	2.90%	37.8%
854129	Transistors (excl. photosensitive t	412.92	1.81%	-5.01%	28.1%
853690	Electrical app. for switching/prote	398.76	1.74%	24.27%	92.0%
854459	Electric conductors (excl. of 8544.	305.1	1.33%	60.98%	79.9%
310310	Superphosphates	304.67	1.33%	2.00%	11.4%
080520	Mandarins, incl. tangerines &satsu	299.66	1.31%	5.21%	48.6%
630790	Other made-up textile arts., incl.	289.15	1.27%	27.34%	99.2%
310559	Mineral/chem. fertilisers cont. the	287.62	1.26%	17452.44%	3.4%
030749	Cuttle fish (Sepia officinalis, Ros	251.42	1.10%	17.58%	86.7%
_	Grand total	12,143.67	53.13%	8.24%	63.45%

Notes: The product description has been shortened to 35 characters for purposes of legibility.

# **Revealed comparative advantage**

In the following table we give the normalized revealed comparative advantage (nRCA) for Morocco's top 20 exported products for the latest available year (2016). The products are ranked by degree of revealed comparative advantage. The three biggest export sectors are identified in red. We also give the normalized revealed comparative advantage for each of our comparator country groups. In bold we identify the country-product combinations which also have a positive nRCA, and the purpose of this is to see which country groupings are most likely to compete with Morocco by product.

	NORMALIZED RCA - 2016								
Code	Product Name	Morocc	Cl1	CI2 EAP	CI2 ECA	CI2 LAC	Cl2 SA	CI2 SSA	Cl 4
160413	Sardines, sardinella	0.992	-0.813	0.544	-0.440	0.208	-0.689	0.699	0.221
251010	Natural calcium phos	0.992	-0.997	-	-1.000	0.544	-0.936	0.102	-0.997
280920	Phosphoric acid & po	0.990	-0.333	-0.999	-0.699	-0.351	-0.969	0.853	-0.815
310310	Superphosphates	0.987	-0.875	-0.738	0.459	0.103	-0.932	-0.798	-0.285
030759	Octopus (Octopus spp	0.987	-0.955	0.415	-0.999	-0.083	-0.193	0.920	0.355
310540	Ammonium dihydrogeno	0.983	-0.161	-	-0.026	-0.207	-1.000	-0.111	-0.796
310559	Mineral/chem. fertil	0.981	-0.046	-0.997	0.399	-0.582	-1.000	-0.520	-0.356
310530	Diammonium hydrogeno	0.972	-0.374	-0.963	-0.259	-0.583	-0.715	-0.567	-0.242
070200	Tomatoes, fresh/chil	0.957	-0.398	-0.989	0.215	0.734	-0.256	-0.339	0.308
080520	Mandarins, incl. tan	0.949	-0.769	-	-0.509	-0.234	0.233	0.722	0.555
030749	Cuttle fish (Sepia o	0.937	-0.731	0.592	-0.819	-0.087	0.629	0.517	-0.167
854430	Ignition wiring sets	0.928	-0.586	0.720	0.819	0.691	-0.521	-0.753	0.101
854129	Transistors (excl. p	0.899	-0.148	0.125	-0.940	-0.395	-0.975	-0.976	-0.617
630790	Other made-up textil	0.893	-0.310	-0.621	0.243	0.054	0.465	-0.616	-0.372
854441	Electric conductors	0.891	-0.289	-0.603	0.433	0.123	-0.820	-0.795	0.021
870322	Vehicles (excl. of 8	0.805	0.031	-0.100	-0.111	0.138	0.278	0.055	0.391
853690	Electrical app. for	0.772	0.048	0.023	-0.261	-0.248	-0.524	-0.624	-0.094
854459	Electric conductors	0.771	-0.117	-0.400	0.411	0.042	-0.680	-0.466	0.277
870332	Vehicles princ. desi	0.647	0.218	-0.982	-0.600	-0.821	-0.913	0.252	0.392
880330	Parts of aeroplanes/	0.548	0.208	-0.177	-0.589	-0.647	0.031	-0.378	-0.134

Notes: The product description has been shortened to 20 characters for purposes of legibility; Notes: EAP - East Asia & Pacific; ECA - Europe & Central Asia; LAC – L. America & Caribbean; SA - South Asia: SSA - Sub-Saharan Africa

There are two main messages which emerge from this table. First, not surprisingly out of Morocco's top 20 exports, for all of the products Morocco has a positive revealed comparative advantage which suggests a strong of competitiveness in world markets for these products. Second, in terms of possible competitor countries we see that the group of countries most likely to be competitors for Morocco in world markets are those in the Latin America and Caribbean group and for the countries in Cluster 4, as they both have a positive nRCA in 9 of the 20 sectors. The country groups least likely to be competing with Morocco in world markets are the countries in cluster 1, and the South Asian countries.

## Similarity of Morocco's exports with the comparator countries

Another way of addressing the issue of competing countries is to look at the overall degree of similarity of Morocco's exports with the exports of the comparator countries. A useful indicator for this purpose is the Finger-Kreinin indicator which ranges between 0 and 1. When the indicator is equal to 1, this means that the structure of trade between Morocco and the comparator country (or country group) is identical. When the indicator is equal to zero this means that they do not export any of the same products and hence the structure is completely different. The indicator can then be calculated at different levels of disaggregation of trade, and in the table below we report on the similarity at the 2, 4 and 6-digit levels, and do so for both 2010 and 2015.

	2dig		40	lig	6dig		
	2010	2015	2010	2015	2010	2015	
Cluster1	0.362	0.426	0.191	0.253	0.142	0.178	
Cluster2 - EAP	0.468	0.517	0.228	0.257	0.164	0.187	
Cluster2 - ECA	0.349	0.405	0.194	0.24	0.153	0.191	
Cluster2 LAC	0.405	0.486	0.198	0.254	0.164	0.184	
Cluster2 - SA	0.377	0.383	0.201	0.247	0.151	0.184	
Cluster2 -SSA	0.319	0.38	0.174	0.228	0.133	0.145	
Cluster4	0.38	0.447	0.215	0.276	0.171	0.225	

Consistent with the nRCA analysis we see that the groups of countries whose structure of trade has the greatest degree of similarity with Morocco are the countries in Cluster 4, at 6-digit level of aggregation. Hence at the 6-digit level we see that the degree of similarity in trade is close to 22% in 2015. We also see, that the degree of similarity with all the clusters has significantly increased over time, and this is true at all level of aggregation. The lowest degree of similarity is with the Sub-Saharan African countries, at all digit level.

# **Diversification of exports**

We turn now to considering in more detail the degree of Morocco's export diversification and how it has evolved over time. We proceed by first analysing the degree of concentration of Morocco's exports in terms of different products (TCI by product, at the HS 6-digit level) and then in term of the number of trade partners (TCI by country). For the TCI by country we do the calculation taking into consideration all the export partners, and then the most significant export partners in 2016 by exports, where we see that 35 countries account for more than 90% of Morocco's total exports.

From the table it can be seen that there has been an increased diversification of Morocco's exports to the world, while in contrast less diversification in terms of exports to the EU. This differential pattern of changes in interesting. With regard to geographical diversification we see less diversification over time when considering all partners as well as when considering the top 16 partners.

	TCI by	product	TCI by c	ountries
	World	EU27 Members	All partners	Top 35 partners
2010	0.024	0.020	0.094	0.122
2011	0.028	0.020	0.095	0.119
2012	0.024	0.017	0.089	0.117
2013	0.020	0.019	0.095	0.123
2014	0.020	0.022	0.103	0.134
2015	0.022	0.026	0.102	0.132
2016	0.021	0.029	0.11	0.135

In table 5 earlier in the report we identified that there were 54 new products exported by Morocco when comparing 2010-2016, out of the list of top 200 products in 2016. This is a big change and either reflects considerable dynamism, or considerable volatility in Morocco's exports. The table below identified the top 10 products by value of exports out of this list of 54. What is interesting is that the first item on the list (Vehicles excl. of 87.02 & 8703.10 ...) is a new product compared to 2010, and by 2016 has become the top export for Morocco with a high revealed comparative advantage as given in the earlier tables.

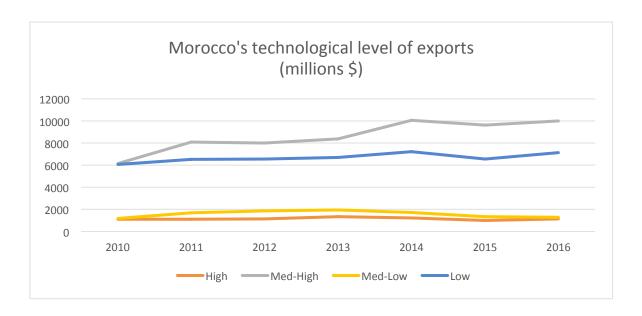
List of the top 10 new products exported to the WORLD in 2016 (compared to 2010)

Product	Product Name	Exports	Exports
Code		Value	Share
870322	Vehicles (excl. of 87.02 & 8703.10) princ. designed for the tpt. of persons	1,396.13	6.11%
870332	Vehicles princ. designed for the tpt. of persons (excl. of 87.02 & 8703.10	1,119.06	4.90%
310559	Mineral/chem. fertilisers cont. the 2 fertilising elements nitrogen & phosp	287.62	1.26%
170199	Cane/beet sugar & chemically pure sucrose, in solid form, not cont. added f	172.86	0.76%
854720	Insulating fittings for electrical machines/appls./equip., of plastics (exc	97.06	0.42%
840991	Parts suit. for use solely/princ. with spark-ignition int. comb. piston eng	79.63	0.35%
252310	Cement clinkers	62.52	0.27%
620451	Women's/girls' skirts & divided skirts (excl. knitted or crocheted), of woo	61.19	0.27%
081020	Raspberries, blackberries, mulberries & loganberries, fresh	59.48	0.26%
870894	Steering wheels, steering columns & steering boxes for the motor vehicles o	56.07	0.25%

In a comparable fashion, the table below gives the list of most significant by value new export destinations, when comparing 2010 with 2016.

Partner	Exports Value	Exports Share
Mozambique	33.03	49.69%
Sudan	20.87	31.40%
Cambodia	8.32	12.52%
Myanmar (Burma)	2.39	3.60%
Dem. People's Rep. of Korea	0.65	0.98%
Somalia	0.41	0.62%
Kyrgyzstan	0.34	0.51%
Turkmenistan	0.15	0.22%
Curacao	0.12	0.18%
Barbados	0.05	0.08%

# **Technological level of exports**



	Change % (2010-2016)					
Reporter	Unall.	High	Med-high	Med-low	Low	
Morocco	-2.2%	-1.8%	9.1%	-0.6%	-4.5%	
Cluster1	-0.8%	0.8%	0.4%	-0.9%	0.4%	
Clust2-EAP	-6.4%	6.8%	0.2%	-2.8%	2.2%	
Clust2-ECA	-4.4%	0.1%	4.2%	-3.6%	3.7%	
Clust2-LAC	-5.6%	0.4%	6.3%	-1.5%	0.4%	
Clust2-SA	-2.4%	2.1%	2.5%	-5.1%	2.9%	
Clust2-SSA	1.2%	0.9%	0.6%	-2.6%	0.0%	
Cluster4	-3.9%	-0.2%	3.6%	-1.8%	2.2%	

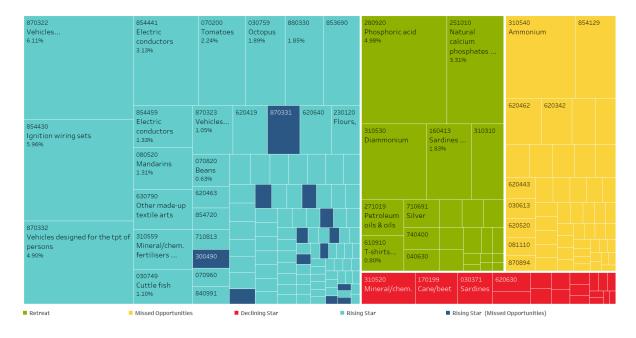
#### **Analytical Table**

The table below takes Morocco's top 200 exported products, and cross-classifies them in terms of the changes in their relative importance in Morocco's trade, with their changing relative importance in world demand. Hence if you look at the bottom left-hand cell here we identify that there are 51 products which Morocco exports, where relative world demand has risen, but where their share in Morocco's exports has declined. Hence these are products which could be considered as 'missed opportunities'. Now consider the bottom right hand cell. From this we see that there are 106 products where their share in Morocco's exports has risen *and* where there has been an increase in relative world demand. We therefore classify these as Rising Stars. Of these 106 products there are 93 products (the figure given in brackets), where the change in their share in Morocco's exports has increase by more than the change in world demand. These are really the rising stars because these are the ones where the change Morocco's exports has exceeded the relative changes in world demand. However, conversely this means that there are 106 minus 93 = 13 products where although Morocco's exports have increased this is less than the change in world demand. These products

could also be considered as missed opportunities. In total therefore there are up to 64 products (51 + 13) which could be considered as missed opportunities.

Comparing 2012 with 2016		Change in Exports Share between Morocco & World		
		Negative	Positive	
Change		Retreat	Declining Star	
in	Negative	24	19	
Exports Share		19.58%	4.49%	
between		Missed Opp	Rising Star	
World &	Positive	51	106 (93)	
World		15.24%	51.83% (49.39%)	

The graphic below identifies the commodities in the four cells of the cross-classification table, and the full list of products which are missed opportunities, and missed opportunities from the rising starts is given in the Appendix to this report.



Finally the table below takes the list of 64 missed opportunities, and for each of our country clusters identifies how many of these products saw an increase in their export share. What we see is interesting – for each of the clusters a very high proportion of the products increased their export share. So a possible reason for the lack of Morocco success could be the success of these countries in exporting these products.

# Export performance of the other country groups in Morocco's Missed Opportunities

Country Group	No of products with positive Δ export share (2010 - 2016)
Cluster1	38
Cluster2 -EAP	31
Cluster2 - ECA	55
Cluster2 - LAC	34
Cluster2 - SA	48
Cluster2 - SSA	45
Cluster4	57

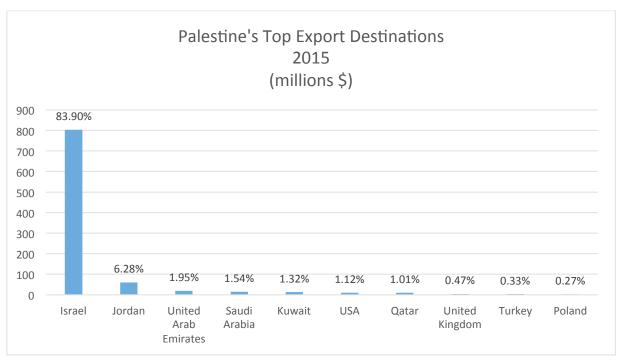
# **Palestine (West Bank and Gaza)**

# **Overview of Palestine's Exports**

Year	Total Export (\$B)	%EU
2010	0.41	2.41%
2011	0.49	2.92%
2012	0.55	2.62%
2013	0.64	2.07%
2014	0.69	2.90%
2015	0.96	1.57%

Palestine's exports account for 0.01% of World exports. From the table it can be seen that there was an increase in exports in the last 5 years, increasing by more than half billion \$. On the other hand the share of exports to the EU decreased between 2014 and 2015, albeit it very low, while considering that in the top 10 country list we have in the last 3 positions UK, Turkey and Poland as European destinations, with an overall share of 1.07% of Palestine's total exports in 2015.

In the following graph we can see the top 10 export destinations in 2015, which account for 98.19% of Palestine's total exports. The most important destination is Israel, which alone accounts for 83.90% of Palestine's total export - having constantly increased from 2010 to 2015 with an average annual rate growth of 20.90%. Israel is followed by Jordan - which alone accounts for 6.28% of its total exports - and in the last 5 years increased with an average annual growth rate of 17.16%, jumping from \$29M to \$60M. The list of top export destinations for Palestine hasn't changed on average over recent years, except for Algeria and The Netherlands , which dropped to 11<sup>th</sup> and 12<sup>th</sup> places respectively in 2015, and were substituted by Turkey and Poland. The exports to Poland were in 2015 more than 9 times bigger than the value registered in 2014.

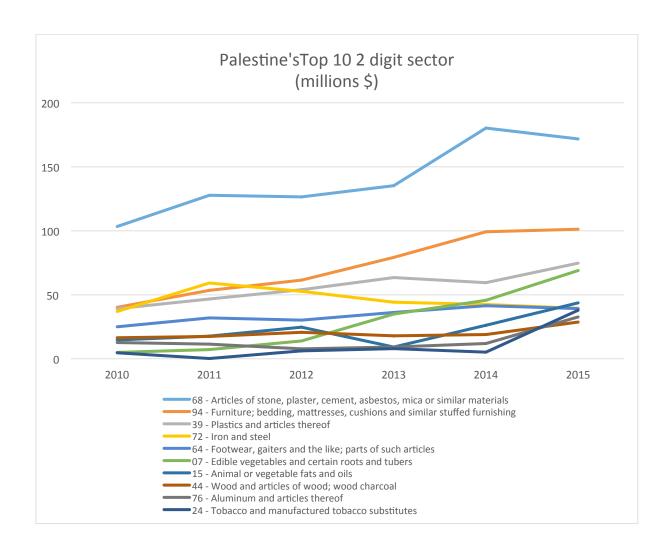


#### **HS-2 digit level trade**

Code	Product Name	Export	Export
		value	share
		(\$B)	
68	Articles of stone, plaster	171.75	17.93%
94	Furniture; bedding	101.2	10.57%
39	Plastics and articles thereof	74.72	7.80%
07	Edible vegetables	68.82	7.19%
15	Animal or vegetable fats	43.63	4.55%
72	Iron and steel	39.29	4.10%
64	Footwear, gaiters	39.22	4.10%
24	Tobacco	37.89	3.96%
76	Aluminum	32.75	3.42%
44	Wood and articles of wood	28.77	3.00%
	Total	638.05	66.61%

In terms of the composition of trade, Palestinian top 10 sectors in exports were unchanged over the last 5 years, except for HS25, which has left the place to Tobacco (HS24) which had an increase in the level of export between 2014 and 2015. The most important sector was always "Articles of stone, plaster, cement, asbestos, mica or similar materials" (HS68), which represent almost 18% of Palestinian exports.

The chart below identifies Palestine's top 2 digit exported sector.



## **HS-6** digit trade

At a more disaggregated level we see the top 20 Palestine's exported products in 2015, at the 6-digit level in the table below. Note that while the average annual growth rate of exports for these 20 products was 20.09%, this masks considerable variation. Seven of the top 20 products saw an exceptional annual average rate of growth in exports. The most relevant ones are "Glazed ceramic tiles, cubes & sim." (HS690810) and "Cucumbers & gherkins, fresh/chilled" (HS070700) with a AARG equal to 9220.83% and 2753.52% respectively. We also see that the significance of the EU as a destination is really low. For 13 of the top 20 products the share of exports going to the EU is near to 0%.

Product	Product Description	2015 Exports	Exports	AARG	2015 Share
Code		value	Share	(2010-2015)	of export to
		(millions \$)	to World		the EU
680229	Worked monumental/building stone &	135.51	14.15%	15.31%	0.38%
392321	Sacks & bags (incl. cones), of poly	43.33	4.52%	14.23%	0.00%
150910	Olive oil, virgin	39.2	4.09%	47.14%	8.04%
240220	Cigarettes cont. tobacco	37.86	3.95%	721.46%	0.00%
680221	Worked monumental/building stone &	29.83	3.11%	2.64%	1.61%
070700	Cucumbers & gherkins, fresh/chilled	29.61	3.09%	2753.52%	0.00%
640419	Footwear (excl. waterproof) with ou	27.68	2.89%	124.94%	0.00%
940421	Mattresses of cellular rubber/plast	22.74	2.37%	119.58%	0.00%
940350	Wooden furniture of a kind used in	22.68	2.37%	14.82%	0.00%
940161	Seats (excl. of 9401.10-9401.50), w	20.68	2.16%	29.97%	0.00%
720430	Waste & scrap of tinned iron/steel	18.45	1.93%	827.09%	0.00%
740400	Copper waste & scrap	18.1	1.89%	36.82%	0.00%
721399	Bars & rods, hot-rolled, in irregul	13.19	1.38%	106.88%	0.00%
441520	Pallets, box pallets & oth. load bo	12.51	1.31%	0.78%	0.00%
760429	Bars, rods & profiles (excl. hollow	12.19	1.27%	70.38%	0.00%
080410	Dates, fresh/dried	11.8	1.23%	62.70%	36.27%
300490	Medicaments (excl. of 30.02/30.05/3	11.43	1.19%	25.45%	30.45%
690810	Glazed ceramic tiles, cubes & sim.	10.98	1.15%	9220.83%	0.00%
210690	Food preps., n.e.s.	10.2	1.06%	19.84%	1.37%
760200	Aluminium waste & scrap	9.97	1.04%	71.04%	0.00%
	Grand total	537.96	56.17%	20.09%	2.24%

Notes: The product description has been shortened to 35 characters for purposes of legibility.

### **Revealed comparative advantage**

In the following table we give the normalized revealed comparative advantage (nRCA) for Palestine's top 20 exported products for the latest available year (2015). The products are ranked by degree of revealed comparative advantage, and where below the double line in the table Palestine has a negative revealed comparative advantage. The three biggest export sectors are identified in red. We also give the normalized revealed comparative advantage for each of our the comparator country groups. In bold we identify the country-product combinations which also have a positive nRCA, and the purpose of this is to see which country groupings are most likely to compete with Palestine by product.

	NORMALIZED RCA - 2015									
Code	Product Name	Israel	Cl1	CI2 EAP	CI2 ECA	CI2 LAC	CI2 SA	CI2 SSA	Cl 4	
680229	Worked monumental/bu	1	-0.492	0.075	-0.432	0.521	0.298	-0.099	-0.014	
690810	Glazed ceramic tiles	0.996	-0.58	0.688	-0.932	-0.056	0.454	0.423	-0.304	
720430	Waste & scrap of tin	0.995	0.266	0.1	-0.17	-0.202	-0.942	0.296	-0.011	
680221	Worked monumental/bu	0.993	-0.922	-0.438	-0.741	-0.599	0.403	-0.731	0.401	
070700	Cucumbers & gherkins	0.991	-0.1	-0.995	0.414	0.653	-0.981	-0.781	0.430	
721399	Bars & rods, hot-rol	0.991	0.118	-0.531	-0.598	-0.356	-0.731	-0.163	0.023	
080410	Dates, fresh/dried	0.989	-0.474	-0.999	-0.856	-0.722	0.622	-0.003	0.104	
940421	Mattresses of cellul	0.988	-0.177	-0.568	-0.413	0.182	-0.753	-0.492	0.405	
150910	Olive oil, virgin	0.981	-0.884	-0.999	-0.966	-0.965	-0.997	-0.921	0.733	
441520	Pallets, box pallets	0.976	0.007	-0.654	0.475	-0.261	-0.909	-0.014	0.543	
392321	Sacks & bags (incl.	0.969	-0.137	0.519	-0.152	-0.085	-0.094	-0.396	-0.093	
940350	Wooden furniture of	0.94	-0.468	0.483	0.101	-0.12	-0.868	-0.615	0.064	
240220	Cigarettes cont. tob	0.936	-0.195	0.19	0.754	-0.639	-0.506	0.27	0.323	
640419	Footwear (excl. wate	0.914	-0.589	0.559	-0.422	-0.761	-0.652	-0.53	-0.207	
940161	Seats (excl. of 9401	0.908	-0.538	-0.335	0.413	-0.412	-0.952	-0.743	0.38	
760429	Bars, rods & profile	0.894	-0.085	-0.406	0.362	-0.542	-0.695	-0.76	0.287	
740400	Copper waste & scrap	0.893	0.192	-0.083	0.122	0.091	-0.539	-0.124	0.182	
760200	Aluminium waste & sc	0.868	0.284	-0.373	-0.233	-0.172	-0.928	-0.082	0.019	
210690	Food preps., n.e.s.	0.662	0.184	0.111	-0.311	-0.297	-0.481	-0.065	0.018	
300490	Medicaments (excl. o	-0.184	0.235	-0.887	-0.355	-0.641	0.296	-0.808	-0.004	

Notes: The product description has been shortened to 20 characters for purposes of legibility; Notes: EAP - East Asia & Pacific; ECA - Europe & Central Asia; LAC – L. America & Caribbean; SA - South Asia: SSA - Sub-Saharan Africa

There are two main messages which emerge from this table. First, it is interesting that out of Palestine's top 20 non-oil exports, for one of the products Palestine has a negative revealed comparative advantage which suggests a lack of competitiveness in world markets for this product. Conversely there are only 19 HS 6-digit products for which Palestine has a positive revealed comparative advantage. Second, in terms of possible competitor countries we see that the group of countries most likely to be competitors for Palestine in world markets are those in the Cluster 4 group, as they have a positive nRCA in 14 of the 20 sectors, all in the sectors for which Palestine had a positive nRCA. The country groups least likely to be competing with Palestine in world markets are the South Asian countries.

### Similarity of Palestine's exports with the comparator countries

Another way of addressing the issue of competing countries is to look at the overall degree of similarity of Palestine's exports with the exports of the comparator countries. A useful indicator for this purpose is the Finger-Kreinin indicator which ranges between 0 and 1. When the indicator is equal to 1, this means that the structure of trade between Palestine and the comparator country (or country group) is identical. When the indicator is equal to zero this means that they do not export any of the same products and hence the structure is completely different. The indicator can then be calculated at different levels of disaggregation of trade, and in the table below we report on the similarity at the 2, 4 and 6-digit levels, and do so for both 2010 and 2015.

	2dig		40	lig	6dig	
	2010	2015	2010	2015	2010	2015
Cluster1	0.277	0.322	0.131	0.185	0.081	0.112
Cluster2 - EAP	0.259	0.351	0.103	0.174	0.046	0.093
Cluster2 - ECA	0.321	0.365	0.120	0.189	0.058	0.105
Cluster2 LAC	0.221	0.307	0.092	0.171	0.051	0.092
Cluster2 - SA	0.224	0.290	0.088	0.153	0.050	0.084
Cluster2 -SSA	0.314	0.359	0.101	0.166	0.054	0.084
Cluster4	0.315	0.382	0.159	0.226	0.086	0.128

Consistent with the nRCA analysis we see that the group of countries whose structure of trade has the greatest degree of similarity with Palestine are the countries in Cluster 4, and this is true at all levels of aggregation. Hence at the 6-digit level we see that the degree of similarity in trade is close to 13% in 2015. We also see however, that the degree of similarity has significantly increased over time with regard to all the comparator country groups. Perhaps not surprisingly the lowest degree of similarity is with the South Asian countries.

### **Diversification of exports**

We turn now to considering in more detail the degree of Palestine's export diversification and how it has evolved over time. We proceed by first analysing the degree of concentration of Palestine's exports in terms of different products (TCI by product, at the HS 6-digit level) and then in term of the number of trade partners (TCI by country). For the TCI by country we do the calculation taking into consideration all the export partners, and then the most significant export partners in 2015 by exports, where we see that 10 countries account for more than 98% of Palestine's total exports.

From the table it can be seen that there has been an increased diversification of Palestine's exports to the world, while in contrast less diversification in terms of exports to the EU. This differential pattern of changes in interesting. With regard to geographical diversification we again see a decline in diversification over time when considering all partners as well as when considering the top 10 partners.

	TCI by	y product	TCI by countries			
	World	EU27 Members	All partners	Top 10* partners		
2010	0.051	0.139	0.635	0.721		
2011	0.064	0.161	0.639	0.706		
2012	0.049	0.146	0.573	0.633		
2013	0.050	0.143	0.687	0.725		
2014	0.062	0.221	0.626	0.673		
2015	0.033	0.185	0.709	0.735		

In table 5 earlier in the report we identified that there were 94 new products exported by Palestine when comparing 2010-2015, out of the list of top 200 products in 2015. This is a big change and either reflects considerable dynamism, or considerable volatility in Palestine's exports. The table below identified the top 10 products by value of exports out of this list of 94. What is interesting is that the first item on the list (Glazed ceramic tiles) is a new product compared to 2010, and by 2015 has become the 18<sup>th</sup> among the top 20 exported products for Palestine with the 2<sup>nd</sup> highest revealed comparative advantage as given in the earlier tables.

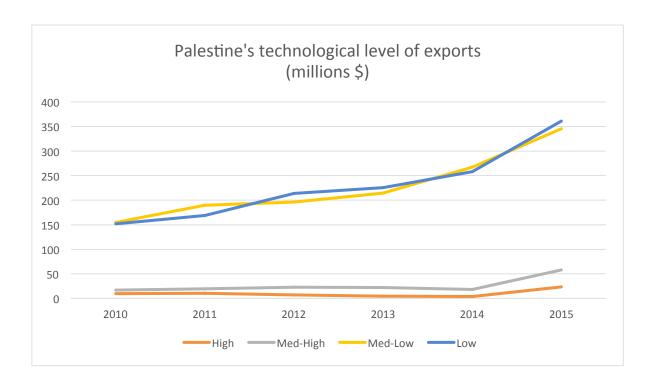
List of the top 10 new products exported to the WORLD in 2015 (compared to 2010)

Product	Product Name	Exports	Exports
Code		Value	Share
690810	Glazed ceramic tiles, cubes & sim. arts., whether or not rect., the largest	10.98	1.15%
640420	Footwear with outer soles of leather/composition leather & uppers of textil	8.65	0.90%
901890	Instruments & appls. used in medical/surgical/veterinary sciences, incl. ot	5.58	0.58%
100890	Cereals (excl. those which have been hulled/othw. wkd.), n.e.s.	5.16	0.54%
392290	Bidets, lavatory pans, flushing cisterns & sim. sanitary ware, of plastics	4.77	0.50%
070990	Vegetables, n.e.s., fresh/chilled	4.64	0.48%
070190	Potatoes other than seed potatoes, fresh/chilled	3.90	0.41%
441890	Builders' joinery & carpentry of wood, incl. cellular wood panels, assemble	3.77	0.39%
401192	New pneumatic tyres, of rubber (excl. those with herring-bone/sim.tread), o	3.57	0.37%
070930	Aubergines (egg-plants), fresh/chilled	3.41	0.36%

In a comparable fashion, the table below gives the list of most significant by value new export destinations, when comparing 2010 with 2015.

Partner	Exports Value	Exports Share
Indonesia	0.34	32.79%
Other Asia, nes	0.17	16.95%
Lebanon	0.12	11.63%
Mauritania	0.11	10.49%
Sudan	0.09	8.24%
Denmark	0.07	6.63%
Singapore	0.06	6.02%
Czech Rep.	0.03	3.34%
Slovakia	0.03	2.96%
Romania	0.00	0.41%

## **Technological level of exports**



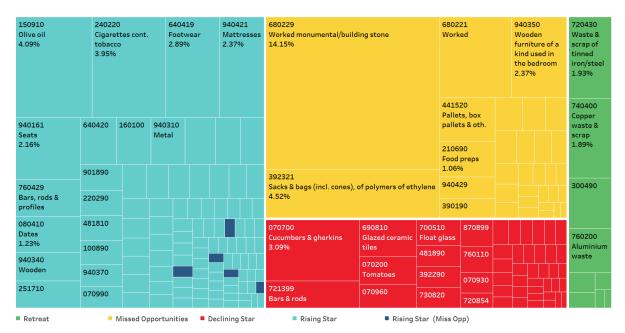
	Change % (2010-2015)					
Reporter	Unall.	High	Med-high	Med-low	Low	
Palestine	17.8%	2.5%	6.0%	36.1%	37.7%	
Cluster1	-0.80%	0.80%	0.40%	-0.90%	0.40%	
Clust2-EAP	-6.40%	6.80%	0.20%	-2.80%	2.20%	
Clust2-ECA	-4.40%	0.10%	4.20%	-3.60%	3.70%	
Clust2-LAC	-5.60%	0.40%	6.30%	-1.50%	0.40%	
Clust2-SA	-2.40%	2.10%	2.50%	-5.10%	2.90%	
Clust2-SSA	1.20%	0.90%	0.60%	-2.60%	0.00%	
Cluster4	-3.90%	-0.20%	3.60%	-1.80%	2.20%	

#### **Analytical Table**

The table below takes Palestine's top 200 exported products, and cross-classifies them in terms of the changes in their relative importance in Palestine's trade, with their changing relative importance in world demand. Hence if you look at the bottom left-hand cell here we identify that there are 32 products which Palestine exports, where relative world demand has risen, but where their share in Palestine's exports has declined. Hence these are products which could be considered as 'missed opportunities'. Now consider the bottom right hand cell. From this we see that there are 102 products where their share in Palestine's exports has risen *and* where there has been an increase in relative world demand. We therefore classify these as Rising Stars. Of these 102 products there are 97 products (the figure given in brackets), where the change in their share in Palestine's exports has increase by more than the change in world demand. These are really the rising stars because these are the ones where the change Palestine's exports has exceeded the relative changes in world demand. However, conversely this means that there are 102 minus 97 = 5 products where although Palestine's exports have increased this is less than the change in world demand. These products could also be considered as missed opportunities. In total therefore there are up to 37 products (32 + 5) which could be considered as missed opportunities.

Comparing 2015	2010 with	Change in Exports Share betwee Occ. Palestinian Terr. & World		
		Negative	Positive	
Change in		Retreat	Declining Star	
Exports	Negative	9	48	
Share		6.89%	14.37%	
between		Missed Opp	Rising Star	
World 8	Positive	32	102 (97)	
World		32.37%	38.60% (38.20%)	

The graphic below identifies the commodities in the four cells of the cross-classification table, and the full list of products which are missed opportunities, and missed opportunities from the rising starts is given in the Appendix to this report.



Finally the table below takes the list of 37 missed opportunities, and for each of our country clusters identifies how many of these products saw an increase in their export share. What we see is interesting – for each of the clusters a very high proportion of the products increased their export share. So a possible reason for the lack of Palestine success could be the success of these countries in exporting these products.

#### **Export performance of the other country groups in Palestine's Missed Opportunities**

Country Group	No of products with positive Δ export share (2010 - 2015)
Cluster1	32
Cluster2 -EAP	28
Cluster2 - ECA	30
Cluster2 - LAC	21
Cluster2 - SA	24
Cluster2 - SSA	21
Cluster4	34

### **Tunisia**

### **Overview of Tunisia's Exports**

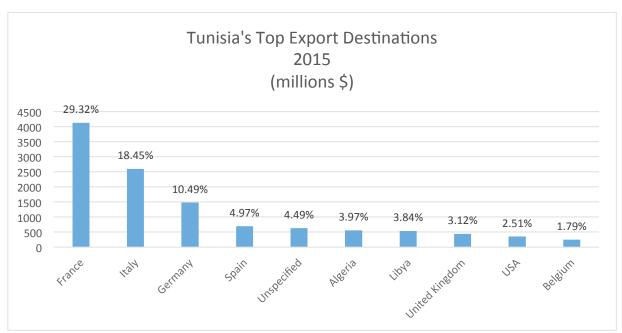
Year	Total exports	Exports Share
real	(billions \$)	to the EU27
2010	16.43	73.16%
2011	17.85	76.36%
2012	16.94	71.55%
2013	17.06	71.28%
2014	16.76	74.28%
2015	14.07	74.63%

Tunisia's exports account for 0.10% of World exports. From the table it can be seen that there was an important decrease in exports between 2014 and 2015. During the last five years the Algerian exports have decreased at an Average Annual Rate of Growth of -2.7%, from \$16.43B in 2010 to \$14.07B in 2015.

We can see that the EU market is the most important

destination for Palestine's export. Over the last 5 years the total export share that went to the European market was well above 70%, reaching almost the 75% in 2015.

The top 10 Tunisian export destinations accounted in 2015 for 82.96% of its total exports. France is the main export partner, with more than 29% of Tunisia's total exports. If we consider the average value of exports in the last 5 years we can see that France, Italy and Germany have been the main partners and that the list of top partners changes by just two countries: Switzerland and Netherlands. In particular, exports to Switzerland showed a big increase between 2011 and 2012, but after that exports to this country contracted. The same is true for the Netherlands: after a gradual increase between 2010 and 2013, there was a contraction. In 2015, Netherlands and Switzerland dropped to 11<sup>th</sup> and 12<sup>th</sup> places, and replaced by USA and Belgium.



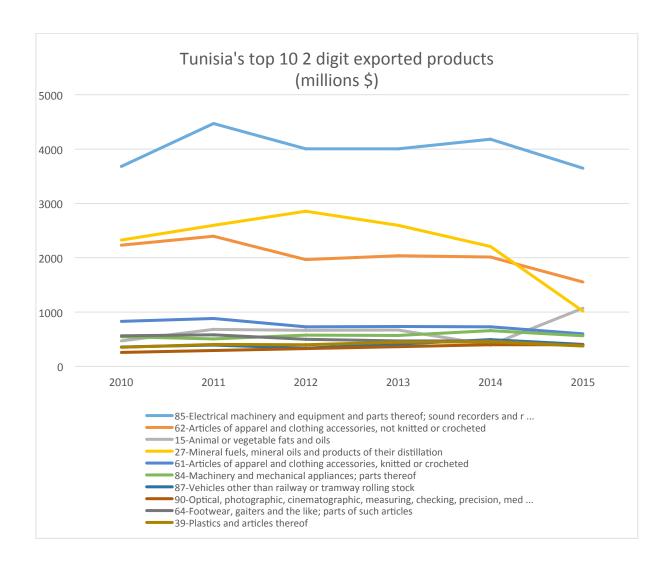
#### **HS-2 digit level trade**

Code	Product Name	Export	Export
		value	share
		(\$B)	
85	Electrical machinery	3.65	25.93%
62	Articles of apparel	1.55	11.03%
15	Animal or vegetable	1.07	7.59%
27	Mineral fuels	1.01	7.21%
61	Articles of apparel	0.6	4.26%
84	Machinery	0.56	4.00%
87	Vehicles	0.41	2.89%
90	Optical, photographic	0.4	2.82%
64	Footwear, gaiters an	0.38	2.71%
39	Plastics and article	0.38	2.69%
	Grand total	10.01	71.14%

In term of composition of trade the most important exported products were "Electrical machinery" (HS85) and "Articles of apparel" (HS62).

The top 10 most exported sectors in 2015 account for 71.14% of Tunisia's total export. The chart below identifies

Tunisia's top exported products in the last 5 years. We can see that exports in products HS31 and HS28 decreased a lot in the last year, and they left their places to product HS87 and HS90.



### **HS - 6 digits trade**

At a more disaggregated level we see the top 20 Tunisia's exported products in 2015, at the 6-digit level in the table below. Note that while the average annual growth rate of exports for these 20 products was -1.7%, this masks considerable variation. Nine of the top 20 products saw an annual average decline in exports while two of the products saw an exceptional rate of growth. We also see the significance of the EU as a destination. For fifteen of the top 20 products the share of exports going to the EU is greater than 80%.

Product Code	Product Description	2015 Exports value (millions \$)	Exports Share to World	AARG (2010-2015)	2015 Share of export to the EU
854441	Electric conductors (excl. of 8544.	948.03	6.74%	6.67%	99.56%
150910	Olive oil, virgin	881.7	6.27%	54.34%	73.28%
270900	Petroleum oils & oils obt. from bit	632.52	4.49%	-17.73%	96.86%
620342	Men's/boys' trousers, bib & brace o	391.86	2.78%	-3.19%	97.17%
852812	Reception app. for television, whet	336.57	2.39%	2.33%	98.47%
854459	Electric conductors (excl. of 8544.	332.69	2.36%	9.86%	44.67%
271019	Petroleum oils & oils obt. from bit	291.73	2.07%	33.19%	60.77%
880330	Parts of aeroplanes/helicopters, ot	270.59	1.92%	47.48%	95.63%
853690	Electrical app. for switching/prote	266.61	1.89%	-6.50%	97.60%
621139	Track suits (excl. knitted or croch	263.56	1.87%	-9.89%	98.74%
854430	Ignition wiring sets & oth. wiring	240.93	1.71%	-0.03%	98.76%
080410	Dates, fresh/dried	227.01	1.61%	2.65%	38.16%
610910	T-shirts, singlets & oth. vests, kn	197.52	1.40%	-6.20%	99.73%
392690	Articles of plastics & arts. of oth	170.32	1.21%	0.42%	68.63%
280920	Phosphoric acid & polyphosphoric ac	163.52	1.16%	-10.87%	15.86%
850140	AC motors (excl. of 8501.10 & 8501.	154.65	1.10%	4.00%	94.52%
853710	Boards, panels, consoles, desks, ca	147.32	1.05%	225.35%	97.59%
621010	Garments made up of fabrics of 56.0	147.09	1.05%	-5.12%	99.26%
620462	Women's/girls', trousers, bib & bra	146.75	1.04%	-3.52%	99.52%
851750	Apparatus for carrier-current line	143.19	1.02%	32785.31%	95.83%
	Grand total	6,354.16	45.15%	-1.70%	85.04%

 $Notes: The \ product \ description \ has \ been \ shortened \ to \ 35 \ characters \ for \ purposes \ of \ legibility.$ 

### **Revealed comparative advantage**

In the following table we give the normalized revealed comparative advantage (nRCA) for Tunisia's top 20 exported products for the latest available year (2015). The products are ranked by degree of revealed comparative advantage, and where below the double line in the table Tunisia has a negative revealed comparative advantage. The three biggest export sectors are identified in red. We also give the normalized revealed comparative advantage for each of our comparator country groups. In bold we identify the country-product combinations which also have a positive nRCA, and the purpose of this is to see which country groupings are most likely to compete with Tunisia by product.

	NORMALIZED RCA - 2015									
Code	Product Name	Israel	Cl1	CI2 EAP	CI2 ECA	CI2 LAC	CI2 SA	CI2 SSA	Cl 4	
621139	Track suits (excl. k	0.995	-0.639	-0.334	-0.249	-0.785	0.136	-0.35	0.272	
080410	Dates, fresh/dried	0.992	-0.474	-0.999	-0.856	-0.722	0.622	-0.003	0.104	
150910	Olive oil, virgin	0.987	-0.884	-0.999	-0.966	-0.965	-0.997	-0.921	0.733	
621010	Garments made up of	0.972	-0.46	0.343	-0.202	0.148	-0.848	-0.866	0.062	
280920	Phosphoric acid & po	0.953	-0.367	-0.331	-0.826	-0.488	-0.849	0.779	-0.812	
854441	Electric conductors	0.952	-0.297	-0.378	0.214	0.164	-0.833	-0.675	0.052	
850140	AC motors (excl. of	0.942	-0.499	-0.316	-0.355	0.577	-0.1	-0.724	-0.164	
620342	Men's/boys' trousers	0.886	-0.429	-0.026	0.099	0.138	0.499	-0.451	-0.091	
854459	Electric conductors	0.866	-0.093	-0.089	0.284	0.072	-0.769	-0.417	0.242	
853690	Electrical app. for	0.81	0.058	-0.048	-0.372	-0.191	-0.512	-0.468	-0.144	
854430	Ignition wiring sets	0.773	-0.583	0.605	0.792	0.698	-0.544	-0.872	0.029	
620462	Women's/girls', trou	0.772	-0.491	0.118	-0.282	-0.485	0.394	-0.699	0.026	
610910	T-shirts, singlets &	0.771	-0.434	0.368	-0.461	0.186	0.597	-0.654	-0.121	
852812	Reception app. for t	0.697	-0.696	0.063	-0.413	0.692	-0.77	-0.022	0.3	
880330	Parts of aeroplanes/	0.604	0.232	-0.45	-0.676	-0.558	-0.151	-0.409	-0.186	
853710	Boards, panels, cons	0.551	0.06	-0.277	0.4	0.292	-0.446	-0.654	0.045	
392690	Articles of plastics	0.543	0.061	-0.161	-0.365	-0.166	-0.269	-0.623	0.069	
851750	Apparatus for carrie	0.196	-0.049	-0.428	-0.626	0.321	-0.841	-0.874	-0.364	
270900	Petroleum oils & oil	0.014	-0.498	-0.404	0.575	0.247	-0.973	-0.942	0.358	
271019	Petroleum oils & oil	-0.089	-0.031	-0.385	0.255	-0.49	0.43	-0.609	-0.108	

Notes: The product description has been shortened to 20 characters for purposes of legibility; Notes: EAP - East Asia & Pacific; ECA - Europe & Central Asia; LAC – L. America & Caribbean; SA - South Asia: SSA - Sub-Saharan Africa

There are two main messages which emerge from this table. First, it is interesting that out of Tunisia's top 20 non-oil exports, for one of the products Tunisia has a negative revealed comparative advantage which suggests a lack of competitiveness in world markets for these products. Conversely there are only 19 HS 6-digit products for which Tunisia has a positive revealed comparative advantage. Second, in terms of possible competitor countries we see that the group of countries most likely to be competitors for Tunisia in world markets are those in the Cluster 4, as they have a positive nRCA in 12 of the 20 sectors, for which Tunisia had a positive nRCA. The country groups least likely to be competing with Tunisia in world markets are the Sub-Saharan Africa countries.

### Similarity of Algeria's exports with the comparator countries

Another way of addressing the issue of competing countries is to look at the overall degree of similarity of Tunisia's exports with the exports of the comparator countries. A useful indicator for this purpose is the Finger-Kreinin indicator which ranges between 0 and 1. When the indicator is equal to 1, this means that the structure of trade between Tunisia and the comparator country (or country group) is identical. When the indicator is equal to zero this means that they do not export any of the same products and hence the structure is completely different. The indicator can then be calculated at different levels of disaggregation of trade, and in the table below we report on the similarity at the 2, 4 and 6-digit levels, and do so for both 2010 and 2015.

	2dig		4d	lig	6dig		
	2010	2015	2010	2015	2010	2015	
Cluster1	0.439	0.481	0.276	0.317	0.210	0.231	
Cluster2 - EAP	0.605	0.670	0.310	0.337	0.240	0.231	
Cluster2 - ECA	0.490	0.489	0.354	0.345	0.302	0.276	
Cluster2 LAC	0.519	0.502	0.390	0.365	0.326	0.279	
Cluster2 - SA	0.501	0.482	0.241	0.280	0.177	0.205	
Cluster2 -SSA	0.352	0.376	0.177	0.202	0.122	0.134	
Cluster4	0.528	0.501	0.425	0.384	0.363	0.301	

Consistent with the nRCA analysis we see that the group of countries whose structure of trade has the greatest degree of similarity with Tunisia are the countries in Cluster 4, and this is true at 4 and 6-digit levels of aggregation. Hence at the 6-digit level we see that the degree of similarity in trade is close to 30% in 2015. We also see however, that the degree of similarity with the Cluster 4 has significantly declined over time as it was over 36% in 2010. The decline in similarity is true with regard to all the comparator country groups. Perhaps not surprisingly the lowest degree of similarity is with Sub-Saharan African countries.

### **Diversification of exports**

We turn now to considering in more detail the degree of Tunisia's export diversification and how it has evolved over time. We proceed by first analysing the degree of concentration of Tunisia's exports in terms of different products (TCI by product, at the HS 6-digit level) and then in term of the number of trade partners (TCI by country). For the TCI by country we do the calculation taking into consideration all the export partners, and then the most significant export partners in 2015 by exports, where we see that 17 countries account for more than 90% of Tunisia's total exports.

From the table it can be seen that there has been an increased diversification of Tunisia's exports to the world and to the EU. With regard to geographical diversification we again see less diversification till 2014 and then an increasing in diversification when considering all partners as well as when considering the top 17 partners.

	TCI by	/ product	TCI by countries		
	World	EU27 Members	All partners	Top 17 partners	
2010	0.026	0.035	0.140	0.175	
2011	0.027	0.039	0.158	0.193	
2012	0.025	0.037	0.128	0.159	
2013	0.023	0.034	0.125	0.151	
2014	0.020	0.030	0.138	0.169	
2015	0.017	0.024	0.142	0.173	

In table 5 earlier in the report we identified that there were 56 new products exported by Tunisia when comparing 2010-2015, out of the list of top 200 products in 2015. This is a big change and either reflects considerable dynamism, or considerable volatility in Tunisia's exports. The table below identified the top 10 products by value of exports out of this list of 56. What is interesting is that the first item on the list (Boards, panels, consoles, desks...) is a new product compared to 2010, and by 2015 has become the 17<sup>th</sup> most exported product for Tunisia with a high revealed comparative advantage as given in the earlier tables.

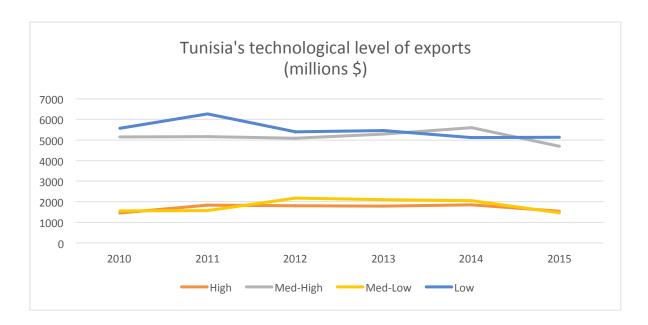
List of the top 10 new products exported to the WORLD in 2015 (compared to 2010)

Product	Product Name	Exports	Exports
Code		Value	Share
853710	Boards, panels, consoles, desks, cabinets & oth. bases, equipped with 2/mor	147.32	1.05%
851750	Apparatus for carrier-current line systems/digital line systems (excl. of 8	143.19	1.02%
940190	Parts of the seats of 94.01	93.14	0.66%
271112	Propane, liquefied	90.02	0.64%
640340	Footwear (excl. waterproof) incorp. a protective metal toe-cap (excl. of 64	53.06	0.38%
854221	Monolithic integrated circuits, digital	41.20	0.29%
610899	Women's/girls' nTgligTs, bathrobes, dressing gowns & sim. arts., knitted or	40.43	0.29%
910400	Instrument panel clocks & clocks of a sim. type for vehicles/aircraft/space	24.91	0.18%
170199	Cane/beet sugar & chemically pure sucrose, in solid form, not cont. added f	22.98	0.16%
030199	Live fish, n.e.s.	22.80	0.16%

In a comparable fashion, the table below gives the list of most significant by value new export destinations, when comparing 2010 with 2015.

Partner	Exports Value	Exports Share
Sudan	5.33	58.04%
Honduras	2.39	26.07%
Bahamas	0.88	9.56%
Guyana	0.24	2.59%
Andorra	0.12	1.30%
Bolivia	0.10	1.05%
Somalia	0.06	0.62%
Vanuatu	0.04	0.47%
Marshall Isds	0.02	0.18%
El Salvador	0.01	0.11%

## **Technological level of exports**



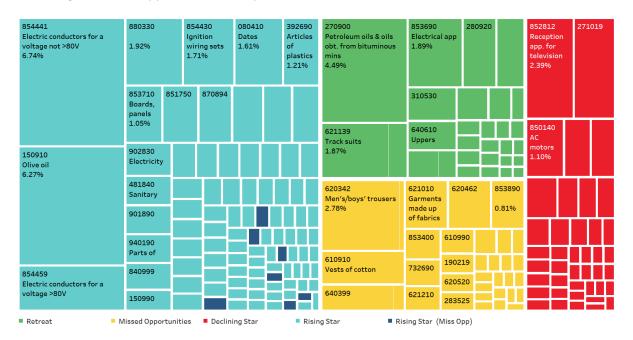
		Ch	Change % (2010-2015)			
Reporter	Unall.	High	Med-high	Med-low	Low	
Tunisia	8.8%	11.0%	33.3%	10.4%	36.5%	
Cluster1	-0.80%	0.80%	0.40%	-0.90%	0.40%	
Clust2-EAP	-6.40%	6.80%	0.20%	-2.80%	2.20%	
Clust2-ECA	-4.40%	0.10%	4.20%	-3.60%	3.70%	
Clust2-LAC	-5.60%	0.40%	6.30%	-1.50%	0.40%	
Clust2-SA	-2.40%	2.10%	2.50%	-5.10%	2.90%	
Clust2-SSA	1.20%	0.90%	0.60%	-2.60%	0.00%	
Cluster4	-3.90%	-0.20%	3.60%	-1.80%	2.20%	

### **Analytical Table**

The table below takes Tunisia's top 200 exported products, and cross-classifies them in terms of the changes in their relative importance in Tunisia's trade, with their changing relative importance in world demand. Hence if you look at the bottom left-hand cell here we identify that there are 34 products which Tunisia exports, where relative world demand has risen, but where their share in Tunisia's exports has declined. Hence these are products which could be considered as 'missed opportunities'. Now consider the bottom right hand cell. From this we see that there are 95 products where their share in Tunisia's exports has risen *and* where there has been an increase in relative world demand. We therefore classify these as Rising Stars. Of these 95 products there are 88 products (the figure given in brackets), where the change in their share in Tunisia's exports has increase by more than the change in world demand. These are really the rising stars because these are the ones where the change Tunisia's exports has exceeded the relative changes in world demand. However, conversely this means that there are 95 minus 88 = 7 products where although Tunisia's exports have increased this is less than the change in world demand. These products could also be considered as missed opportunities. In total therefore there are up to 41 products (34 + 7) which could be considered as missed opportunities.

Comparing 2010 with 2015		Change in Exports Share between Tunisia & World		
		Negative	Positive	
		Retreat	Declining Star	
	Negative	29	41	
Change in Exports Share between World		16.16%	12.97%	
& World		Missed Opp	Rising Star	
<u> </u>	Positive	34	95 (88)	
		13.21%	43.34% (42.60%)	

The graphic below identifies the commodities in the four cells of the cross-classification table, and the full list of products which are missed opportunities, and missed opportunities from the rising starts is given in the Appendix to this report.



Finally the table below takes the list of 41 missed opportunities, and for each of our country clusters identifies how many of these products saw an increase in their export share. What we see is interesting – for each of the clusters a very high proportion of the products increased their export share. So a possible reason for the lack of Tunisian success could be the success of these countries in exporting these products.

#### Export performance of the other country groups in Tunisia's Missed Opportunities

Country Group	No of products with positive Δ export share (2010 - 2015)
Cluster1	29
Cluster2 -EAP	29
Cluster2 - ECA	31
Cluster2 - LAC	26
Cluster2 - SA	25
Cluster2 - SSA	27
Cluster4	32

### **Turkey**

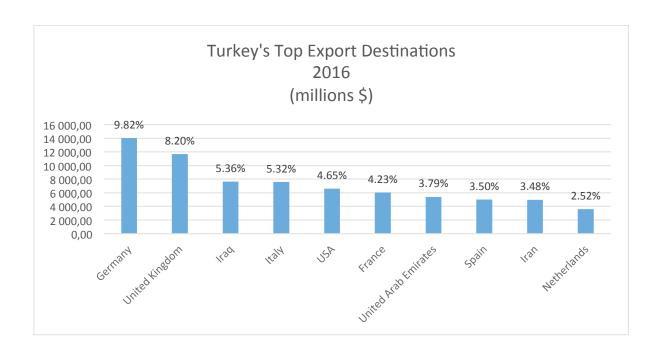
### **Overview of Turkey's Exports**

Year	Total exports	Exports Share
	(billions \$)	to the EU27
2010	112.28	47.31%
2011	132.79	47.22%
2012	150.45	39.55%
2013	149.69	42.25%
2014	155.03	43.53%
2015	141.75	44.49%
2016	140.83	47.94%

Turkey's exports account for 0.97% of World exports. From the table we can see an increase in Turkey's total exports of almost \$30B.

In 2016 the top export destinations for Turkey were Germany (9.82%), UK (8.20%) and Iraq (5.36%). The top 10 list of destination countries alone account for almost 51% of Turkey's total exports, with 6 out of 10 of these destinations being European countries. We can see that the EU market is

an important destination for Turkey's exports. In 2016 almost 48% of its total exports went to the European market.

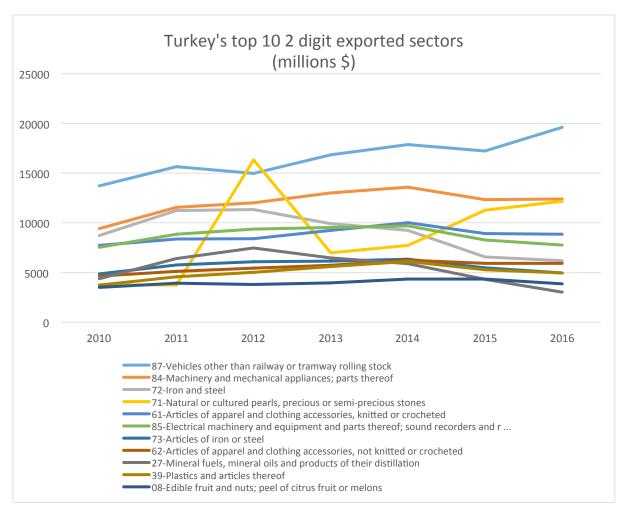


### **HS-2 digit level trade**

Code	Product Name	Export	Export
		value	share
		(\$B)	
87	Vehicles	19,613.70	13.93%
84	Machinery	12,415.03	8.82%
71	Natural or cultured pearls	12,176.57	8.65%
61	Articles of apparel	8,855.61	6.29%
85	Electrical machinery	7,767.56	5.52%
72	Iron and steel	6,187.05	4.39%
62	Articles of apparel	5,928.89	4.21%
39	Plastics and articles thereof	4,968.83	3.53%
73	Articles of iron or steel	4,967.68	3.53%
08	Edible fruit and nuts	3,873.87	2.75%
	Grand total	86,754.79	61.60%

In terms of the composition of trade, Turkey's exports are dominated by "Vehicles" (HS87), which represent almost the 14% of Turkey exports. At 2 digit level the top 10 exported products by Turkey account, in 2016, for 61.60% of its total exports.

The chart below identifies Turkey's top exports over the last 6 years. We may notice that the composition of Turkey's has change little. The list of top 10 products is unchanged, except for product 27, which left the place to product 08. The exports in Mineral Fuels, indeed, had a gradual contraction from 2012.



#### **HS-6** digit trade

At a more disaggregated level we see the top 20 Turkey's exported products in 2016, at the 6-digit level in the table below. Note that while the average annual growth rate of exports for these 20 products was 8.07%, this masks considerable variation. Four of the top 20 products saw an annual average decline in exports while two of the products saw a rate of growth in excess of 100%. In particular Vehicles (excl. of 87.02 & 8703.10), with an AARG above 12377%. We also see the significance of the EU as a destination. For nine of the top 20 products the share of exports going to the EU is greater than 80%.

Product Code	Product Description	2016 Exports value	Exports Share	AARG (2010-2016)	2016 Share of export to
Code		(millions \$)	to World	(2010-2010)	the EU
710812	Gold (incl. gold plated with platin	8,248.52	5.86%	139.85%	38.78%
870421	Motor vehicles for the tpt. of gds.	4,132.69	2.93%	6.81%	90.88%
711319	Articles of jewellery & parts there	3,676.27	2.61%	18.45%	11.67%
870322	Vehicles (excl. of 87.02 & 8703.10)	2,649.87	1.88%	9.38%	87.16%
721420	Bars & rods of iron/non-alloy steel	2,554.19	1.81%	-1.65%	4.50%
870331	Vehicles princ. designed for the tp	1,755.52	1.25%	-1.12%	89.29%
271011	Light petroleum oils & preps.	1,715.97	1.22%	6.04%	18.82%
610910	T-shirts, singlets & oth. vests, kn	1,583.25	1.12%	-2.91%	72.67%
570242	Carpets & oth. textile floor coveri	1,554.52	1.10%	10.73%	19.61%
870323	Vehicles (excl. of 87.02 & 8703.10)	1,526.15	1.08%	0.49%	64.13%
870210	Motor vehicles for the tpt. of 10/m	1,499.20	1.06%	10.55%	83.43%
852812	Reception app. for television, whet	1,392.25	0.99%	-2.60%	92.05%
610990	T-shirts, singlets & oth. vests, kn	1,347.52	0.96%	9.67%	84.84%
870332	Vehicles princ. designed for the tp	1,326.08	0.94%	7.47%	92.67%
870899	Parts & accessories of the motor ve	1,307.57	0.93%	8.54%	68.98%
620462	Women's/girls', trousers, bib & bra	1,257.26	0.89%	3.51%	84.92%
080222	Hazelnuts/filberts (Corylus spp.),	1,161.20	0.82%	6.53%	70.62%
854459	Electric conductors (excl. of 8544.	1,137.56	0.81%	1.61%	47.22%
620342	Men's/boys' trousers, bib & brace o	1,105.22	0.78%	2.36%	73.90%
870321	Vehicles (excl. of 87.02 & 8703.10)	1,084.14	0.77%	12377.38%	94.33%
	Grand Total	42,014.95	29.83%	8.07%	57.61%

Notes: The product description has been shortened to 35 characters for purposes of legibility.

### **Revealed Comparative Advantage**

In the following table we give the normalized revealed comparative advantage (nRCA) for Turkey's top 20 exported products for the latest available year (2016). The products are ranked by degree of revealed comparative advantage, and where below the double line in the table Turkey has a negative revealed comparative advantage. The three biggest export sectors are identified in red. We also give the normalized revealed comparative advantage for each of our the comparator country other country groups. In bold we identify the country-product combinations which also have a positive nRCA, and the purpose of this is to see which country groupings are most likely to compete with Algeria by product.

	NORMALIZED RCA - 2016								
Code	Product Name	Turkey	Cl1	Cl2 EAP	CI2 ECA	Cl2 LAC	CI2 SA	CI2 SSA	Cl 4
570242	Carpets & oth. texti	0.968	-0.354	-0.261	0.2	-0.984	-0.436	-0.98	-0.716
080222	Hazelnuts/filberts (	0.966	-0.802	-1	0.757	-0.997	-1	-0.992	0.239
721420	Bars & rods of iron/	0.936	-0.56	-0.927	0.591	0.155	-0.695	0.001	0.402
870210	Motor vehicles for t	0.826	-0.008	-0.606	-0.043	-0.268	-0.178	-0.368	0.181
610990	T-shirts, singlets &	0.806	-0.372	0.484	-0.012	-0.041	0.653	-0.237	0.01
870421	Motor vehicles for t	0.801	-0.044	-0.984	-0.937	0.254	-0.509	0.784	0.449
610910	T-shirts, singlets &	0.782	-0.337	0.6	-0.137	0.239	0.68	-0.482	0.149
620462	Women's/girls', trou	0.757	-0.492	0.195	-0.108	-0.494	0.308	-0.554	0.115
870331	Vehicles princ. desi	0.731	0.096	-0.99	0.724	-0.787	-0.228	-0.413	0.421
620342	Men's/boys' trousers	0.706	-0.354	0.031	0.332	0.174	0.501	-0.189	0.14
870321	Vehicles (excl. of 8	0.663	-0.031	-0.986	0.418	0.029	0.467	0.216	0.461
711319	Articles of jeweller	0.648	-0.256	0.548	-0.883	-0.772	0.701	-0.622	-0.214
854459	Electric conductors	0.648	-0.117	-0.4	0.411	0.042	-0.68	-0.466	0.277
710812	Gold (incl. gold pla	0.6	-0.293	-0.371	-0.541	0.136	0.009	0.277	-0.574
870322	Vehicles (excl. of 8	0.48	0.031	-0.1	-0.111	0.138	0.278	0.055	0.391
852812	Reception app. for t	0.41	-0.756	0.005	-0.393	0.642	-0.821	-0.538	0.354
870899	Parts & accessories	0.146	0.012	-0.158	0.182	0.172	0.092	-0.455	0.26
271011	Light petroleum oils	0.049	-0.044	-0.853	0.254	-0.44	0.538	0.34	-0.062
870332	Vehicles princ. desi	-0.053	0.218	-0.982	-0.6	-0.821	-0.913	0.252	0.392
870323	Vehicles (excl. of 8	-0.324	0.258	-0.784	-0.639	0.263	-0.67	0.096	-0.175

Notes: The product description has been shortened to 20 characters for purposes of legibility; Notes: EAP - East Asia & Pacific; ECA - Europe & Central Asia; LAC – L. America & Caribbean; SA - South Asia: SSA - Sub-Saharan Africa

There are two main messages which emerge from this table. First, it is interesting that out of Turkey's top 20 non-oil exports, for two of the products Turkey has a negative revealed comparative advantage which suggests a lack of competitiveness in world markets for these products. Conversely there are only 18 HS 6-digit products for which Turkey has a positive revealed comparative advantage. Second, in terms of possible competitor countries we see that the group of countries most likely to be competitors for Turkey in world markets are those in the Cluster 4, as they have a positive nRCA in 15 of the 20 sectors, and in 1 of the 2 sectors for which Turkey had a positive nRCA. The country groups least likely to be competing with Turkey in world markets are countries in Cluster 1.

### Similarity of Turkey's exports with the comparator countries

Another way of addressing the issue of competing countries is to look at the overall degree of similarity of Turkey's exports with the exports of the comparator countries. A useful indicator for this purpose is the Finger-Kreinin indicator which ranges between 0 and 1. When the indicator is equal to 1, this means that the structure of trade between Turkey and the comparator country (or country group) is identical. When the indicator is equal to zero this means that they do not export any of the same products and hence the structure is completely different. The indicator can then be calculated at different levels of disaggregation of trade, and in the table below we report on the similarity at the 2, 4 and 6-digit levels, and do so for both 2010 and 2015.

	2dig		40	lig	6dig		
	2010	2015	2010	2015	2010	2015	
Cluster1	0.619	0.620	0.446	0.447	0.351	0.353	
Cluster2 - EAP	0.586	0.604	0.395	0.407	0.313	0.316	
Cluster2 - ECA	0.519	0.538	0.403	0.414	0.330	0.344	
Cluster2 LAC	0.582	0.601	0.418	0.432	0.313	0.313	
Cluster2 - SA	0.538	0.604	0.370	0.433	0.287	0.358	
Cluster2 -SSA	0.537	0.567	0.356	0.394	0.268	0.277	
Cluster4	0.635	0.659	0.510	0.520	0.435	0.444	

Consistent with the nRCA analysis we see that the group of countries whose structure of trade has the greatest degree of similarity with Turkey are the countries in Cluster 4, and this is true at all levels of aggregation. Hence at the 6-digit level we see that the degree of similarity in trade is above 44% in 2015. We also see however, that the degree of similarity with regard to all the comparator country groups has increased. The lowest degree of similarity is with the Cluster 1 groups of countries.

### **Diversification of exports**

We turn now to considering in more detail the degree of Turkey's export diversification and how it has evolved over time. We proceed by first analysing the degree of concentration of Turkey's exports in terms of different products (TCI by product, at the HS 6-digit level) and then in term of the number of trade partners (TCI by country). For the TCI by country we do the calculation taking into consideration all the export partners, and then the most significant export partners in 2015 by exports, where we see that 52 countries account for more than 90% of Turkey's total exports.

From the table it can be seen that there has been less diversification of Turkey's exports to the world, as well as in terms of exports to the EU. With regard to geographical diversification we again see a decrease in diversification over time when considering all partners as well as when considering the top 52 partners.

	TCI by product		TCI by countries		
	World	EU27 Members	All partners	Top 52 partners	
2010	0.006	0.010	0.034	0.043	
2011	0.006	0.009	0.035	0.045	
2012	0.013	0.009	0.035	0.044	
2013	0.006	0.009	0.033	0.043	
2014	0.006	0.010	0.034	0.041	
2015	0.008	0.010	0.034	0.042	
2016	0.008	0.012	0.036	0.044	

In table 5 earlier in the report we identified that there were 39 new products exported by Turkey when comparing 2010-2016, out of the list of top 200 products in 2016. This is a big change and either reflects considerable dynamism, or considerable volatility in Turkey's exports even if is the Mediterranean country with less number of new products. The table below identified the top 10 products by value of exports out of this list of 39. What is interesting is that the first item on the list (Vehicles (excl. of 87.02 & 8703.10)) is a new product compared to 2010, and by 2016 has become the 4<sup>th</sup> among the top export for Turkey with a high revealed comparative advantage as given in the earlier tables.

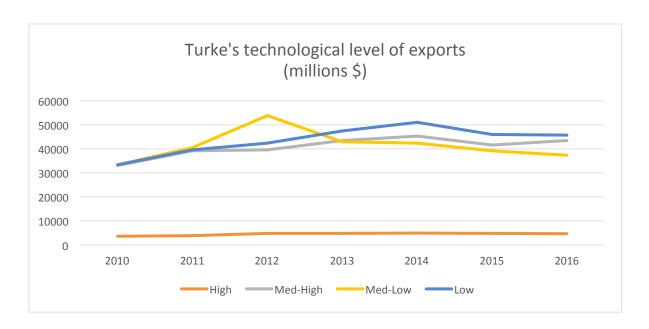
List of the top 10 new products exported to the WORLD in 2016 (compared to 2010)

Product	Product Name	Exports	Exports
Code		Value	Share
870321	Vehicles (excl. of 87.02 & 8703.10) princ. designed for the tpt. of persons	1,084.14	0.77%
030269	Fish, n.e.s., fresh/chilled (excl. fillets/oth. fish meat of 03.04/livers &	345.74	0.25%
870120	Road tractors for semi-trailers (excl. of 87.09)	316.74	0.22%
480300	Toilet/facial tissue stock, towel/napkin stock & sim. paper of a kind used	265.27	0.19%
845121	Drying machines other than of 84.50, each of a dry linen cap. not >10kg	255.31	0.18%
283620	Disodium carbonate	246.75	0.18%
441139	Fibreboard of wood/oth. ligneous mats., whether or not bonded with resins/o	233.85	0.17%
252890	Natural borates & concs. thereof (excl. sodium borates), whether or not cal	224.44	0.16%
560312	Nonwovens, whether or not impregnated/coated/covered/laminated, of man-made	209.37	0.15%
760711	Aluminium foil, whether or not printed, not backed, of a thkns. not >0.2mm,	206.68	0.15%

In a comparable fashion, the table below gives the list of most significant by value new export destinations, when comparing 2010 with 2015.

Partner	Exports Value	Exports Share
Sudan	461.57	99.02%
Cura?ao	4.38	0.94%
South Sudan	0.20	0.04%
FS Micronesia	0.02	0.00%

## **Technological level of exports**



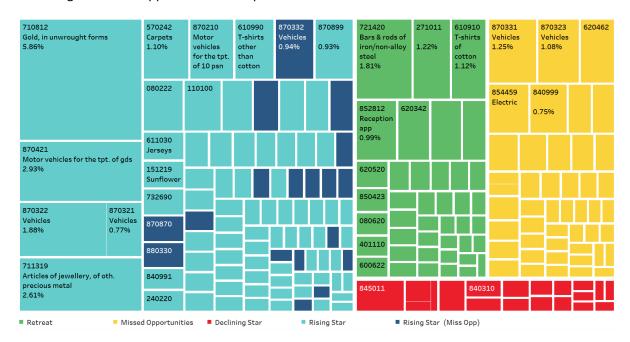
	Change % (2010-2015)								
Reporter	Unall.	Unall. High Med-high Med-low							
Turkey	7.1%	3.4%	29.3%	27.7%	32.4%				
Cluster1	-0.80%	0.80%	0.40%	-0.90%	0.40%				
Clust2-EAP	-6.40%	6.80%	0.20%	-2.80%	2.20%				
Clust2-ECA	-4.40%	0.10%	4.20%	-3.60%	3.70%				
Clust2-LAC	-5.60%	0.40%	6.30%	-1.50%	0.40%				
Clust2-SA	-2.40%	2.10%	2.50%	-5.10%	2.90%				
Clust2-SSA	1.20%	0.90%	0.60%	-2.60%	0.00%				
Cluster4	-3.90%	-0.20%	3.60%	-1.80%	2.20%				

#### **Analytical Table**

The table below takes Turkey's top 200 exported products , and cross-classifies them in terms of the changes in their relative importance in Turkey's trade, with their changing relative importance in world demand. Hence if you look at the bottom left-hand cell here we identify that there are 46 products which Turkey exports, where relative world demand has risen, but where their share in Turkey's exports has declined. Hence these are products which could be considered as 'missed opportunities' . Now consider the bottom right hand cell. From this we see that there are 93 products where their share in Turkey's exports has risen *and* where there has been an increase in relative world demand. We therefore classify these as Rising Stars. Of these 93 products there are 75 products (the figure given in brackets), where the change in their share in Turkey's exports has increase by more than the change in world demand. These are really the rising stars because these are the ones where the change Turkey's exports has exceeded the relative changes in world demand. However, conversely this means that there are 93 minus 75 = 18 products where although Turkey's exports have increased this is less than the change in world demand. These products could also be considered as missed opportunities. In total therefore there are up to 64 products (46 + 18) which could be considered as missed opportunities.

Comparing 2010 with 2016		Change in Exports Share between Turkey & World		
		Negative	Positive	
		Retreat	Declining Star	
Change in	Negative	41	19	
Exports Share between		13.27%	3.39%	
World &		Missed Opp	Rising Star	
World	Positive	46	93 (75)	
		12.85%	38.03% (33.05%)	

The graphic below identifies the commodities in the four cells of the cross-classification table, and the full list of products which are missed opportunities, and missed opportunities from the rising starts is given in the Appendix to this report.



Finally the table below takes the list of 64 missed opportunities, and for each of our country clusters identifies how many of these products saw an increase in their export share. What we see is interesting – for each of the clusters, except for East Asian Pacific countries, a very high proportion of the products increased their export share. So a possible reason for the lack of Turkey's success could be the success of these countries in exporting these products.

#### Export performance of the other country groups in Turkey's Missed Opportunities

Country Group	No of products with positive Δ export share (2010 - 2016)
Cluster1	43
Cluster2 -EAP	25
Cluster2 - ECA	51
Cluster2 - LAC	44
Cluster2 - SA	55
Cluster2 - SSA	47
Cluster4	57

### **Appendix**

#### Cluster Analysis

We conduct the cluster analysis considering the following variables:

- 1. Political Stability and Absence of Violence and Terrorism
- 2. Fuel exports (% of merchandise exports)
- 3. GDP per capita
- 4. Inflation, consumer prices (annual %)
- 5. Labor force participation rate, female (% of female population ages 15+) (national estimate)
- 6. Trade in services (% of GDP)

The data source is the World Bank Database and we picked the most recent data available for each variable. When possible, the missing data for the year taken into consideration were filled with the most recent data registered.

The method used to conduct the cluster analysis is the k-mean method, which aims to partition all the countries - for which we have data - into k clusters in which each country belongs to the cluster with the nearest mean, serving as a prototype of the cluster.

To validate the number of clusters we use the elbow method. <sup>14</sup>In our study we can see that this method suggest that the optimum number of clusters is 4.

The following table shows the means of each variable for each cluster. This could give us information about the characteristics of the clusters. In particular the 2<sup>nd</sup> cluster is characterized by the lowest Political stability, GDP pro capita and shares of trade in services in GDP and the highest inflation. We can also see a quite low level of export of fuel and a quite low share of woman participation in the workforce.

Cluste r	Political Stability and Absence of Violence/Te rrorism	Fuel exports (% of merchandise exports)	GDP per capita	Inflation, consumer prices (annual %)	Labor force participation rate, female (% of female population ages 15+) (national estimate)	Trade in services (% of GDP)
1	0.8214337	7.409988	45796.296	0.6160836	58.09444	32.94487
2	-0.4250146	14.228467	4001.328	5.2071509	51.30672	19.73584
3	1.2110768	35.582585	82213.061	1.57251	57.975	91.62845
4	0.5105659	15.837075	18048.054	1.2421634	50.21111	38.36574

-

<sup>&</sup>lt;sup>14</sup>The idea of the elbow method is to run k-means clustering on the dataset for a range of values of k (say, k from 1 to 10 in the examples above), and for each value of k calculate the sum of squared errors (SSE). Then, plot a line chart of the SSE for each value of k. If the line chart looks like an arm, then the "elbow" on the arm is the value of k that is the best. The idea is that we want a small SSE, but that the SSE tends to decrease toward 0 as we increase k (the SSE is 0 when k is equal to the number of data points in the dataset, because then each data point is its own cluster, and there is no error between it and the center of its cluster). So our goal is to choose a small value of k that still has a low SSE, and the elbow usually represents where we start to have diminishing returns by increasing k.

The following table show the composition of each cluster. We also have two additional information that will be used in the definition of our country groups used as comparative countries: whether a country is an island or not, and the region of the world they belong to. In particular in our analysis we will exclude the Small Island Developing States (SIDS).

	Country	Region	Note
	Austria	Europe & Central Asia	
	Belgium	Europe & Central Asia	
	Canada	North America	
	Denmark	Europe & Central Asia	
	Finland	Europe & Central Asia	
	France	Europe & Central Asia	
	Germany	Europe & Central Asia	
	Israel	Middle East & North	
		Africa	
Cluster 1	Netherlands	Europe & Central Asia	
	Sweden	Europe & Central Asia	
	United States	North America	
	Australia	East Asia & Pacific	
	Iceland	Europe & Central Asia	Island;
	Ireland	Europe & Central Asia	the SIDS are
	Japan	East Asia & Pacific	highlighted and
	New Zealand	East Asia & Pacific	excluded from
	Singapore	East Asia & Pacific	our analysis
	United Kingdom	Europe & Central Asia	
	Afghanistan	South Asia	
	Albania	Europe & Central Asia	
	Algeria	Middle East & North	
		Africa	
	Armenia	Europe & Central Asia	
	Azerbaijan	Europe & Central Asia	
	Belarus	Europe & Central Asia	
	Belize	Latin America & Caribbean	
	Bhutan	South Asia	
	Bolivia	Latin America & Caribbean	
	Brazil	Latin America & Caribbean	
	Bulgaria	Europe & Central Asia	
	Cambodia	East Asia & Pacific	
	Colombia	Latin America & Caribbean	
	Ecuador	Latin America & Caribbean	
Cluster 2	Egypt, Arab Rep.	Middle East & North	
		Africa	
	El Salvador	Latin America & Caribbean	
	Ethiopia	Sub-Saharan Africa	
	Georgia	Europe & Central Asia	
	Ghana	Sub-Saharan Africa	
	Guatemala	Latin America & Caribbean	
	Guinea	Sub-Saharan Africa	
	Honduras	Latin America & Caribbean	
	India	South Asia	
	Jordan	Middle East & North	
	23.44	Africa	
	Kazakhstan	Europe & Central Asia	
	Kazakhstan Kyrgyz Republic	Europe & Central Asia Furope & Central Asia	
	Kazakhstan Kyrgyz Republic <b>Lebanon</b>	Europe & Central Asia Europe & Central Asia  Middle East & North	

	Lesotho Libya Malawi Malaysia Mauritania	Sub-Saharan Africa Middle East & North Africa Sub-Saharan Africa East Asia & Pacific Sub-Saharan Africa	
	Mexico Moldova Mongolia	Latin America & Caribbean Europe & Central Asia East Asia & Pacific	
	Morocco	Middle East & North Africa	
	Mozambique Namibia	Sub-Saharan Africa Sub-Saharan Africa	
	Nepal Nicaragua Pakistan	South Asia Latin America & Caribbean South Asia	
	Paraguay Peru Romania	Latin America & Caribbean Latin America & Caribbean Europe & Central Asia	
	Rwanda Senegal	Sub-Saharan Africa Sub-Saharan Africa	
	Serbia South Africa Suriname	Europe & Central Asia Sub-Saharan Africa Latin America & Caribbean	
	Tanzania Thailand	Sub-Saharan Africa East Asia & Pacific	
	Tunisia	Middle East & North Africa	
	<i>Turkey</i> Uganda	<b>Europe &amp; Central Asia</b> Sub-Saharan Africa	
	Ukraine	Europe & Central Asia East Asia & Pacific	
	Vietnam		
	West Bank and Gaza	Middle East & North  Africa	
	<b>West Bank and Gaza</b> Zambia	Middle East & North Africa Sub-Saharan Africa	
	West Bank and Gaza  Zambia  Dominican Republic Indonesia	Middle East & North Africa Sub-Saharan Africa Latin America & Caribbean East Asia & Pacific	
	West Bank and Gaza  Zambia  Dominican Republic  Indonesia  Jamaica  Madagascar	Middle East & North Africa Sub-Saharan Africa Latin America & Caribbean East Asia & Pacific Latin America & Caribbean Sub-Saharan Africa	
	West Bank and Gaza  Zambia  Dominican Republic  Indonesia  Jamaica	Middle East & North Africa Sub-Saharan Africa Latin America & Caribbean East Asia & Pacific Latin America & Caribbean	Island
	West Bank and Gaza  Zambia  Dominican Republic Indonesia Jamaica Madagascar Mauritius	Middle East & North Africa Sub-Saharan Africa Latin America & Caribbean East Asia & Pacific Latin America & Caribbean Sub-Saharan Africa Sub-Saharan Africa East Asia & Pacific East Asia & Pacific	Island
	West Bank and Gaza  Zambia  Dominican Republic Indonesia Jamaica Madagascar Mauritius Philippines Samoa Sri Lanka St. Lucia	Middle East & North Africa Sub-Saharan Africa Latin America & Caribbean East Asia & Pacific Latin America & Caribbean Sub-Saharan Africa Sub-Saharan Africa East Asia & Pacific East Asia & Pacific South Asia Latin America & Caribbean	Island
Cluster 3	Zambia Dominican Republic Indonesia Jamaica Madagascar Mauritius Philippines Samoa Sri Lanka St. Lucia Luxembourg Norway Qatar	Middle East & North Africa Sub-Saharan Africa Latin America & Caribbean East Asia & Pacific Latin America & Caribbean Sub-Saharan Africa Sub-Saharan Africa East Asia & Pacific East Asia & Pacific East Asia & Pacific South Asia Latin America & Caribbean Europe & Central Asia Europe & Central Asia Middle East & North Africa	Island  It won't be object of our analysis
Cluster 3	West Bank and Gaza  Zambia  Dominican Republic Indonesia Jamaica Madagascar Mauritius Philippines Samoa Sri Lanka St. Lucia Luxembourg Norway	Middle East & North Africa Sub-Saharan Africa Latin America & Caribbean East Asia & Pacific Latin America & Caribbean Sub-Saharan Africa Sub-Saharan Africa East Asia & Pacific East Asia & Pacific East Asia & Pacific South Asia Latin America & Caribbean Europe & Central Asia Europe & Central Asia Middle East & North Africa Europe & Central Asia Latin America & Caribbean Latin America & Caribbean Latin America & Caribbean Latin America & Caribbean	It won't be object of our
	Zambia Dominican Republic Indonesia Jamaica Madagascar Mauritius Philippines Samoa Sri Lanka St. Lucia Luxembourg Norway Qatar Switzerland Argentina Chile Costa Rica Croatia Czech Republic	Middle East & North Africa Sub-Saharan Africa Latin America & Caribbean East Asia & Pacific Latin America & Caribbean Sub-Saharan Africa Sub-Saharan Africa East Asia & Pacific East Asia & Pacific East Asia & Pacific South Asia Latin America & Caribbean Europe & Central Asia Europe & Central Asia Middle East & North Africa Europe & Central Asia Latin America & Caribbean Latin America & Caribbean Latin America & Caribbean Latin America & Caribbean Europe & Central Asia Europe & Central Asia Europe & Central Asia	It won't be object of our
	Zambia Dominican Republic Indonesia Jamaica Madagascar Mauritius Philippines Samoa Sri Lanka St. Lucia Luxembourg Norway Qatar Switzerland Argentina Chile Costa Rica Croatia Czech Republic Estonia Greece	Middle East & North Africa Sub-Saharan Africa Latin America & Caribbean East Asia & Pacific Latin America & Caribbean Sub-Saharan Africa Sub-Saharan Africa East Asia & Pacific East Asia & Pacific East Asia & Pacific South Asia Latin America & Caribbean Europe & Central Asia Europe & Central Asia Middle East & North Africa Europe & Central Asia Latin America & Caribbean Latin America & Caribbean Latin America & Caribbean Latin America & Caribbean Europe & Central Asia	It won't be object of our
	Zambia Dominican Republic Indonesia Jamaica Madagascar Mauritius Philippines Samoa Sri Lanka St. Lucia Luxembourg Norway Qatar Switzerland Argentina Chile Costa Rica Croatia Czech Republic Estonia	Middle East & North Africa Sub-Saharan Africa Latin America & Caribbean East Asia & Pacific Latin America & Caribbean Sub-Saharan Africa Sub-Saharan Africa East Asia & Pacific East Asia & Pacific East Asia & Pacific South Asia Latin America & Caribbean Europe & Central Asia Europe & Central Asia Middle East & North Africa Europe & Central Asia Latin America & Caribbean Latin America & Caribbean Latin America & Caribbean Latin America & Caribbean Europe & Central Asia Europe & Central Asia Europe & Central Asia Europe & Central Asia	It won't be object of our

Panama	Latin America & Caribbean	
Poland	Europe & Central Asia	
Portugal	Europe & Central Asia	
Saudi Arabia	Middle East & North Africa	
Slovak Republic	Europe & Central Asia	
Slovenia	Europe & Central Asia	
Spain	Europe & Central Asia	
Uruguay	Latin America & Caribbean	
Aruba	Latin America & Caribbean	
Bahrain	Middle East & North Africa	
Barbados	Latin America & Caribbean	
Cyprus	Europe & Central Asia	Island
Malta	Middle East & North Africa	
Seychelles	Sub-Saharan	
Trinidad and Tobago	Latin America & Caribbean	

In particular we will conduct our analysis comparing the Mediterranean countries of our interest with countries contained in the same cluster (cluster 2), excluding the islands and subdivided by Region.

The following table contain the detailed list of the countries which form this 5 country groups, within the  $2^{nd}$  cluster.

East Asia & Pacific	Europe & Central Asia	Latin America & Caribbean	South Asia	Sub-Saharan Africa
Cambodia	Albania	Belize	Afghanistan	Ethiopia
Indonesia	Armenia	Bolivia	Bhutan	Ghana
Malaysia	Azerbaijan	Brazil	India	Guinea
Mongolia	Belarus	Colombia	Nepal	Lesotho
Philippines	Bulgaria	Ecuador	Pakistan	Madagascar
Thailand	Georgia	El Salvador	Sri Lanka	Malawi
Vietnam	Kazakhstan	Guatemala		Mauritania
	Kyrgyz Republic	Honduras		Mozambique
	Moldova	Mexico		Namibia
	Romania	Nicaragua		Rwanda
	Serbia	Paraguay		Senegal
	Ukraine	Peru		South Africa
		Suriname		Tanzania
				Uganda
				Zambia

# 2. Analytical Tables: list of Missed Opportunities

# a. Algeria's analytical table (without Mineral Fuels)

	Missed Opportunities					
HS Code	Product Description	Export	Share to			
		Share	EU27			
220290	Non-alcoholic beverages other than waters of 2202.10 (not incl. fruit/veg	0.01%	12.19%			
410419	Tanned/crust hides & skins of bovine (incl. buffalo)/equine animals, withou	0.00%	0.00%			
220421	Wine other than sparkling wine of fresh grapes, incl. fortified; grape must	0.00%	98.28%			
030613	Shrimps & prawns, whether or not in shell, frozen	0.00%	100.00%			
392330	Carboys, bottles, flasks & sim. arts., of plastics	0.00%	36.77%			
190531	Sweet biscuits	0.00%	0.07%			
160414	Tunas, skipjack & bonito (Sarda spp.), prepd./presvd., whole/in pieces (exc	0.00%	0.00%			
690890	Glazed ceramic flags & paving/hearth/wall tiles (excl. of 6908.10); glazed	0.00%	5.56%			
330720	Personal deodorants & antiperspirants	0.00%	0.02%			
730799	Tube/pipe fittings of iron/steel (excl. cast iron/stainless steel; excl. of	0.00%	3.96%			
283630	Sodium hydrogencarbonate (sodium bicarbonate)	0.00%	87.44%			
392310	Boxes, cases, crates & sim. arts., of plastics	0.00%	61.58%			
392350	Stoppers, lids, caps & oth. closures, of plastics	0.00%	4.24%			
250100	Salt (incl. table salt & denatured salt) & pure sodium chloride, whether or	0.00%	98.80%			
853650	Switches other than isolating switches & make-&-break switches, for a volta	0.00%	16.68%			
848190	Parts of the appls. of 84.81	0.00%	27.26%			
340220	Surface-active preps., washing preps. (incl. auxiliary washing preps.) & cl	0.00%	14.68%			
853669	Plugs & sockets for a voltage not >1000V	0.00%	13.93%			
840999	Parts suit. for use solely/princ. with the engines of 84.07/84.08 (excl. of	0.00%	9.50%			
		0.03%	22.26%			

	Missed Opportunities among the Rising Star				
HS	Product Description	Export	Share to		
Code		Share	EU27		
880330	Parts of aeroplanes/helicopters, other than propellers, rotors, under-carri	0.01%	1.84%		
121299	Vegetable prods., incl. sugar cane & unroasted chicory roots (Chicorium int	0.01%	94.12%		
290490	Sulphonated/nitrated/nitrosated derivs. of hydrocarbons, whether or not hal	0.01%	0.00%		
481840	Sanitary towels & tampons, napkins & napkin liners for babies & sim. sanita	0.01%	0.00%		
481910	Cartons, boxes & cases, of corrugated paper/paperboard	0.01%	0.07%		
392390	Articles for the conveyance/packing of gds., of plastics (excl. of 3923.10	0.00%	1.97%		
190219	Uncooked pasta, not stuffed/othw. prepd., not cont. eggs	0.00%	1.51%		
110100	Wheat/meslin flour	0.00%	0.02%		
391990	Self-adhesive plates, sheets, film, foil, tape, strip & oth. flat shapes, o	0.00%	0.18%		
382440	Prepared additives for cements/mortars/concretes	0.00%	46.37%		
210690	Food preps., n.e.s.	0.00%	48.10%		
842129	Filtering/purifying mach. & app. for liquids (excl. of 8421.21-8421.23)	0.00%	0.49%		
480810	Corrugated paper & paperboard (with/without glued flat surface sheets), whe	0.00%	0.00%		
848180	Taps, cocks, valves & sim. appls. for pipes/boiler shells/tanks/vats or the	0.00%	6.56%		

730793	Butt welding fittings of iron/steel (excl. of cast iron/stainless steel)	0.00%	0.06%
902680	Instruments & app. for meas./checking the flow/level/pressure/oth. variable	0.00%	81.98%
700800	Multiple-walled insulating units of glass	0.00%	100.00%
200980	Juice of any single fruit/veg. (excl. of 2009.11-2009.79), unfermented & no	0.00%	0.17%
071239	Mushrooms (excl. of 0712.31-0712.33) & truffles, dried, whole/cut/sliced/br	0.00%	0.00%
392329	Sacks & bags (incl. cones), of plastics other than polymers of ethylene	0.00%	99.99%
150910	Olive oil, virgin	0.00%	92.94%
841290	Parts of the engines & motors of 8412.10-8412.80	0.00%	0.13%
841330	Fuel/lubricating/cooling medium pumps for int. comb. piston engines	0.00%	45.33%
902690	Parts & accessories of the instr. & appls. of 90.26	0.00%	0.33%
151800	Animal/veg. fats & oils & fractions thereof , boiled/oxidised/dehydrated/su	0.00%	0.05%
392690	Articles of plastics & arts. of oth. mats. of 39.01-39.14, n.e.s. in Ch.39	0.00%	47.69%
030621	Rock lobster & oth. sea crawfish (Palinurus spp., Panulirus spp., Jasus spp	0.00%	99.15%
252220	Slaked lime	0.00%	0.00%
392020	Plates, sheets, film, foil & strip, of polymers of propylene, non-cellular	0.00%	1.01%
854210	Cards incorp. an electronic integrated circuit (smart cards)	0.00%	2.50%
848490	Sets/assortments of gaskets & sim. joints, dissim. in composition, put up i	0.00%	1.37%
401693	Gaskets, washers & oth. seals of vulcanised rubber other than hard rubber	0.00%	8.76%
391239	Cellulose ethers other than carboxymethylcellulose & its salts, in primary	0.00%	0.00%
902620	Instruments & app. for meas./checking pressure	0.00%	2.12%
391721	Tubes, pipes & hoses, rigid, of polymers of ethylene	0.00%	0.22%
330510	Shampoos	0.00%	0.00%
851790	Parts of the app. & equip. of 85.17	0.00%	0.00%
220429	Wine other than sparkling wine of fresh grapes, incl. fortified; grape must	0.00%	100.00%
903289	Automatic regulating/controlling instr. & app., n.e.s. in 90.32	0.00%	97.57%
732690	Articles of iron/steel, n.e.s.	0.00%	10.49%
010110	Live horses/asses/mules/hinnies: pure-bred breeding animals	0.00%	100.00%
200819	Nuts (excl. ground-nuts), incl. mixts., prepd./presvd., whether or not cont	0.00%	100.00%
300650	First-aid boxes & kits	0.00%	0.00%
871499	Parts & accessories of the vehicles of 87.11-87.13, n.e.s. in 87.14	0.00%	100.00%
841981	Machinery, plant & equip., n.e.s. in Ch.84, for making hot drinks/for cooki	0.00%	0.00%
901839	Catheters, cannulae and the like	0.00%	0.00%
870190	Tractors n.e.s. in 87.01 (excl. of 87.09)	0.00%	0.00%
300210	Antisera & oth. blood fractions & modified immunological prods., whether or	0.00%	99.92%
380830	Herbicides, anti-sprouting prods. & plant-growth regulators, put up in form	0.00%	100.00%
391510	Waste, parings & scrap, of polymers of ethylene	0.00%	50.25%
180631	Chocolate & oth. food preps. cont. cocoa, in blocks/slabs/bars, weighing 2k	0.00%	0.00%
482360	Trays, dishes, plates, cups and the like, of paper/paperboard	0.00%	10.48%
853710	Boards, panels, consoles, desks, cabinets & oth. bases, equipped with 2/mor	0.00%	16.58%
853110	Burglar/fire alarms & sim. app.	0.00%	37.10%
853620	Automatic circuit breakers, for a voltage not >1000V	0.00%	94.85%
290943	Monobutyl ethers of ethylene glycol/of diethylene glycol	0.00%	52.56%
190590	Bread, pastry, cakes, biscuits & oth. bakers' wares n.e.s. in Ch.19, whethe	0.00%	0.00%
841391	Parts of the pumps of 8413.11-8413.81	0.00%	9.95%
841451	Table/floor/wall/window/ceiling/roof fans, with a self-contained elec. moto	0.00%	0.00%
841490	Parts of the pumps, compressors, fans & recycling hoods of 8414.10-8414.20	0.00%	81.15%
330749	Preparations for perfuming/deodorizing rooms other than agarbatti & oth. od	0.00%	0.44%
820570	Vices, clamps and the like	0.00%	0.85%
940380	Furniture of mats. other than metal/wood/plastics, incl. cane/osier/bamboo/	0.00%	0.00%
940180	Seats (excl. of 64.02), n.e.s. in 94.01	0.00%	0.00%
846799	Parts of tools for working in the hand (excl. of chain saws, of pneumatic t	0.00%	31.59%
220110	Mineral waters (nat./art.) & aerated waters, not cont. added sugar/oth. swe	0.00%	5.16%
220110		1	
741999	Articles of copper n.e.s. in Ch.74	0.00%	1.39%

## b. Egypt's Analytical Table

	Missed Opportunities			
HS Code	Product Description	Export Share	Share to EU27	
130219	Vegetable saps & extracts (excl. of 1302.11-1302.14)	0.36%	0.24%	
210111	Extracts, essences & concs. of coffee	0.08%	24.96%	
210210	Active yeasts	0.16%	3.42%	
281420	Ammonia in aqueous solution	0.08%	20.17%	
392210	Baths, shower-baths, sinks & wash-basins, of plastics	0.34%	76.67%	
392350	Stoppers, lids, caps & oth. closures, of plastics	0.08%	0.60%	
481910	Cartons, boxes & cases, of corrugated paper/paperboard	0.08%	32.43%	
570190	Carpets & oth. textile floor coverings, knotted, whether or not made up, of	1.28%	28.99%	
620462	Women's/girls', trousers, bib & brace overalls, breeches & shorts (excl. sw	0.24%	64.46%	
621050	Women's/girls' garments made up of fabrics of 59.03/59.06/59.07, n.e.s.	0.08%	38.24%	
690710	Unglazed ceramic tiles, cubes & sim. arts., whether or not rect., the large	0.14%	0.24%	
690890	Glazed ceramic flags & paving/hearth/wall tiles (excl. of 6908.10); glazed	0.13%	5.13%	
732690	Articles of iron/steel, n.e.s.	0.21%	22.93%	
750890	Articles of nickel n.e.s. in Ch.75	0.07%	0.19%	
853710	Boards, panels, consoles, desks, cabinets & oth. bases, equipped with 2/mor	0.08%	12.44%	
	Total share	3.42%	27.98%	

	Missed Opportunities among the rising Star			
HS Code	Product Description	Export	Share to	
		Share	EU27	
392690	Articles of plastics & arts. of oth. mats. of 39.01-39.14, n.e.s. in Ch.39	0.47%	0.190933	
691010	Ceramic sinks, wash basins, wash basin pedestals, baths, bidets, water clos	0.31%	0.600657	
730890	Structures& parts of structuresof iron/steel (excl. of 7308.10-7308.4	0.13%	0.054308	
901890	Instruments & appls. used in medical/surgical/veterinary sciences, incl. ot	0.09%	0.653149	
	Total share	1.00%	0.342891	

### c. Israel's Analytical Table

	Missed Opportunities			
HS Code	Product Description	Export	Share	
		Share	to EU27	
080440	Avocados, fresh/dried	0.07%	80.49%	
081090	Fresh fruit, n.e.s.	0.06%	58.51%	
283524	Phosphates of potassium	0.05%	33.15%	
285100	Inorganic comps. (incl. distilled/conductivity water & water of sim. purity	0.39%	50.45%	
290243	p-Xylene	0.18%	32.29%	
293339	Heterocyclic comps. cont. an unfused pyridine ring (whether or not hydrogen	0.06%	55.68%	
293359	Heterocyclic comps. cont. a pyrimidine ring (whether or not hydrogenated)/p	0.11%	18.20%	
300439	Medicaments cont. hormones/oth. prods. of 29.37 but not cont. antibiotics,	0.06%	19.74%	
340111	Soap & organic surface-active prods. & preps., in the form of bars/cakes/mo	0.11%	79.28%	
382200	Diagnostic/laboratory reagents on a backing, prepd. diagnostic/laboratory r	0.07%	22.04%	
382490	Other chem. prods. & preps. of the chem./allied industries (incl. those con	1.59%	47.32%	
390190	Polymers of ethylene, in primary forms (excl. of 3901.10-3901.30)	0.19%	40.58%	
391740	Fittings (e.g., joints, elbows, flanges) for tubes, pipes & hoses, of plast	0.13%	65.34%	
392049	Plates, sheets, film, foil & strip, of polymers of vinyl chloride, non-cell	0.08%	46.17%	
392190	Plates, sheets, film, foil & strip (excl. cellular), of plastics, n.e.s. in	0.08%	36.74%	
392329	Sacks & bags (incl. cones), of plastics other than polymers of ethylene	0.07%	31.45%	
392410	Tableware & kitchenware, of plastics	0.08%	48.83%	
560311	Nonwovens, whether or not impregnated/coated/covered/laminated	0.10%	40.12%	
710231	Diamonds, non-industrial, unwkd./simply sawn/cleaved/bruted	5.04%	33.10%	
710239	Diamonds, non-industrial other than unwkd./simply sawn/cleaved/bruted	21.48%	12.27%	

711311	Articles of jewellery & parts thereof , of silver, whether or not plated/cl	0.12%	9.80%
841191	Parts of the turbo-jets/turbo-propellers of 8411.11-8411.22	0.07%	35.52%
841950	Heat exchange units, whether or not electrically heated	0.12%	71.35%
848180	Taps, cocks, valves & sim. appls. for pipes/boiler shells/tanks/vats or the	0.23%	31.17%
850450	Inductors, n.e.s. (excl. for cathode ray tubes)	0.09%	20.51%
851790	Parts of the app. & equip. of 85.17	0.69%	25.35%
852610	Radar app.	0.08%	20.09%
853400	Printed circuits	0.09%	24.09%
854390	Parts of the mach. & app. of 85.43	0.10%	34.23%
870829	Parts & accessories of bodies (incl. cabs) of the motor vehicles of 87.01-8	0.06%	58.74%
870899	Parts & accessories of the motor vehicles of 87.01-87.05, n.e.s. in 87.06-8	0.06%	51.63%
880390	Parts of gds. of 88.01/88.02, n.e.s. in 88.03	0.33%	0.14%
901819	Electro-diagnostic app. used in medical/surgical/dental/veterinary sciences	0.59%	25.36%
902290	X-ray generators (excl. tubes), high tension generators, control panels & d	0.36%	15.15%
903149	Optical meas./checking instr. & appls., n.e.s. in Ch.90	0.51%	9.13%
903180	Measuring/checking instr., app.& machines, n.e.s. in Ch. 90	0.28%	5.17%
903190	Parts & accessories of the instr., app. & machines of 90.31	0.16%	16.19%
903210	Thermostats	0.06%	19.44%
903289	Automatic regulating/controlling instr. & app., n.e.s. in 90.32	0.06%	12.49%
	Tot	34.09%	19.82%

	Missed Opportunities Among the Rising Star			
HS Code	Product Description	Export Share	Share to EU27	
190590	Bread, pastry, cakes, biscuits & oth. bakers' wares n.e.s. in Ch.19, whethe	0.12%	29.13%	
210690	Food preps., n.e.s.	0.28%	49.90%	
300210	Antisera & oth. blood fractions & modified immunological prods., whether or	0.36%	24.41%	
330499	Beauty/make-up preps. & preps. for the care of the skin (excl. meds.; excl	0.33%	26.24%	
392490	Household arts. & toilet arts. (excl. tableware & kitchenware), of plastics	0.09%	23.87%	
710813	Gold (incl. gold plated with platinum), non-monetary, in semi-manufactured	0.13%	41.02%	
847990	Parts of the mach. & mech. appls. of 84.79	0.09%	27.00%	
853710	Boards, panels, consoles, desks, cabinets & oth. bases, equipped with 2/mor	0.16%	16.20%	
902780	Instruments & app. for physical/chem. analysis, n.e.s. in 90.27	0.06%	36.63%	
	Tot	1.62%	30.69%	

# d. Jordan's Analytical Table

Missed Opportunities			
HS Code	Product Description	Export	Share
		Share	to EU
480300	Toilet/facial tissue stock, towel/napkin stock & sim. paper of a kind used	1.07%	0.00%
210690	Food preps., n.e.s.	0.94%	13.20%
621143	Track suits (excl. knitted or crocheted), women's/girls'; oth. garments, n	0.87%	0.00%
160250	Prepared/presvd. preps. of bovine animals (excl. homogenised preps.), incl	0.34%	0.00%
610520	Men's/boys' shirts, knitted or crocheted, of man-made fibres	0.30%	0.00%
391739	Tubes, pipes & hoses of plastics, n.e.s. (excl. of 3917.21-3917.33)	0.25%	0.82%
481840	Sanitary towels & tampons, napkins & napkin liners for babies & sim. sanita	0.23%	0.03%
380810	Insecticides, put up in forms or packings-RS/as preps./arts.	0.23%	1.57%
710812	Gold (incl. gold plated with platinum), in unwrought forms (excl. powder)	0.22%	9.10%
481810	Toilet paper, in rolls of a width not >36cm/cut to size/shape	0.22%	0.00%
070410	Cauliflowers & headed broccoli, fresh/chilled	0.20%	2.15%
392329	Sacks & bags (incl. cones), of plastics other than polymers of ethylene	0.20%	0.37%
841869	Refrigerating/freezing equip. n.e.s. in 84.18; heat pumps	0.17%	0.00%
080711	Watermelons, fresh	0.16%	0.00%
240290	Cigars, cheroots, cigarillos & cigarettes of tobacco substitutes	0.15%	0.00%
730890	Structures& parts of structuresof iron/steel (excl. of 7308.10-7308.4	0.15%	0.38%
481910	Cartons, boxes & cases, of corrugated paper/paperboard	0.12%	0.14%

392020	Plates, sheets, film, foil & strip, of polymers of propylene, non-cellular	0.12%	0.00%
940370	Furniture of plastics (excl. of 94.01)	0.12%	1.08%
190110	Preparations for infant use, put up for RS	0.10%	0.00%
321410	Glaziers' putty, grafting putty, resin cements, caulking comps. & oth. mast	0.10%	0.00%
940360	Wooden furniture (excl. of 94.01 & 9403.30-9403.50)	0.07%	2.36%
210500	Ice cream & oth. edible ice, whether or not cont. cocoa	0.07%	0.00%
841590	Parts of the air-conditioning machines of 8415.10-8415.83	0.07%	0.00%
190590	Bread, pastry, cakes, biscuits & oth. bakers' wares n.e.s. in Ch.19, whethe	0.07%	4.49%
560122	Wadding; oth. arts. of wadding, of man-made fibres	0.07%	0.00%
020230	Meat of bovine animals, frozen, boneless	0.06%	0.00%
853720	Boards, panels, consoles, desks, cabinets & oth. bases, equipped with 2/mor	0.05%	0.00%
180690	Chocolate & oth. food preps. cont. cocoa (excl. of 1806.20-1806.32)	0.05%	1.56%
940340	Wooden furniture of a kind used in the kitchen	0.05%	0.00%
240399	Manufactured tobacco & manufactured tobacco substitutes, n.e.s. (excl. smok	0.05%	0.23%
392490	Household arts. & toilet arts. (excl. tableware & kitchenware), of plastics	0.05%	1.63%
611030	Jerseys, pullovers, cardigans, waist-coats & sim. arts., knitted or crochet	0.05%	4.21%
150910	Olive oil, virgin	0.05%	3.45%
210112	Preparations with a basis of extracts/essences/concs. of coffee/with a basi	0.04%	0.16%
392119	Plates, sheets, film, foil & strip, cellular, of plastics, n.e.s. in 39.21	0.04%	0.00%
070190	Potatoes other than seed potatoes, fresh/chilled	0.04%	0.00%
350691	Adhesives based on polymers of 39.01-39.13/based on rubber	0.04%	0.00%
731010	Tanks,casks,drums,cans,boxes&sim.conts.,for any mat.other thancompressed/li	0.03%	0.00%
090121	Coffee, roasted, not decaffeinated	0.03%	2.64%
070490	Cabbages, kohlrabi, kale & sim. edible brassicas (excl. cauliflowers, heade	0.03%	0.00%
		7.28%	2.32%

	Missed Opportunities				
HS	Product Description	Export	Share		
Code		Share	to EU		
392410	Tableware & kitchenware, of plastics	0.07%	0.19%		
391740	Fittings (e.g., joints, elbows, flanges) for tubes, pipes & hoses, of plast	0.04%	2.84%		
080550	Lemons (Citrus limon/limonum) & limes (Citrus aurantifolia/latifolia), fres	0.04%	0.00%		
940320	Metal furniture (excl. of 94.01 & 94.02)	0.04%	0.81%		
220890	Undenatured ethyl alcohol of an alcoholic strength by volume <80%vol; oth	0.03%	0.00%		
		0.21%	0.72%		

## e. Lebanon's Analytical Table

	Missed Opportunities				
HS Code	Product Description	Export Share	Share to EU27		
080300	Bananas, incl. plantains, fresh/dried	11.06%	0.00%		
100110	Durum wheat	1.70%	10.49%		
190531	Sweet biscuits	0.65%	0.15%		
390190	Polymers of ethylene, in primary forms (excl. of 3901.10-3901.30)	0.39%	16.27%		
392690	Articles of plastics & arts. of oth. mats. of 39.01-39.14, n.e.s. in Ch.39	0.38%	0.00%		
481310	Cigarette paper, in the form of booklets/tubes	0.19%	0.01%		
481820	Handkerchiefs, cleansing/facial tissues & towels, of paper pulp/paper/cellu	0.16%	5.79%		
481840	Sanitary towels & tampons, napkins & napkin liners for babies & sim. sanita	0.15%	42.06%		
680229	Worked monumental/building stone & arts. thereof (excl. gds. of 68.01)(e	0.13%	10.77%		
710231	Diamonds, non-industrial, unwkd./simply sawn/cleaved/bruted	0.11%	5.34%		
710812	Gold (incl. gold plated with platinum), in unwrought forms (excl. powder)	0.10%	0.71%		
711319	Articles of jewellery & parts thereof , of oth. precious metal (excl. silve	0.10%	13.56%		
730830	Doors, windows & their frames, & thresholds for doors, of iron/steel	0.10%	9.49%		
732399	Table/kitchen/oth. h-hold. arts. & parts thereof (sim. to but excl. those o	0.09%	0.26%		
732690	Articles of iron/steel, n.e.s.	0.08%	9.35%		
761090	Aluminium structures (excl. prefabricated buildings of 94.06) & oth. parts	0.08%	63.80%		

842121	Filtering/purifying mach. & app. for filtering/purifying water	0.08%	3.11%
853720	Boards, panels, consoles, desks, cabinets & oth. bases, equipped with 2/mor	0.08%	1.63%
		15.63%	2.71%

Missed Opportunities among the Rising Star			
HS Code	Product Description	Export	Share
		Share	to EU
271019	Petroleum oils & oils obt. from bituminous mins. (excl. crude) & preps. oth	0.56%	0.02%
852520	Transmission app. for radio-telephony/radio-telegraphy/radio-broadcasting/t	0.17%	2.81%
880330	Parts of aeroplanes/helicopters, other than propellers, rotors, under-carri	0.16%	17.20%
940510	Chandeliers & oth. elec. ceiling/wall lighting fittings (excl. those of a k	0.13%	75.30%
940540	Electric lamps & lighting fittings, n.e.s. in 94.05	0.07%	3.17%
		1.09%	11.99%

## f. Morocco's Analytical Table

	Missed Opportunities		
HS	Product Description	Export	Share
Code		Share	to EU27
310540	Ammonium dihydrogenorthophosphate (monoammonium phosphate) &mixts. thereof	3.13%	10.35%
854129	Transistors (excl. photosensitive transistors), other than those with a dis	1.81%	28.11%
620462	Women's/girls', trousers, bib & brace overalls, breeches & shorts (excl. sw	0.89%	99.45%
620342	Men's/boys' trousers, bib & brace overalls, breeches & shorts (excl. swimwe	0.76%	95.26%
200570	Olives, presvd./presvd. othw. than by vinegar/acetic acid, not frozen, othe	0.59%	68.06%
160420	Prepared/presvd. fish other than whole/in pieces	0.50%	87.24%
853890	Parts suit. for use solely/princ. with the app. of 85.35/85.36/85.37 (excl	0.43%	96.67%
640399	Footwear (excl. waterproof) with outer soles of rubber/plastics/composition	0.40%	83.07%
260300	Copper ores &concs.	0.39%	46.06%
610990	T-shirts, singlets &oth. vests, knitted or crocheted, other than of cotton	0.37%	98.57%
620469	Women's/girls', trousers, bib & brace overalls, breeches & shorts (excl. sw	0.37%	98.08%
620443	Women's/girls' dresses (excl. knitted or crocheted), of synth. fibres	0.34%	99.90%
030613	Shrimps & prawns, whether or not in shell, frozen	0.32%	99.99%
620520	Men's/boys' shirts (excl. knitted or crocheted), of cotton	0.31%	98.12%
081110	Strawberries, uncooked/cooked by steaming/boiling in water, frozen, whether	0.29%	91.14%
870894	Steering wheels, steering columns & steering boxes for the motor vehicles o	0.25%	99.43%
080510	Oranges, fresh/dried	0.24%	85.43%
401699	Articles of vulcanised rubber other than hard rubber, n.e.s. in Ch.40	0.23%	97.27%
030269	Fish, n.e.s., fresh/chilled (excl. fillets/oth. fish meat of 03.04/livers &	0.22%	97.21%
611030	Jerseys, pullovers, cardigans, waist-coats & sim. arts., knitted or crochet	0.22%	98.06%
081010	Strawberries, fresh	0.18%	99.47%
080719	Melons (excl. watermelons), fresh	0.17%	98.57%
620192	Men's/boys', anoraks (incl. ski-jackets), wind-cheaters, wind-jackets & sim	0.16%	98.91%
620442	Women's/girls' dresses (excl. knitted or crocheted), of cotton	0.16%	99.04%
721070	Flat-rolled prods. of iron/non-alloy steel, of a width of 600mm/more, paint	0.16%	24.64%
940320	Metal furniture (excl. of 94.01 & 94.02)	0.16%	98.46%
620433	Women's/girls' jackets & blazers (excl. knitted or crocheted), of synth. fi	0.15%	99.61%
160416	Anchovies, prepd./presvd., whole/in pieces (excl. minced)	0.14%	70.58%
640391	Footwear (excl. waterproof) with outer soles of rubber/plastics/composition	0.13%	94.80%
520942	Woven fabrics of cotton, cont. 85%/more by wt. of cotton, denim, weighing >	0.12%	62.22%
853710	Boards, panels, consoles, desks, cabinets &oth. bases, equipped with 2/mor	0.12%	85.67%
210111	Extracts, essences &concs. of coffee	0.11%	4.23%
620439	Women's/girls' jackets & blazers (excl. knitted or crocheted), of textile m	0.11%	98.26%
640510	Footwear with uppers of leather/composition leather, n.e.s.	0.11%	42.67%
620530	Men's/boys' shirts (excl. knitted or crocheted), of man-made fibres	0.10%	99.88%
610342	Men's/boys' trousers, bib & brace overalls, breeches & shorts (excl. swimwe	0.09%	98.28%
620333	Men's/boys' jackets & blazers (excl. knitted or crocheted), of synth. fibre	0.09%	99.92%
620343	Men's/boys' trousers, bib & brace overalls, breeches & shorts (excl. swimwe	0.09%	99.19%

620432	Women's/girls' jackets & blazers (excl. knitted or crocheted), of cotton	0.09%	99.74%
620449	Women's/girls' dresses (excl. knitted or crocheted), of textile mats. other	0.09%	94.29%
030374	Mackerel (Scomberscombrus/australasicus/japonicus), frozen (excl. fillets/	0.07%	22.77%
620452	Women's/girls' skirts & divided skirts (excl. knitted or crocheted), of cot	0.07%	96.91%
330300	Perfumes & toilet waters	0.06%	37.41%
610444	Women's/girls' dresses, knitted or crocheted, of art. fibres	0.06%	99.82%
610459	Women's/girls' skirts & divided skirts, knitted or crocheted, of textile ma	0.06%	99.86%
620459	Women's/girls' skirts & divided skirts (excl. knitted or crocheted), of tex	0.06%	99.96%
630900	Worn clothing &oth. worn arts.	0.06%	30.42%
880390	Parts of gds. of 88.01/88.02, n.e.s. in 88.03	0.06%	99.99%
121220	Seaweeds &oth. algae, fresh/chilled/frozen/dried, whether or not ground	0.05%	26.05%
200850	Apricots, prepd./presvd., whether or not cont. added sugar/oth. sweetening	0.05%	98.48%
621410	Shawls, scarves, mufflers, mantillas, veils and the like (excl. knitted or	0.05%	99.87%
	Total share	15.24%	64.76%

Missed Opportunities among the Rising Star			
HS	Product Description	Export	Share
Code		Share	to EU27
870331	Vehicles princ. designed for the tpt. of persons (excl. of 87.02 & 8703.10	0.84%	14.25%
300490	Medicaments (excl. of 30.02/30.05/30.06) consisting of mixed/unmixed prods	0.37%	73.66%
392690	Articles of plastics & arts. ofoth. mats. of 39.01-39.14, n.e.s. in Ch.39	0.21%	78.19%
854221	Monolithic integrated circuits, digital	0.21%	96.55%
870829	Parts & accessories of bodies (incl. cabs) of the motor vehicles of 87.01-8	0.19%	96.50%
691010	Ceramic sinks, wash basins, wash basin pedestals, baths, bidets, water clos	0.14%	84.96%
420221	Handbags, whether or not with shoulder strap, incl. those without handle, w	0.10%	95.26%
847990	Parts of the mach. & mech. appls. of 84.79	0.09%	97.80%
640299	Footwear (excl. waterproof) with outer soles & uppers of rubber/plastics (e	0.08%	95.85%
851220	Lighting/visual signalling equip. of a kind used for cycles (excl. bicycles	0.07%	74.89%
611241	Women's/girls' swimwear, knitted or crocheted, of synth. fibres	0.05%	63.87%
853650	Switches other than isolating switches & make-&-break switches, for a volta	0.05%	54.94%
853669	Plugs & sockets for a voltage not >1000V	0.05%	49.88%
	Total share	2.44%	59.34%

# g. Palestine's Analytical Table

Missed Opportunities			
HS Code	Product Description	Export Share	Share to EU27
040310	Yogurt	0.23%	0.01%
110419	Rolled/flaked grains of cereals other than oats	0.49%	0.00%
121190	Plants & parts of plants, incl. seeds & fruits, of a kind used primarily in	0.30%	17.14%
170490	Sugar confectionery other than chewing gum (incl. white chocolate), not con	0.42%	0.06%
210690	Food preps., n.e.s.	1.06%	1.37%
220890	Undenatured ethyl alcohol of an alcoholic strength by volume <80%vol; oth	0.19%	0.00%
390190	Polymers of ethylene, in primary forms (excl. of 3901.10-3901.30)	0.59%	0.00%
391721	Tubes, pipes & hoses, rigid, of polymers of ethylene	0.37%	0.00%
392310	Boxes, cases, crates & sim. arts., of plastics	0.06%	0.00%
392321	Sacks & bags (incl. cones), of polymers of ethylene	4.52%	0.00%
392410	Tableware & kitchenware, of plastics	0.32%	0.00%
440110	Fuel wood, in logs/billets/twigs/faggots/sim. forms	0.13%	0.00%
441510	Cases, boxes, crates, drums & sim. packings of wood; cable-drums of wood	0.06%	0.00%
441520	Pallets, box pallets & oth. load boards of wood; pallet collars of wood	1.31%	0.00%
442010	Statuettes & oth. ornaments, of wood	0.12%	36.20%
481840	Sanitary towels & tampons, napkins & napkin liners for babies & sim. sanita	0.12%	0.00%
481910	Cartons, boxes & cases, of corrugated paper/paperboard	0.13%	0.00%
491199	Printed matter, n.e.s.	0.06%	0.29%
620990	Babies' garments & clothing accessories (excl. knitted or crocheted), of te	0.12%	0.00%

640620	Outer soles & heels, of rubber/plastics	0.09%	6.69%
680221	Worked monumental/building stone & arts. thereof (excl. gds. of 68.01), sim	3.11%	1.62%
680223	Worked monumental/building stone & arts. thereof (excl. gds. of 68.01), sim	0.09%	0.00%
680229	Worked monumental/building stone & arts. thereof (excl. gds. of 68.01)(e	14.15%	0.39%
681011	Building blocks & bricks, of cement/concrete/art. stone, whether or not rei	0.14%	0.00%
681099	Articles of cement/concrete/art. stone, whether or not reinf. (excl. of 681	0.17%	0.00%
730120	Welded angles, shapes & sections of iron/steel	0.26%	0.00%
730830	Doors, windows & their frames, & thresholds for doors, of iron/steel	0.26%	0.00%
761010	Doors, windows & their frames & thresholds for doors, of aluminium	0.36%	0.00%
853710	Boards, panels, consoles, desks, cabinets & oth. bases, equipped with 2/mor	0.05%	0.00%
940320	Metal furniture (excl. of 94.01 & 94.02)	0.08%	0.00%
940350	Wooden furniture of a kind used in the bedroom	2.37%	0.00%
940429	Mattresses of oth. mats. (excl. cellular rubber/plastics)	0.63%	0.00%
		32.37%	0.68%

Missed Opportunities among the Rising star			
HS Code	Product Description	Export Share	Share to EU27
392690	Articles of plastics & arts. of oth. mats. of 39.01-39.14, n.e.s. in Ch.39	0.10%	0.00%
420221	Handbags, whether or not with shoulder strap, incl. those without handle, w	0.06%	0.00%
640299	Footwear (excl. waterproof) with outer soles & uppers of rubber/plastics (e	0.05%	0.00%
847160	Input/output units (of auto. data processing machines), whether or not cont	0.07%	0.00%
853669	Plugs & sockets for a voltage not >1000V	0.12%	0.00%
		0.41%	0.00%

### h. Tunisia's Analytical Table

	Missed Opportunities			
HS	Product Description	Export	Share to	
Code		Share	EU27	
030235	Bluefin tunas (Thunnus thynnus), fresh/chilled (excl. fillets/oth. fish mea	2.78%	97.17%	
030749	Cuttle fish (Sepia officinalis, Rossia macrosoma, Sepiola spp.) & squid (Om	1.40%	99.73%	
030759	Octopus (Octopus spp.), other than live/fresh/chilled	1.05%	99.26%	
151529	Maize (corn) oil, other than crude, & fractions thereof, whether or not re	1.04%	99.52%	
190219	Uncooked pasta, not stuffed/othw. prepd., not cont. eggs	0.95%	97.90%	
190590	Bread, pastry, cakes, biscuits & oth. bakers' wares n.e.s. in Ch.19, whethe	0.81%	95.24%	
250100	Salt (incl. table salt & denatured salt) & pure sodium chloride, whether or	0.55%	84.02%	
283525	Calcium hydrogenorthophosphate (dicalcium phosphate)	0.48%	86.07%	
391729	Tubes, pipes & hoses, rigid, of plastics n.e.s. in 39.17	0.44%	99.44%	
391739	Tubes, pipes & hoses of plastics, n.e.s. (excl. of 3917.21-3917.33)	0.42%	96.48%	
401120	New pneumatic tyres, of rubber, of a kind used on buses/lorries	0.33%	1.13%	
610910	T-shirts, singlets & oth. vests, knitted or crocheted, of cotton	0.32%	99.38%	
610990	T-shirts, singlets & oth. vests, knitted or crocheted, other than of cotton	0.31%	2.46%	
611011	Jerseys, pullovers, cardigans, waist-coats & sim. arts., knitted or crochet	0.28%	98.20%	
620342	Men's/boys' trousers, bib & brace overalls, breeches & shorts (excl. swimwe	0.19%	14.00%	
620349	Men's/boys' trousers, bib & brace overalls, breeches & shorts (excl. swimwe	0.17%	98.83%	
620439	Women's/girls' jackets & blazers (excl. knitted or crocheted), of textile m	0.15%	48.99%	
620462	Women's/girls', trousers, bib & brace overalls, breeches & shorts (excl. sw	0.14%	97.89%	
620520	Men's/boys' shirts (excl. knitted or crocheted), of cotton	0.12%	7.15%	
621010	Garments made up of fabrics of 56.02/56.03	0.11%	99.03%	
621210	BrassiFres & parts thereof , whether or not knitted or crocheted	0.10%	93.30%	
630499	Textile furnishing arts. other than bedspreads (excl. of 94.04), not knitte	0.10%	44.33%	
640391	Footwear (excl. waterproof) with outer soles of rubber/plastics/composition	0.10%	31.12%	
640399	Footwear (excl. waterproof) with outer soles of rubber/plastics/composition	0.09%	0.00%	
690890	Glazed ceramic flags & paving/hearth/wall tiles (excl. of 6908.10); glazed	0.09%	99.51%	

730890	Structures& parts of structuresof iron/steel (excl. of 7308.10-7308.4	0.09%	47.23%
732690	Articles of iron/steel, n.e.s.	0.08%	20.05%
760429	Bars, rods & profiles (excl. hollow profiles) of aluminium alloys	0.08%	0.00%
848350	Flywheels & pulleys, incl. pulley blocks	0.08%	94.33%
850450	Inductors, n.e.s. (excl. for cathode ray tubes)	0.08%	99.99%
850710	Electric accumulators, incl. separators therefor, whether or not rect. (inc	0.07%	0.00%
853400	Printed circuits	0.07%	92.20%
853890	Parts suit. for use solely/princ. with the app. of 85.35/85.36/85.37 (excl	0.07%	76.05%
871639	Trailers & semi-trailers for the tpt. of gds. (excl. of 8716.10-8716.31)	0.06%	99.46%
		13.21%	86.02%

	Missed Opportunities			
HS Code	Product Description	Export Share	Share to EU27	
210690	Food preps., n.e.s.	0.16%	77.59%	
340290	Organic surface-active agents, surface-active preps., washing preps. & clea	0.15%	97.24%	
392190	Plates, sheets, film, foil & strip (excl. cellular), of plastics, n.e.s. in	0.11%	30.43%	
620640	Women's/girls' blouses, shirts & shirt-blouses (excl. knitted or crocheted)	0.09%	83.60%	
840991	Parts suit. for use solely/princ. with spark-ignition int. comb. piston eng	0.08%	99.61%	
848180	Taps, cocks, valves & sim. appls. for pipes/boiler shells/tanks/vats or the	0.07%	43.07%	
950390	Toys n.e.s. in 95.03	0.07%	0.15%	
		0.74%	67.30%	

# i. Turkey's Analytical Table

	Missed Opportunities			
HS Code	Product Description	Export	Share	
		Share	to EU	
870331	Vehicles princ. designed for the tpt. of persons (excl. of 87.02 & 8703.10	1.25%	7.62%	
870323	Vehicles (excl. of 87.02 & 8703.10) princ. designed for the tpt. of persons	1.08%	6.65%	
620462	Women's/girls', trousers, bib & brace overalls, breeches & shorts (excl. sw	0.89%	26.56%	
854459	Electric conductors (excl. of 8544.11-8544.30), for a voltage >80V but not	0.81%	76.26%	
840999	Parts suit. for use solely/princ. with the engines of 84.07/84.08 (excl. of	0.75%	8.91%	
851660	Electric ovens other than microwave ovens; elec. cookers, cooking plates, b	0.47%	61.52%	
611592	Hosiery, knitted or crocheted, of cotton	0.45%	5.25%	
730890	Structures& parts of structuresof iron/steel (excl. of 7308.10-7308.4	0.45%	47.21%	
630260	Toilet linen & kitchen linen, of terry towelling/sim. terry fabrics, of cot	0.42%	43.82%	
680291	Mosaic cubes and the like, of marble/travertine/alabaster, whether or not o	0.36%	27.98%	
401699	Articles of vulcanised rubber other than hard rubber, n.e.s. in Ch.40	0.34%	25.62%	
690890	Glazed ceramic flags & paving/hearth/wall tiles (excl. of 6908.10); glazed	0.30%	71.31%	
760429	Bars, rods & profiles (excl. hollow profiles) of aluminium alloys	0.30%	80.60%	
730660	Tubes, pipes & hollow profiles (excl. of 7306.10-7306.50), welded, of non-c	0.25%	51.50%	
080520	Mandarins, incl. tangerines & satsumas; clementines, wilkings & sim. citrus	0.23%	58.95%	
392020	Plates, sheets, film, foil & strip, of polymers of propylene, non-cellular	0.23%	63.29%	
080550	Lemons (Citrus limon/limonum) & limes (Citrus aurantifolia/latifolia), fres	0.22%	87.12%	
730630	Tubes, pipes & hollow profiles (excl. of 7306.10 & 7306.20), welded, of cir	0.22%	86.73%	
741300	Stranded wire, cables, plaited bands and the like, of copper, not electrica	0.20%	84.92%	
180690	Chocolate & oth. food preps. cont. cocoa (excl. of 1806.20-1806.32)	0.19%	68.12%	
732111	Cooking appls. & plate warmers, for gas fuel/for both gas & oth. fuels	0.19%	77.98%	
540761	Woven fabrics (excl. of 5407.10-5407.30), cont. 85%/more by wt. of non-text	0.18%	16.26%	

841850	Refrigerating/freezing chests, cabinets, display counters, show-cases & sim	0.17%	44.73%
760612	Plates, sheets & strip, rect. (incl. square), of a thkns. >0.2mm, of alumin	0.15%	58.83%
853710	Boards, panels, consoles, desks, cabinets & oth. bases, equipped with 2/mor	0.15%	42.19%
853720	Boards, panels, consoles, desks, cabinets & oth. bases, equipped with 2/mor	0.15%	9.20%
854430	Ignition wiring sets & oth. wiring sets of a kind used in vehicles/aircraft	0.15%	48.29%
210210	Active yeasts	0.14%	33.54%
340111	Soap & organic surface-active prods. & preps., in the form of bars/cakes/mo	0.14%	76.65%
630532	Flexible intermediate bulk conts. of a kind used for the packing of gds., o	0.14%	52.20%
080510	Oranges, fresh/dried	0.13%	70.49%
080920	Cherries, fresh	0.13%	21.14%
260300	Copper ores & concs.	0.13%	97.01%
390690	Acrylic polymers other than poly(methyl methacrylate), in primary forms	0.13%	78.97%
610442	Women's/girls' dresses, knitted or crocheted, of cotton	0.13%	47.98%
840820	Compression-ignition int. comb. piston engines (diesel/semi-diesel engines)	0.13%	51.97%
391740	Fittings (e.g., joints, elbows, flanges) for tubes, pipes & hoses, of plast	0.12%	14.08%
551511	Woven fabrics of polyester staple fibres mixed mainly or solely with viscos	0.12%	64.48%
850710	Electric accumulators, incl. separators therefor, whether or not rect. (inc	0.12%	26.25%
940600	Prefabricated buildings	0.12%	20.13%
200190	Vegetables, fruit, nuts & oth. edible parts of plants (excl. cucumbers & gh	0.11%	93.56%
610444	Women's/girls' dresses, knitted or crocheted, of art. fibres	0.11%	47.21%
870893	Clutches & parts thereof for the motor vehicles of 87.01-87.05	0.11%	64.13%
732393	Table/kitchen/oth. h-hold. arts. & parts thereof (excl. of 7323.10), of sta	0.10%	89.29%
761090	Aluminium structures (excl. prefabricated buildings of 94.06) & oth. parts	0.10%	62.68%
841899	Parts of the refrigerating/freezing equip. & heat pumps of 8418.10-8418.69	0.09%	20.78%
		12.85%	58.23%

Missed Opportunities among the Rising Star			
HS Code	Product Description	Export Share	Share to EU27
870332	Vehicles princ. designed for the tpt. of persons (excl. of 87.02 & 8703.10	0.94%	18.99%
870829	Parts & accessories of bodies (incl. cabs) of the motor vehicles of 87.01-8	0.53%	76.72%
200819	Nuts (excl. ground-nuts), incl. mixts., prepd./presvd., whether or not cont	0.49%	37.97%
870870	Road wheels & parts & accessories thereof for the motor vehicles of 87.01-8	0.43%	0.92%
880330	Parts of aeroplanes/helicopters, other than propellers, rotors, under-carri	0.42%	44.19%
870431	Motor vehicles for the tpt. of gds. (excl. of 8704.10), with spark-ignition	0.26%	24.72%
210690	Food preps., n.e.s.	0.24%	55.67%
848180	Taps, cocks, valves & sim. appls. for pipes/boiler shells/tanks/vats or the	0.21%	13.95%
071340	Lentils, dried, shelled, whether or not skinned/split	0.20%	26.15%
392690	Articles of plastics & arts. of oth. mats. of 39.01-39.14, n.e.s. in Ch.39	0.20%	82.50%
841191	Parts of the turbo-jets/turbo-propellers of 8411.11-8411.22	0.20%	92.67%
870839	Brakes & servo-brakes & parts thereof (excl. mounted brake linings) for the	0.20%	31.09%
300210	Antisera & oth. blood fractions & modified immunological prods., whether or	0.12%	69.15%
851220	Lighting/visual signalling equip. of a kind used for cycles (excl. bicycles	0.12%	64.63%
940190	Parts of the seats of 94.01	0.11%	50.93%
640299	Footwear (excl. waterproof) with outer soles & uppers of rubber/plastics (e	0.10%	83.80%
870850	Drive-axles with differential, whether or not provided with oth. transmissi	0.10%	53.67%
760421	Hollow profiles of aluminium	0.09%	75.25%
		4.98%	60.86%