

PIRAEUS BANK



# A Closer Look to External Trade: Greece's Export Performance



Economic Research & Investment Strategy

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- Greece's trade balance in terms of GDP has improved substantially in the last eight years (from 12.6% deficit in 2008 to marginal surplus of 0.1% in 2015), correcting one of the long-term macroeconomic imbalances of the Greek economy. However, this improvement was achieved through sharp import contraction taking into account that imports decreased by 36% in 2008-2015 (in current prices), while exports fell over that period marginally by 0.8%.
- Despite the fact that Greece's trade openness in 2015 has increased significantly compared to 1995 and has reached 64% of GDP it still remains relatively low compared to the average of the Euro area as a whole. Furthermore, it should be noted that although Greek exports in the last 3 years exceeded 30% of GDP, which is a historic high, Greece as a small closed economy presents lower ratio exports to GDP compared to its peers.
- Despite the reduction in nominal unit labour costs in the period 2010-2015, which restored cost competitiveness, the response of exports has been limited partially due to weak price adjustments.
- Greece's share in world total exports of goods and services stood on average in the period 2010-2015 at 0.31% as opposed to 0.37% in the period 2000-2009.
- Although, more than 55% of Greek exports are directed to EU countries, trade to non EU countries and especially to those with the largest import shares globally is limited.
- Greek exports are dominated by oil, shipping and tourism. In the first 9 months of 2016 more than 25% of Greek exports of goods in terms of product values is related to mineral oil.
- Greek exports are mainly concentrated in medium-low and low technology products and therefore unable to cash in on trends in foreign demand. The increase of exports in the last five years came from the above categories.

- Greece has one of the highest concentration ratios among Euro area countries and the third highest ratio in terms of top ten enterprises among OECD countries. Micro and small firms are responsible for a limited share of total exports, even if they represent the majority among all exporting enterprises. Additionally, the ratio of exports over the total turnover is on average higher in large firms than in SMEs.
- Despite the unfavourable economic conditions, Greece's performance in trade activities in terms of international comparisons has improved substantially. This is mainly due to the implementation of several reforms in recent years. Still, there are several areas where Greece continues to be below peers.
- In the Doing Business report on Trading Across Borders Greece ranked 27th in 2016. The country holds the 86th place (out of 138) in the 2016-17 Global Competitiveness Index (GCI), marking a drop of five places compared to 2015-2016, but having climbed up from 96th place (out of 148) in 2012-2013 due to the implementation of reforms in recent years. Furthermore, in terms of trade facilitation, Greece's performance has improved between 2012 - 2015 mainly in the areas of involvement of the trade community, advance rulings, fees and charges, streamlining of border procedures and internal border agency cooperation.
- Although a number of key elements have been put in place through substantial policy efforts, a range of reform measures are still needed in order to build an efficient export strategy. This should focus on product diversification, quality improvement, penetration to world markets and structural transformation through improving infrastructure, investing in human capital, and reducing market regulation.

1. A Closer Look to Greek External Trade

2. Importance of Trade & Export Performance

3. Structure of Greek Exports

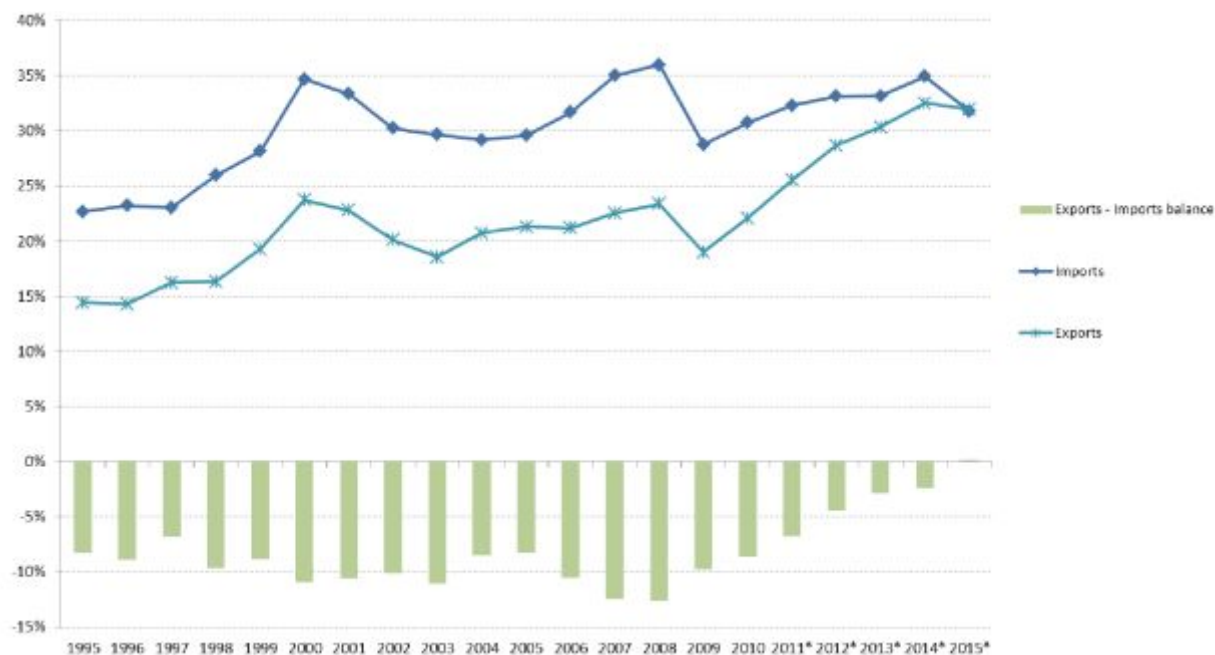
4. Entrepreneurship and International Trade

5. International Performance Indices

6. Forecasts - Conclusions

Greek trade balance (% GDP) has improved substantially in the last eight years (from 12.6% deficit in 2008 to 0.1% surplus in 2015), correcting one of the long-term macroeconomic imbalances of the Greek economy. However, this improvement was achieved through sharp import contraction taking into account that imports decreased by 36% in 2008-2015 (in current prices), while exports fell over that period marginally by 0.8% mainly due to negative impact of services.

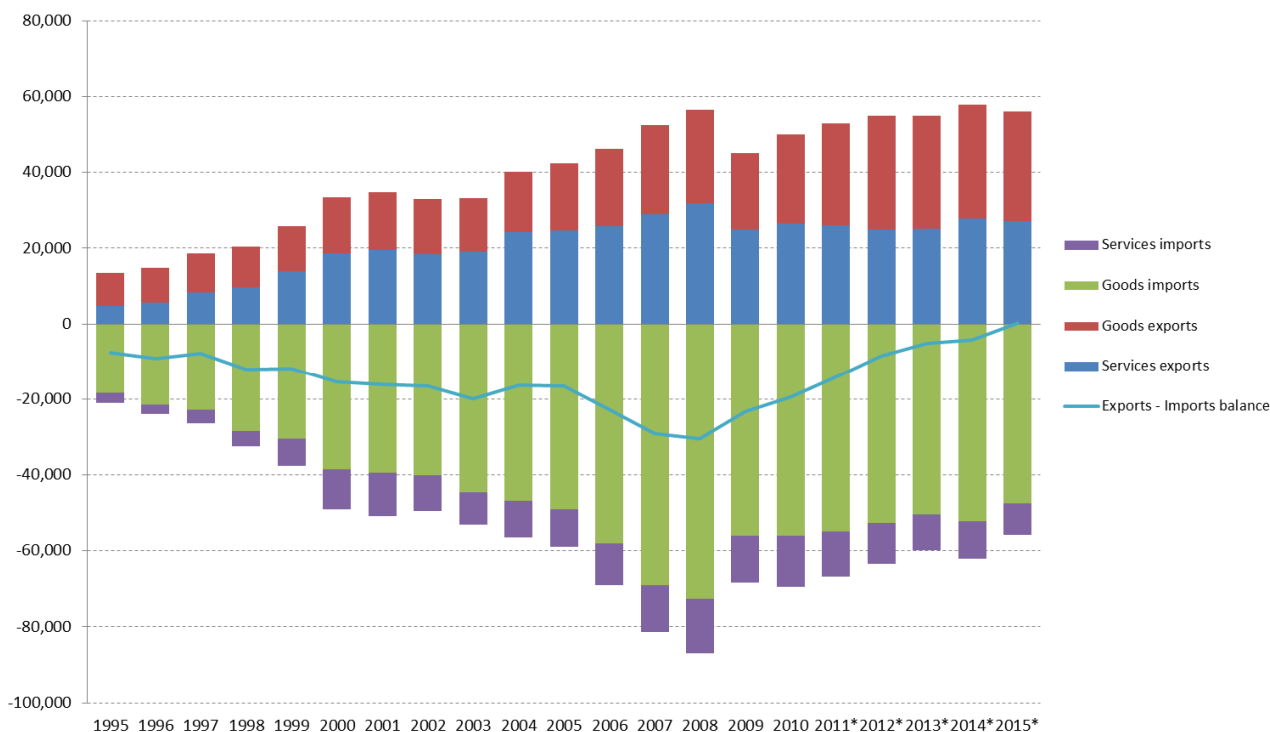
## External Trade (% of GDP)



\*provisional data

Greece's international trade in goods and services with the rest of the world was valued at € 111.9 bn in 2015. Both imports and exports decreased compared to the previous year, but the decrease was larger for imports (€ 6.4 bn) than for exports (€ 1.8 bn, out of which 66% related to services), mainly due to the implications of capital controls.

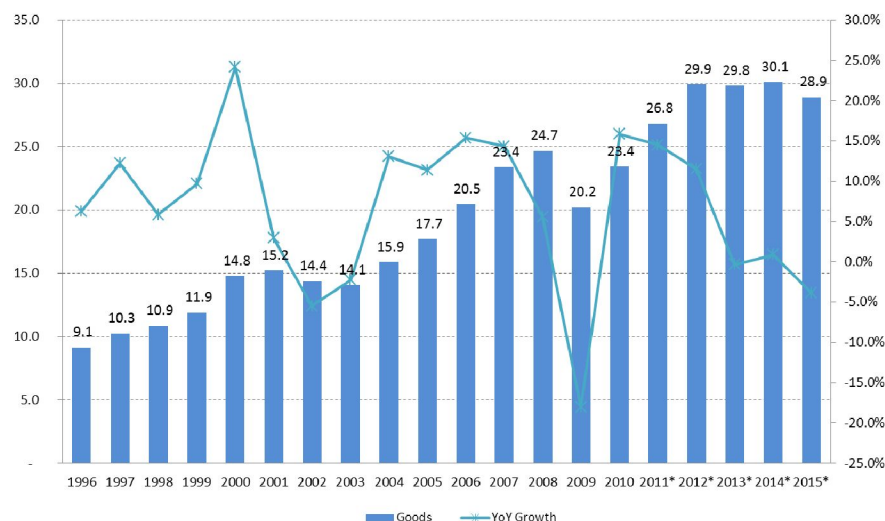
## Trade Balance – Goods and Services (€ mn)



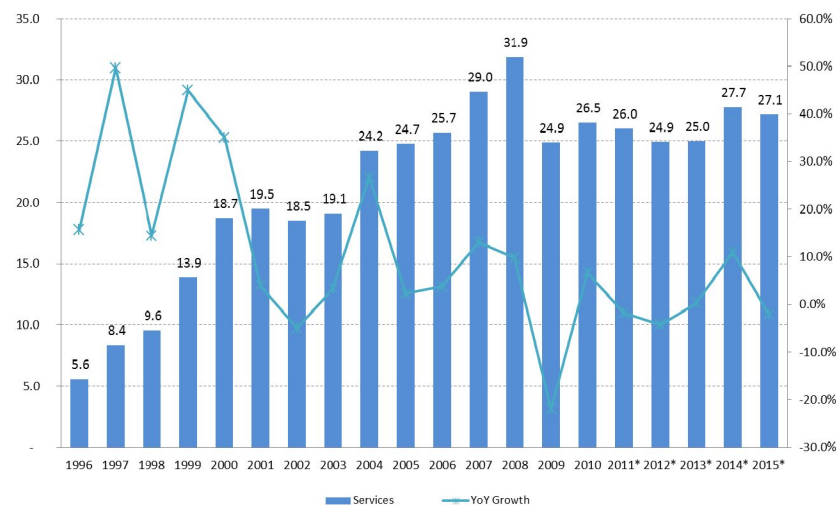
\*provisional data

Greek exports of goods represented on average more than 50% of total exports in 2010-2015 compared to 43% in 2004-2009. Furthermore, exports of goods have delivered better results over the past 6 years with an average annual growth of 6.4% in 2010-2015 as opposed to 1.6% average annual growth of exported services, which - despite the positive impact of tourism- were negatively affected by the decrease in transportation.

## Exports of Goods (€ bn)



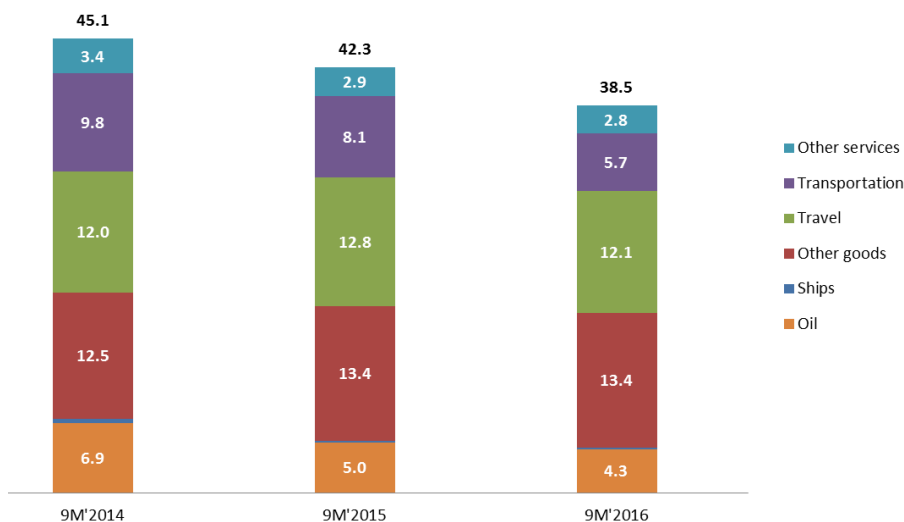
## Exports of Services (€ bn)



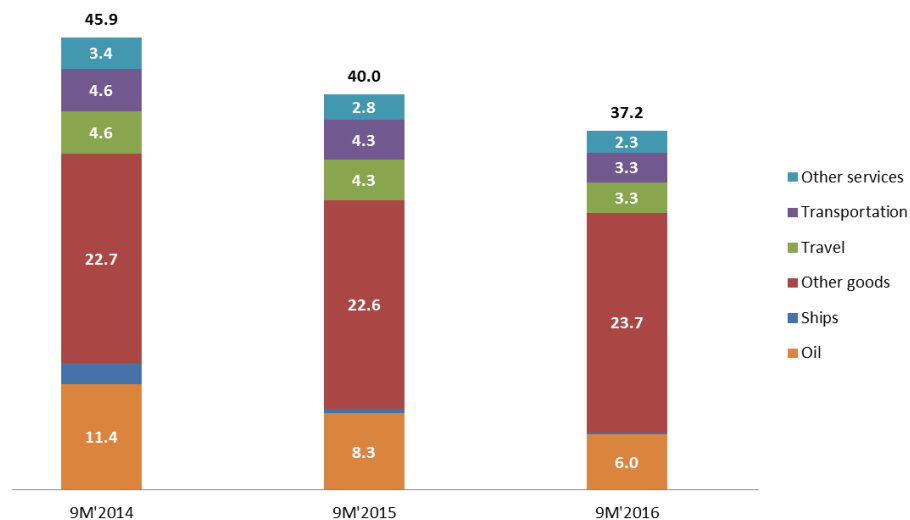
\*provisional data

Given the marginal positive GDP growth of 0.2% yoy in the 9M of 2016, the import-export balance to GDP ratio is expected to remain at the 2015 levels. According to the 9-month data, in 2016 trade balance remained positive, with the value of exports falling by 9%, while the value of imports decreased by 7%. Exports of goods (excluding oil and ships) increased slightly by 0.4% and travel income decreased by 5.5%

## Exports of goods and services in 9M 2016 (€ bn)



## Imports of goods and services in 9M 2016 (€ bn)





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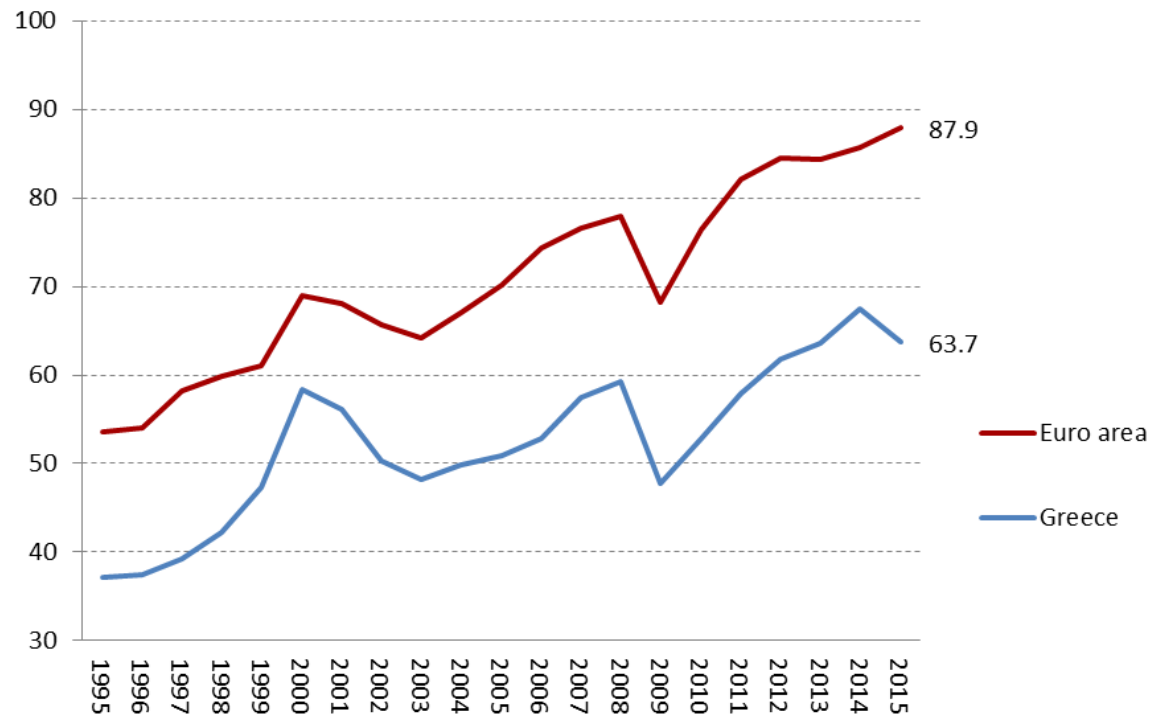
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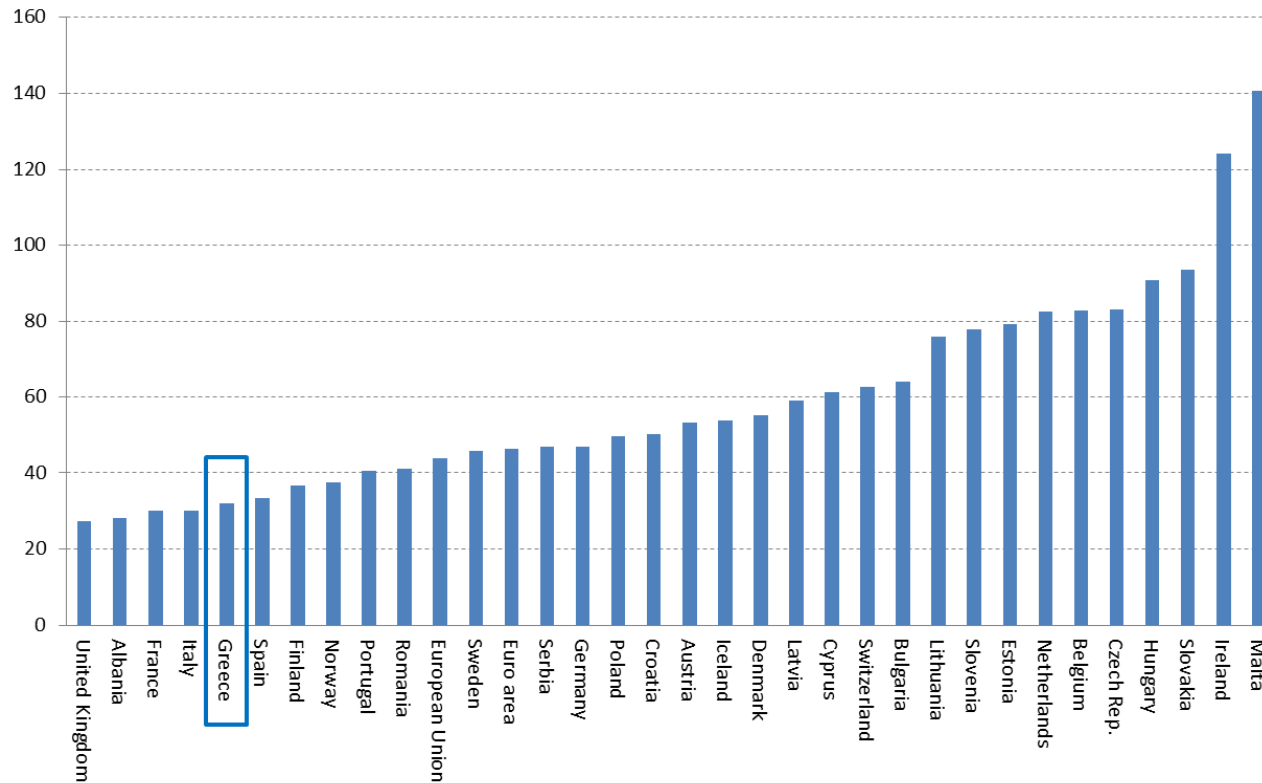
The Greek economy is a relatively closed one, although the degree of openness has been constantly increasing over the past 20 years. Based on the sum of exports and imports as a percentage of GDP, trade openness has increased significantly from around 37% of GDP in 1995 to 64% in 2015, however, it still remains relatively low compared to the average of the Euro area as a whole (88% in 2015).

## External Trade (% of GDP)



While most of the smaller economies among the EU and OECD countries are characterised by larger export to GDP ratios, Greece as a small closed economy, presents a lower export to GDP ratio compared to its peers.

## Exports to GDP Ratio (2015)

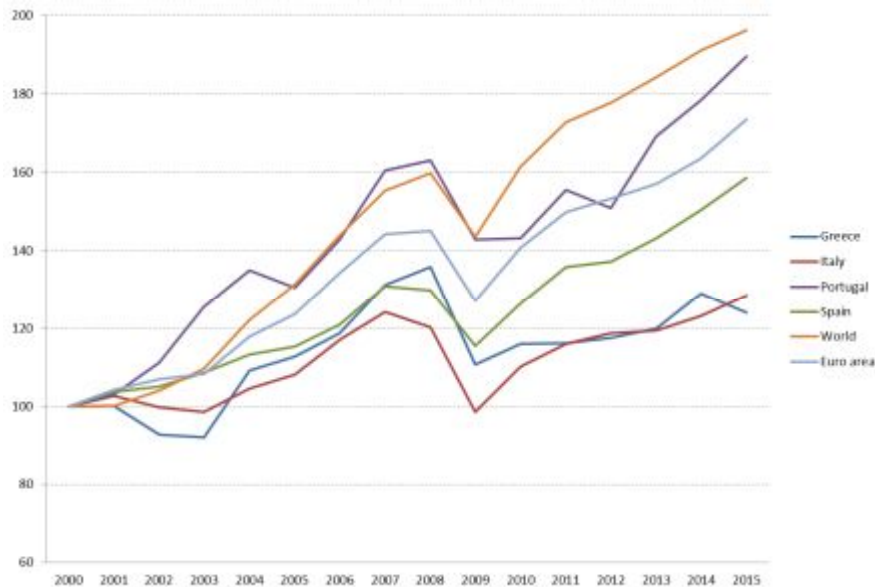


# Greek exports have recovered marginally since the global economic crisis

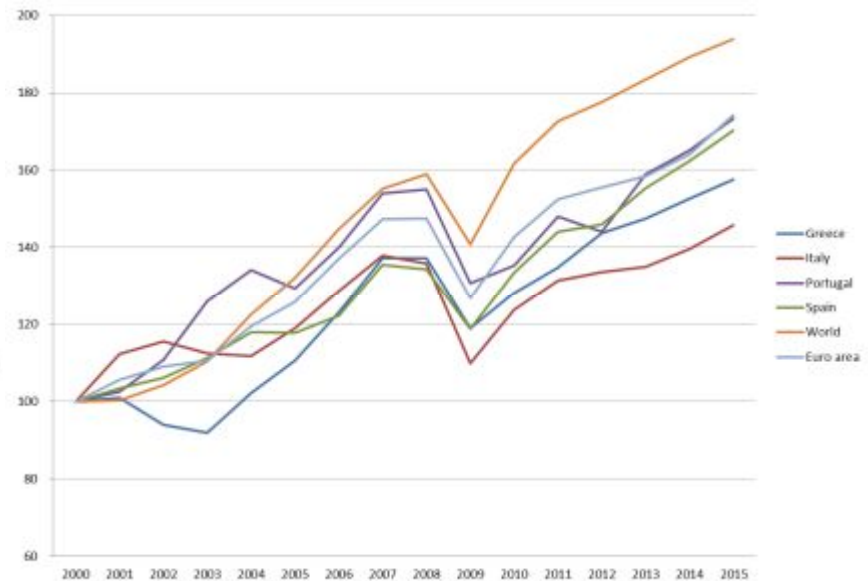


Despite the reduction in nominal unit labour costs by -12.4% in the period 2010-2015, which restored cost competitiveness, the response of exports has been limited partially due to weak price adjustments. Greece's export market performance for goods and services is relatively poor in comparison to its peers. The relevant comparison for exports of goods represents better performance although still below the peers. Greek exports have recovered marginally since the global economic crisis in 2008/2009 whereas EU and World on average recorded strong export growth.

Exports of goods and services performance (2000=100)

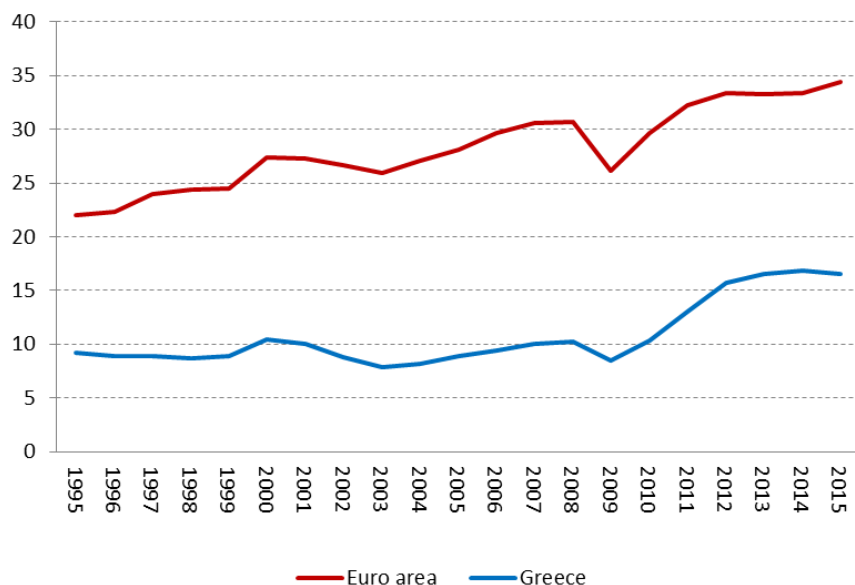


Exports of goods performance (2000=100)

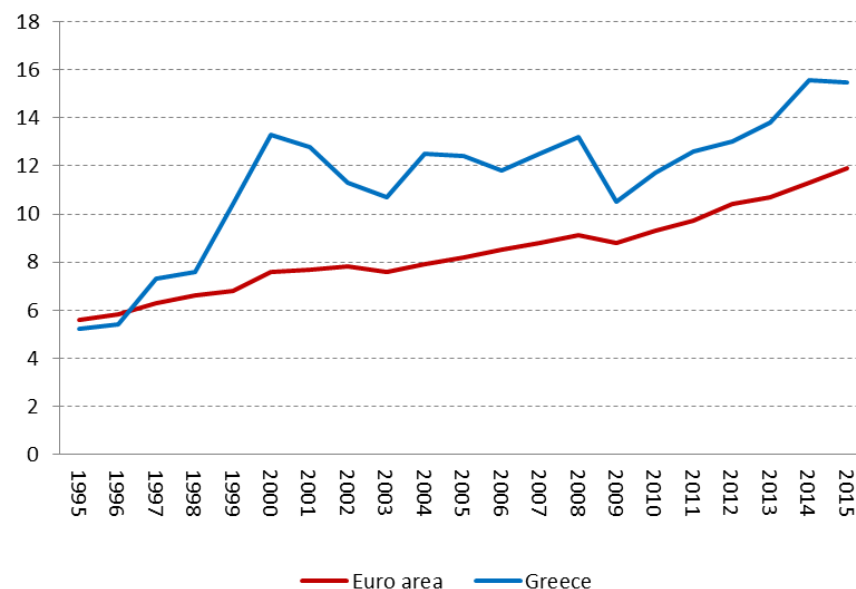


Although Greek exports of goods represent almost 50% (average 2008-2015) of total exports (74% for Euro area), their share related to GDP is very low compared to the rest of the Euro area. There is a significant gap of 180 bps (2010-2015). On the contrary, exports of services to GDP ratio, mainly due to the positive impact of tourism sector and shipping, is higher by 32 bps compared to the Euro area average over the same period.

## Exports of goods to GDP ratio

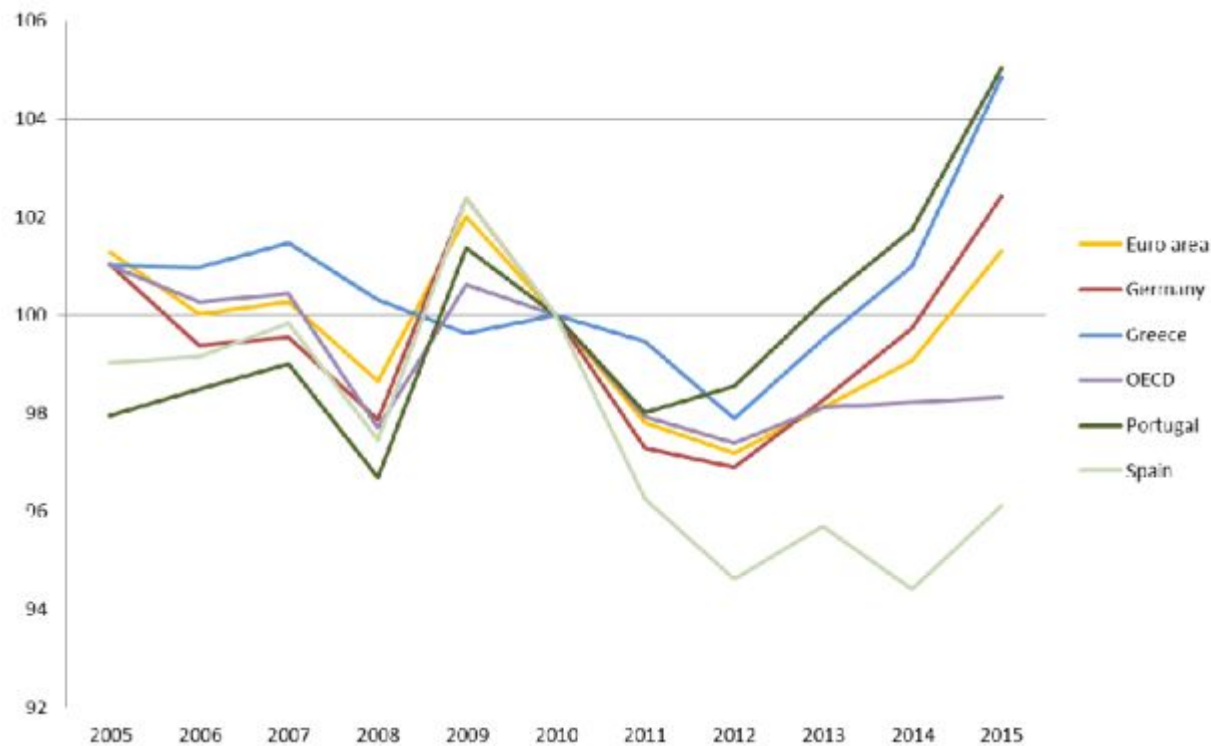


## Exports of services to GDP ratio



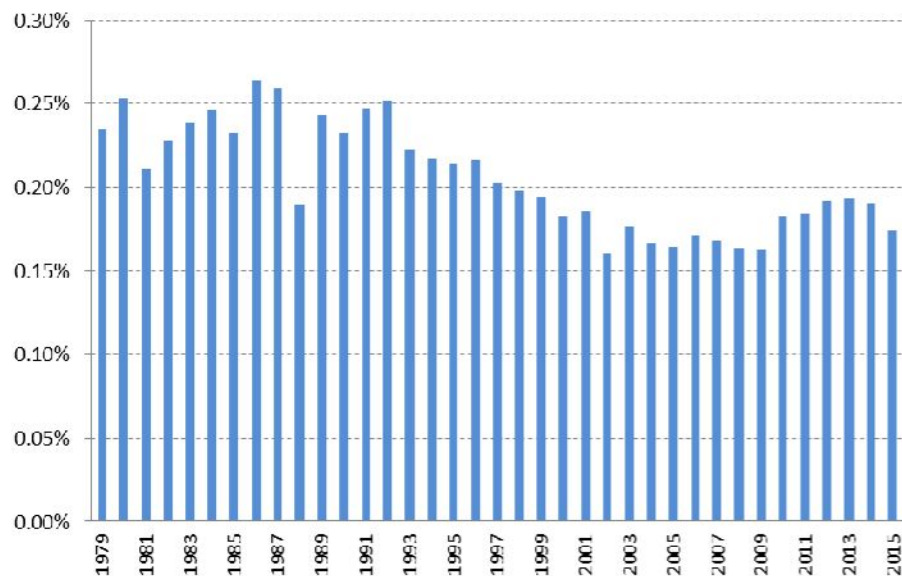
Greece has the 3rd highest ratio among OECD countries in terms of trade (ratio between the index of export prices and the index of import prices) and the 2nd highest ratio in the Euro Area. An increase in the terms of trade means that the value of exports is increasing compared to the value of imports.

## Terms of trade (2010=100)

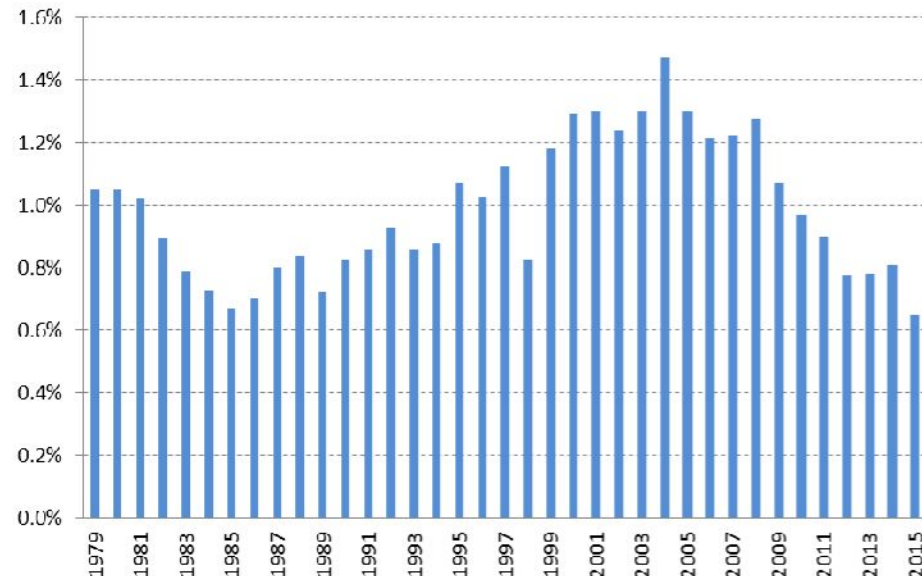


Greece's share in world total exports for goods and services stood on average in 2010-2015 at 0.31% from 0.37% in 2000-2009. In terms of merchandise trade in 2010-2015 Greece's share stood at 0.19% and the ratio for commercial services at 0.81%. The above ratios for 2015 stood at 0.17% and 0.65% respectively.

Merchandise Trade  
Greek exports to world exports



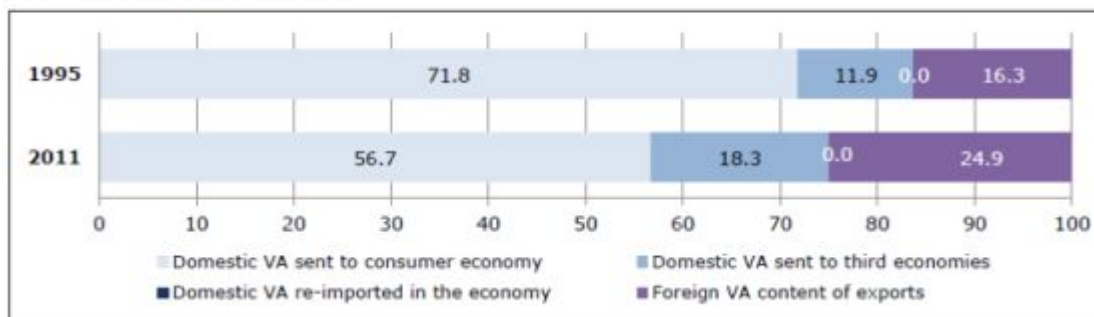
Commercial Services  
Greek exports to world exports



Greece's domestic value added (DVA) content of exports has changed over the last 16 years since 1995, in all the major components. The DVA share as a percentage of total gross exports to consumer economy (embodied either in final or intermediate goods or services directly consumed by the importing economy) decreased by 15.1 pps. On the contrary, DVA sent to third economies and foreign VA content of exports increased by 6.4 and 8.6 pps respectively.

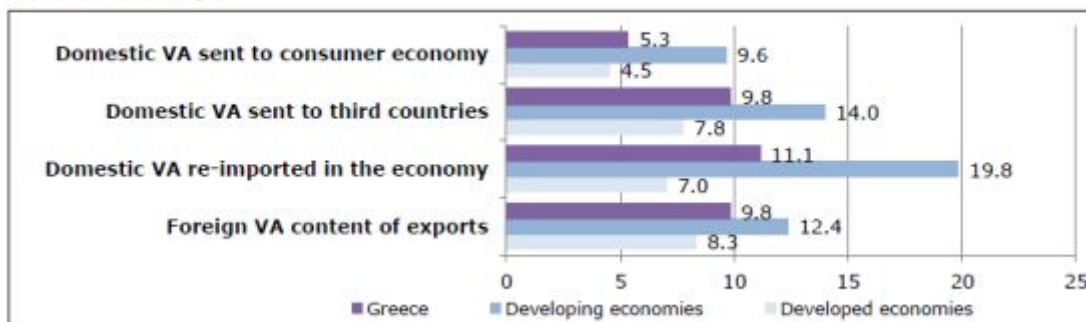
## The value added (VA) components of gross exports, 1995 and 2011

(% share in total gross exports)



## Evolution of the VA components of gross exports, 1995-2011

(annual % change)





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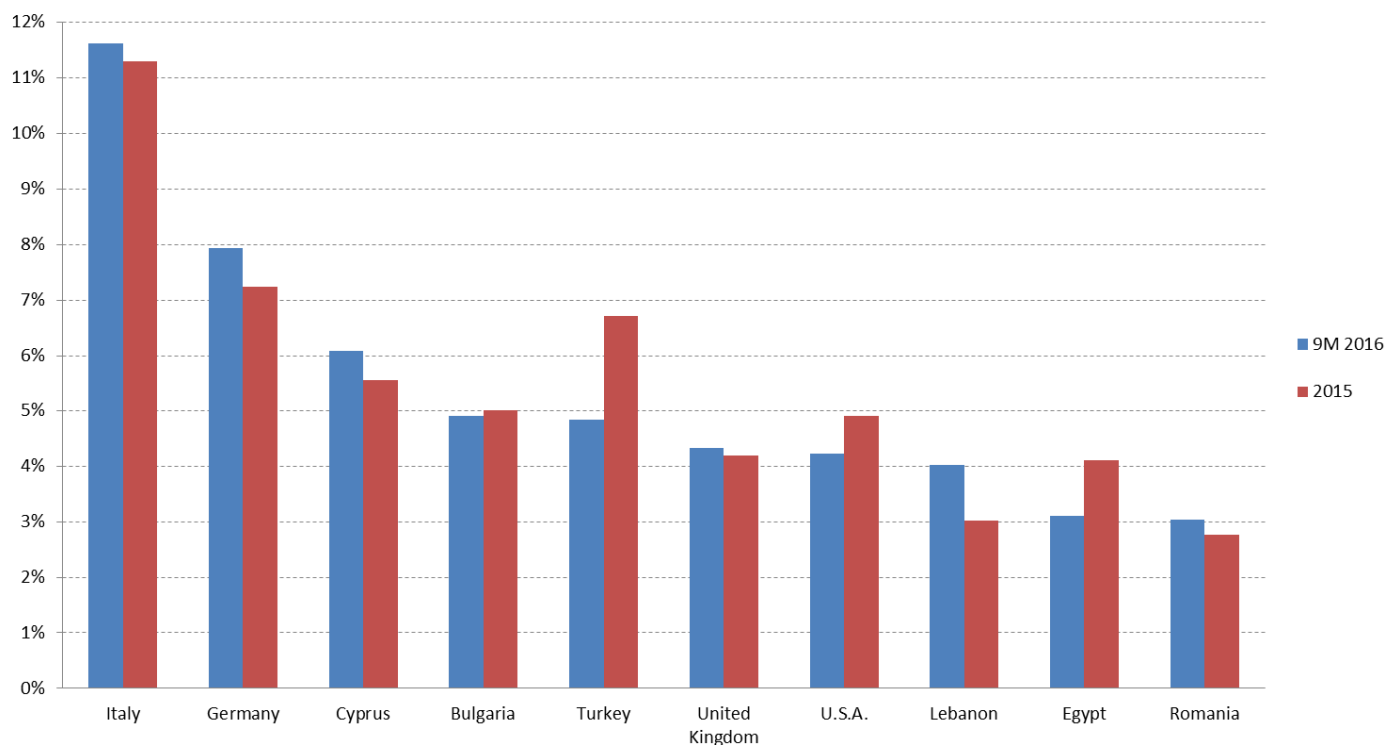
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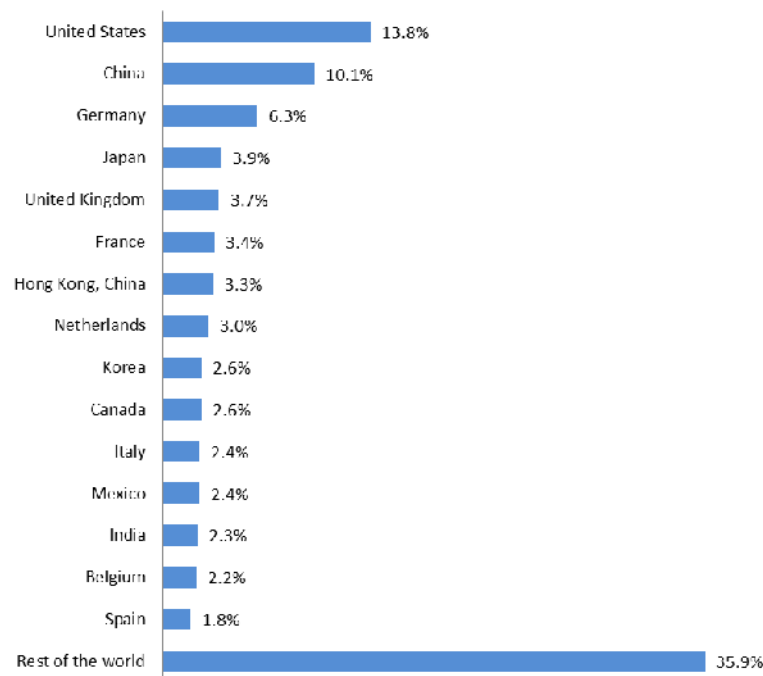
Italy was the largest importer country in 2015, contributing by 11.3% to Greece's exports of goods, followed by Germany with 7.2%. In the 9M2016, the relevant ratios stood at 11.6% and 7.9% respectively with Cyprus being the 3rd main partner with 6.1%.

## Greek Exports of Goods by Country

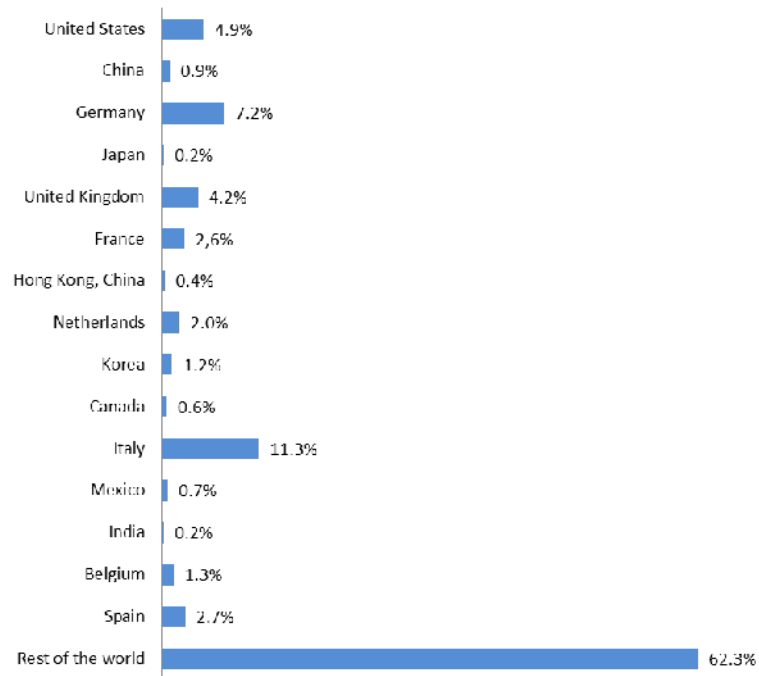


Although more than 55% of Greek exports are directed to EU countries, trade to non-EU countries and especially to those with the largest import shares globally is limited. USA and China, which are the two main importing countries in the world, both have almost one-fourth of world import share but the Greek export share to them to total Greek exports is less than 6% (4.9% in USA and 0.9% in China). In 2015, EU exports to US and China represented 20.7% and 9.5% of the total EU exports respectively (€371 bn in US and €170 bn in China, out of which only 0.3% and 0.1% represented Greek exports).

## Share of World Imports (2015)

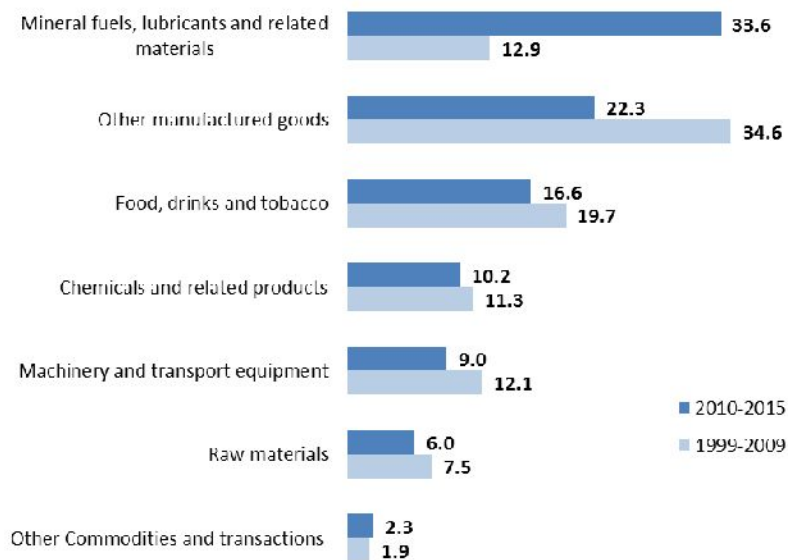


## Share of Greek Exports to the main Importing Countries (2015)

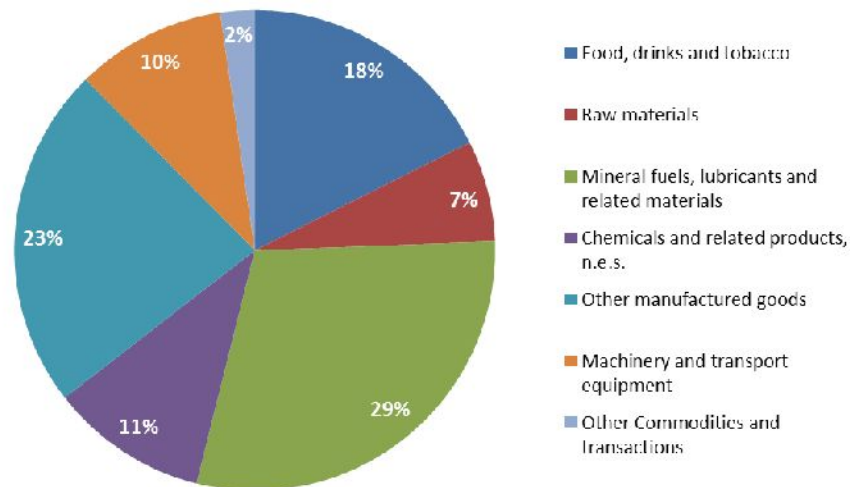


Greek exports are dominated by oil (imported as crude oil, refined and then exported), shipping and tourism. The main goods exported are mineral fuels, manufactured goods and food and live animals. In 2010-2015 mineral fuels, lubricants and related goods held the biggest share of goods exports (34%) compared to 1999-2009 (13%).

Exports of goods - Structure comparison (%)

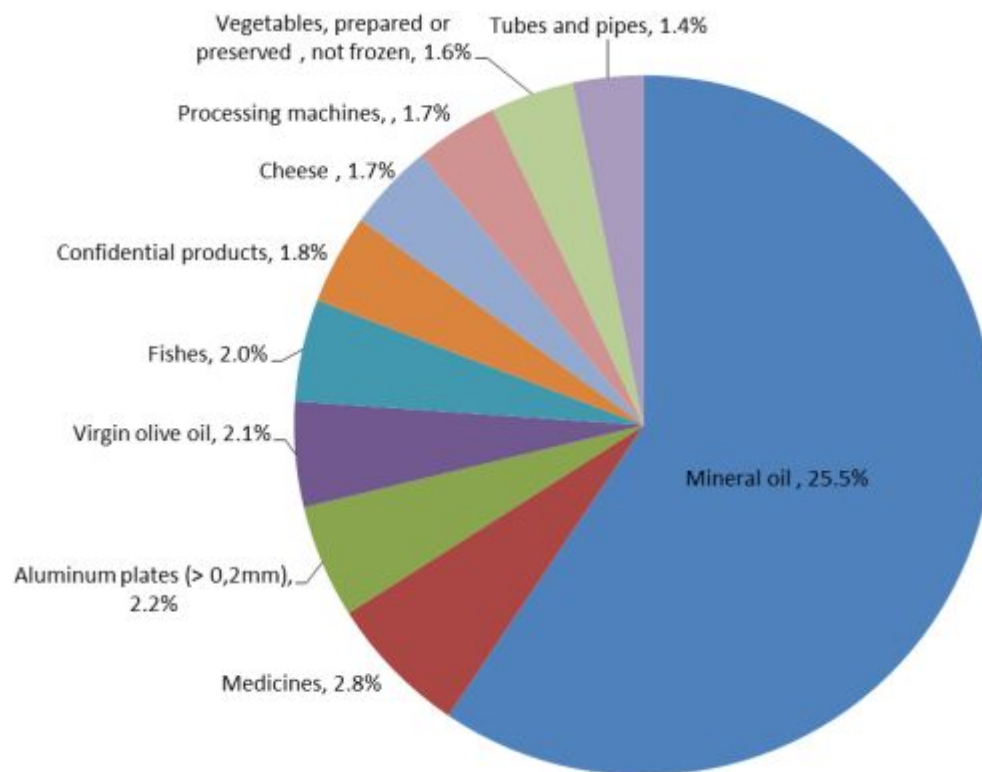


Share of exports by product, 2015 (%)

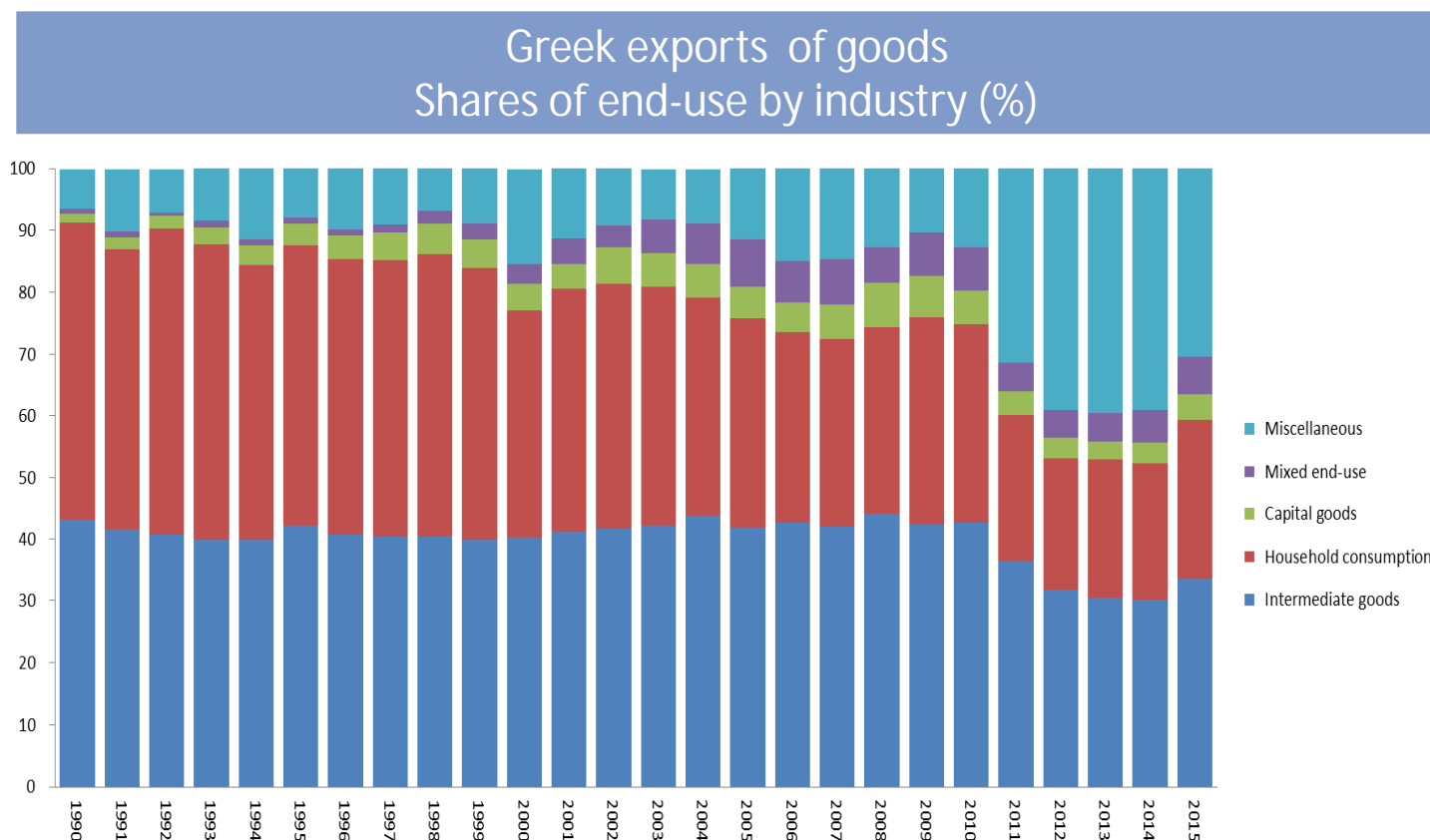


In the 9M 2016, more than 1/4 of Greek exports in terms of product value was related to mineral oil (25.5%) followed by medicines (2.8%). Top ten export products represented 43% of total products.

## Share of top 10 Greek exports by product in 9M 2016

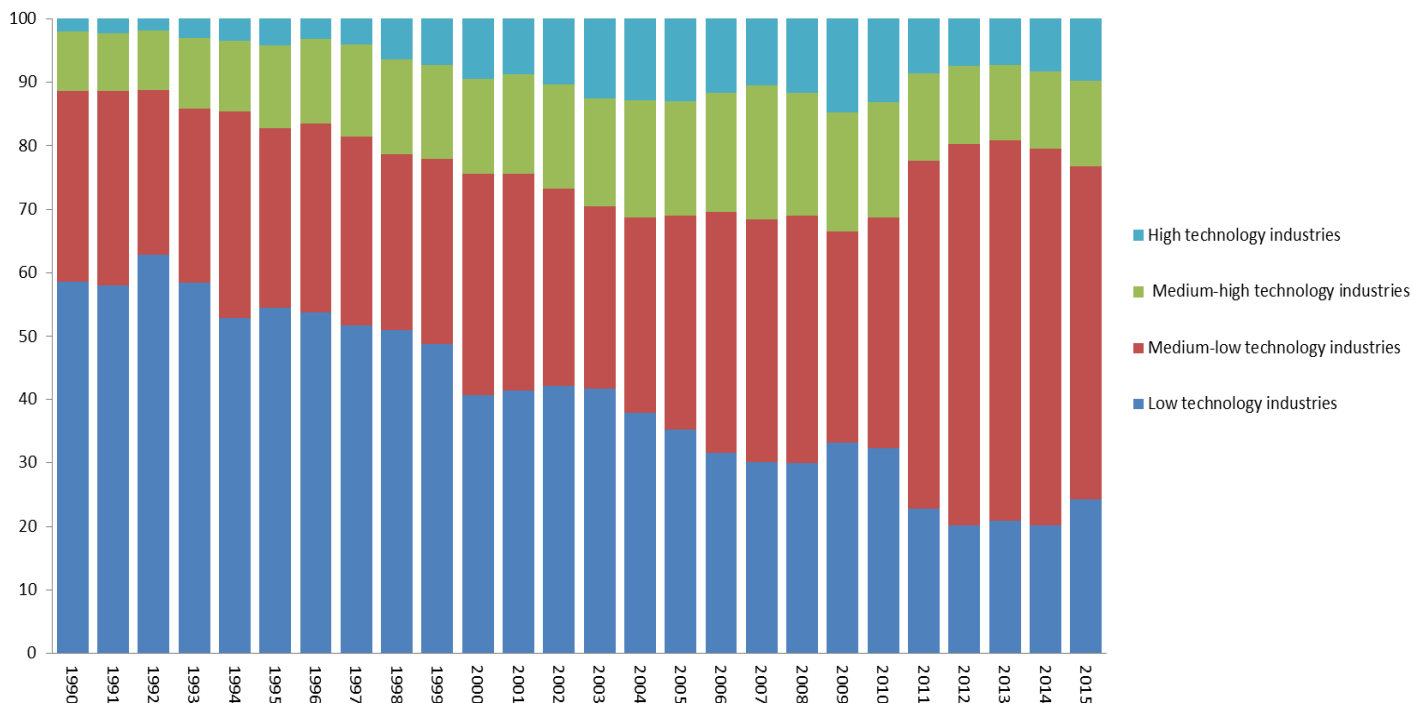


Over the last five years, the shares of Greek exports by end-use categories have remained relatively stable. Intermediate goods share stood from 41% on average in 1990-2010 at 32% in 2011-2015. Similarly, household consumption's share stood at 40% in 1990-2010 compared to 23% in 2011-2015.



Over the last five years, the share of medium-technology products in total exports increased from 47% in 1990–2010 to 70% in 2011–2015. Nevertheless, Greek exports are mainly concentrated in medium-low and low technology products, which face strong competition from countries with lower labour costs. Additionally, the increase of exports in the last five years came from the above categories.

Composition of Greek exports by technological intensity (%)



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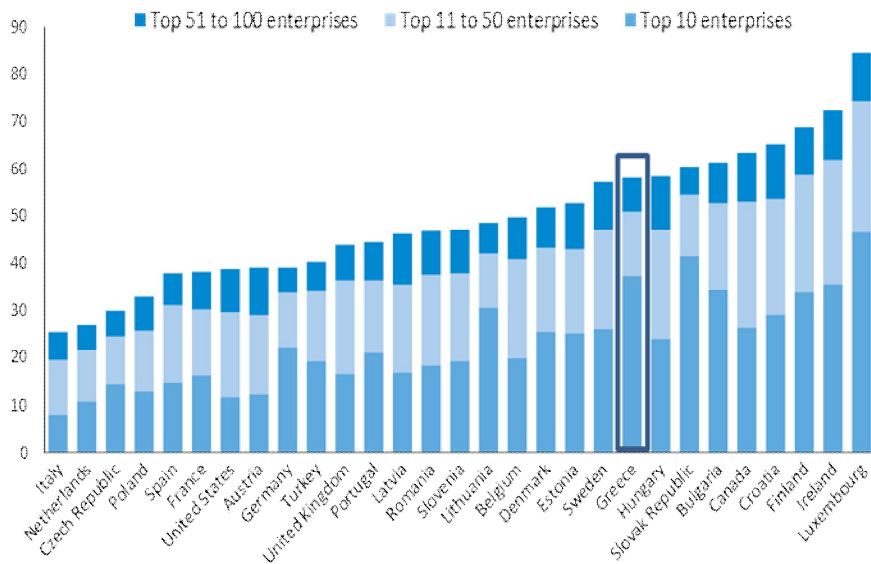
5. Greece and International Performance Indices

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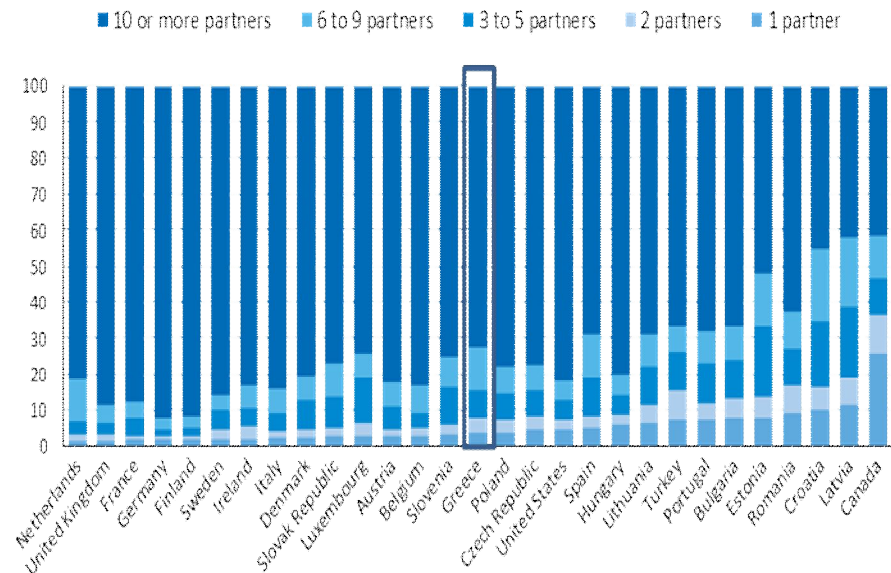


The top 100 exporting companies account for a significant share of exports in all countries. Greece has one of the highest concentration ratios among Euro area countries and the third highest ratio in terms of top ten enterprises among OECD countries with 37% compared to the OECD average of 23%.

Concentration of exports by exporting enterprises, total economy (%)



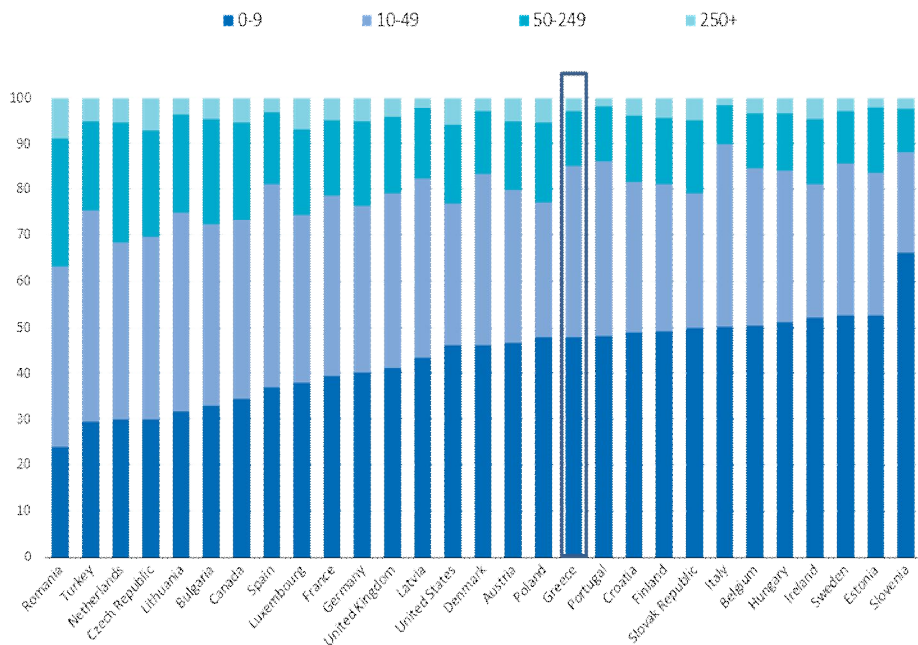
Concentration of the value of exports by number of partners, total economy (%)



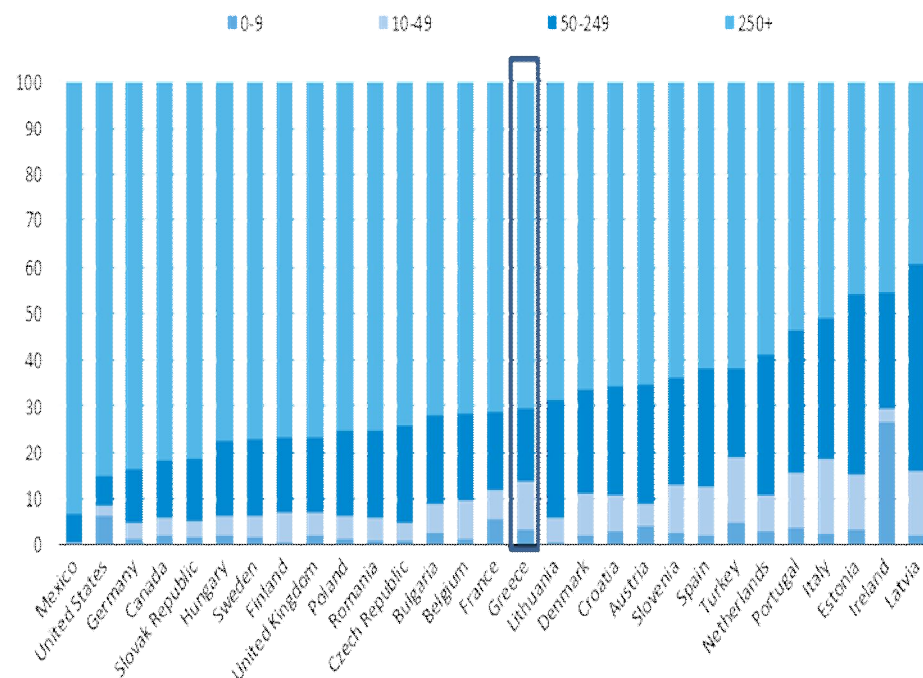
Note: Estimations based on 2012 figures.

Micro and small firms in Greece, i.e. enterprises with less than ten and between ten and 50 employees respectively, account for a limited share of total exports (13.8%), even if they represent the majority among all exporting enterprises (85%).

## Share of exporters by enterprise size (%) 2012

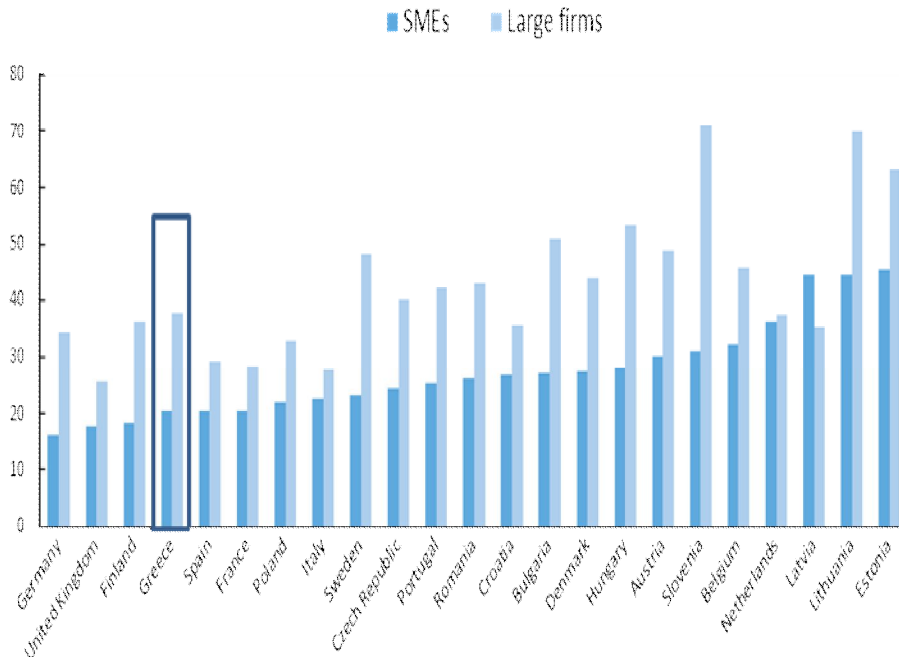


## Share of exports by enterprise size (%) 2012

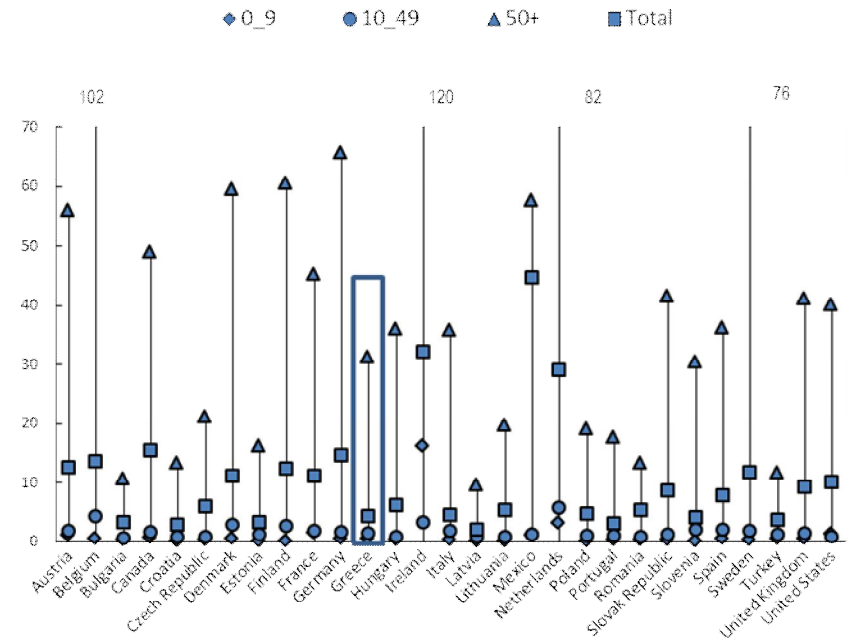


In Greece, the ratio of exports over the total turnover is on average higher in large firms (37.8%) than in SMEs (20.4%). In general, compared to the EU countries the ratio of both SMEs and large firms in Greece is lower by 7.0 and 5.0 pps respectively

## Export to turnover ratio by enterprise size (%)



## Average value of exports by enterprise size mn US dollars



Note: Estimations based on 2012 figures.

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Despite the unfavourable economic conditions, in 2016 Greece ranked 27th in the World Bank Doing Business report on Trading Across Borders (TAB). Additionally the Distance to Frontier (DTF) ratio on TAB increased to 93.7 pps in 2016 from 76.7% in 2009. Altogether, Greece has climbed up in the World's Doing Business overall rankings from 100th in 2012 to 65th position in 2016.

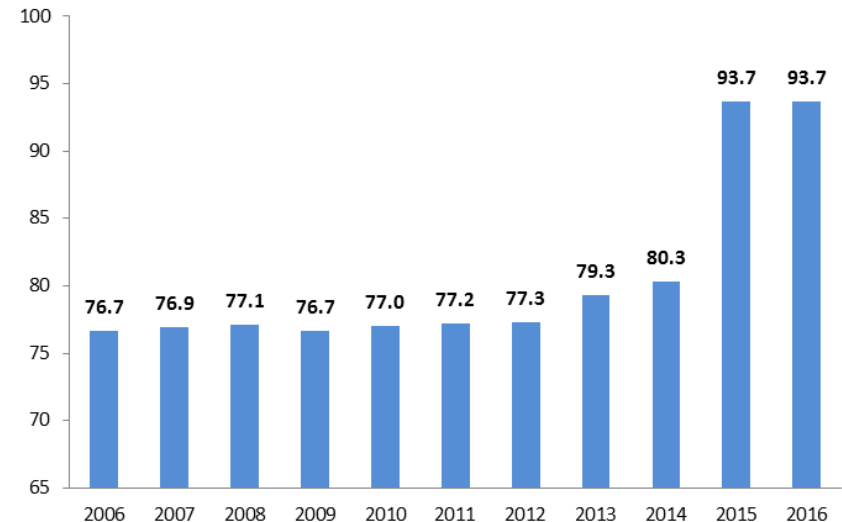
## Trading Across Borders performance

DB 2016 RANK: 27

DB 2016 DTF (%POINTS): 93.72

Indicator	Greece	OECD high income
Time to export: Border compliance (hours)	24	15
Cost to export: Border compliance (USD)	300	160
Time to export: Documentary compliance (hours)	1	5
Cost to export: Documentary compliance (USD)	30	36
Time to import: Border compliance (hours)	1	9
Cost to import: Border compliance (USD)	0	123
Time to import: Documentary compliance (hours)	1	4
Cost to import: Documentary compliance (USD)	0	25

## Distance to Frontier ratio for TAB

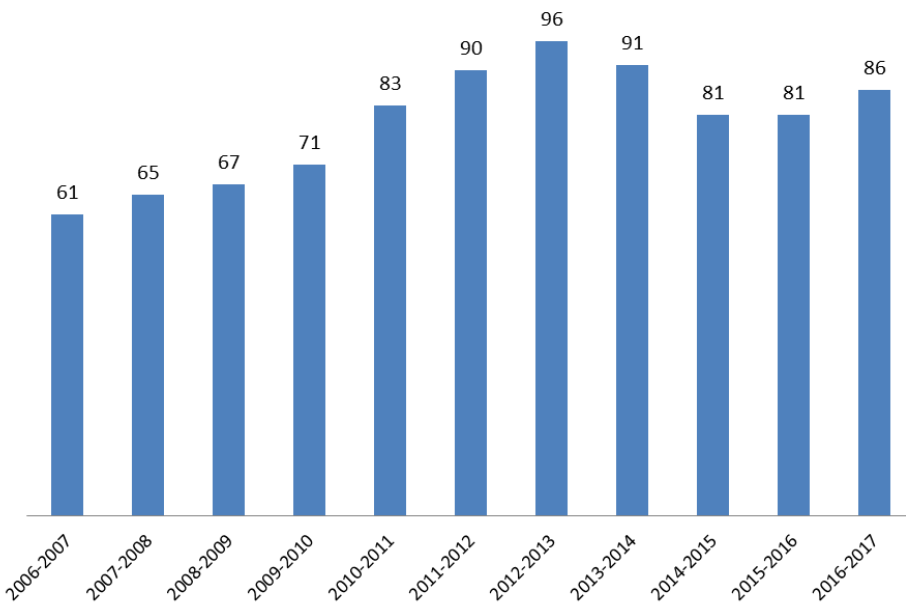


Distance to Frontier (DTF) shows the distance of each economy to the "frontier," which represents the best performance observed on each of the indicators across all economies. An economy's distance to frontier is reflected on a scale from 0 to 100, where 0 represents the lowest performance and 100 represents the frontier.

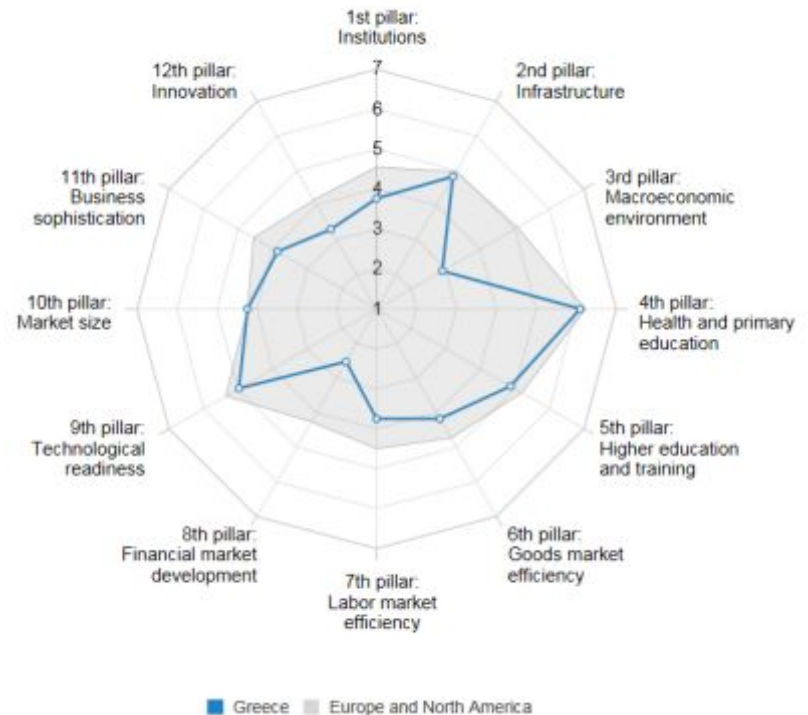
Greece is in 86th position (out of 138) in the 2016-17 GCI, marking a drop of five places compared to 2015-16 but has improved from 96th (out of 148) in the 2012-13 due to the implementation of reforms in the recent years. In the 6th pillar of the index related to goods market efficiency, Greece rank 89th, negatively affected among others, by the very low score of the subindex "Effect of taxation on incentives to invest" and the relevant low ranking (136th out of 138).

## Greece's Competitiveness Index ranking

## Greece's Performance Overview 2016-17

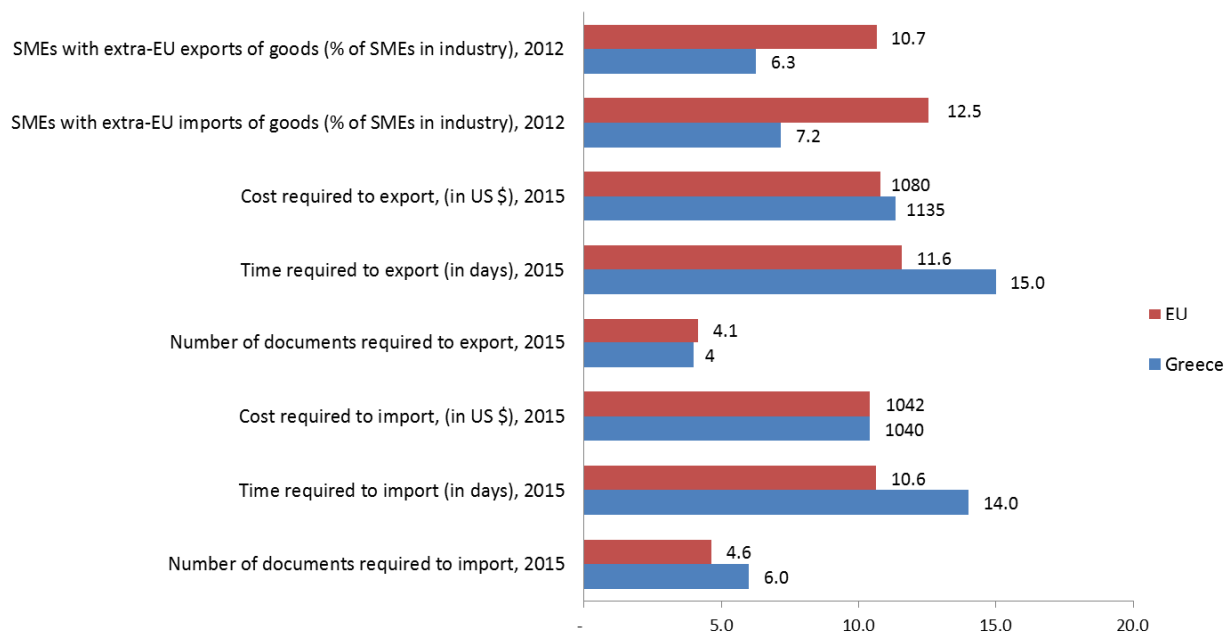


Higher index ranking corresponds to deterioration of competitiveness performance



Greece's SBA performance related to internationalisation remains below the EU average. In both the trade performance of SMEs and trading conditions as expressed in the time, cost and bureaucratic effort needed to trade with non-Member States, Greece trails behind the rest of the EU. As regards SME export performance, Greece's score of only 6.3% of manufacturing SMEs exporting to non-EU markets is one of the lowest in the EU.

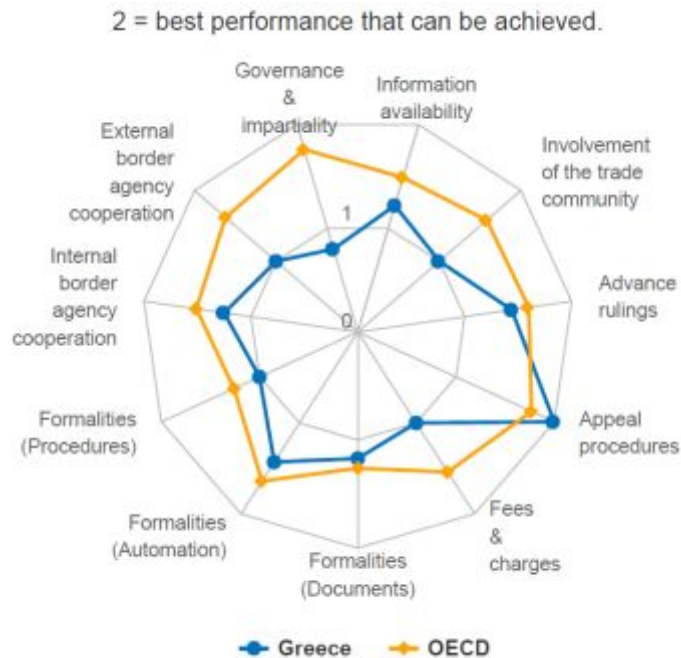
## Performance of Greece for Internationalisation



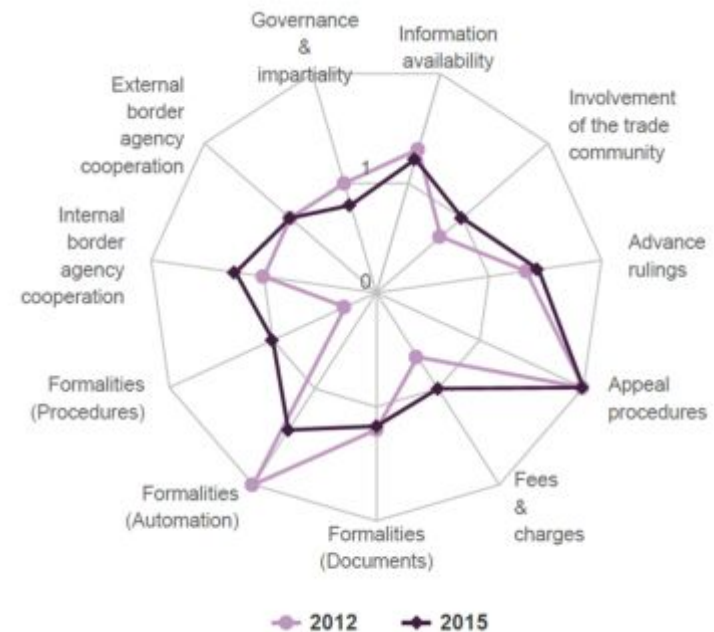
The Small Business Act for Europe (SBA) is the EU's flagship policy initiative to support SMEs. It comprises a set of policy measures organised around 10 principles ranging from entrepreneurship and 'responsive administration' to internationalisation.

In terms of trade facilitation, Greece's performance according to OECD's report has improved between 2012 - 2015 mainly in the areas of involvement of the trade community, advance rulings, fees and charges, streamlining of border procedures and internal border agency cooperation. Nevertheless, there are areas like information availability, involvement of the trade community, advance rulings, fees and charges, simplification of documents, etc. that remain below best performance.

## Trade facilitation indicators Greece - OECD (2015)



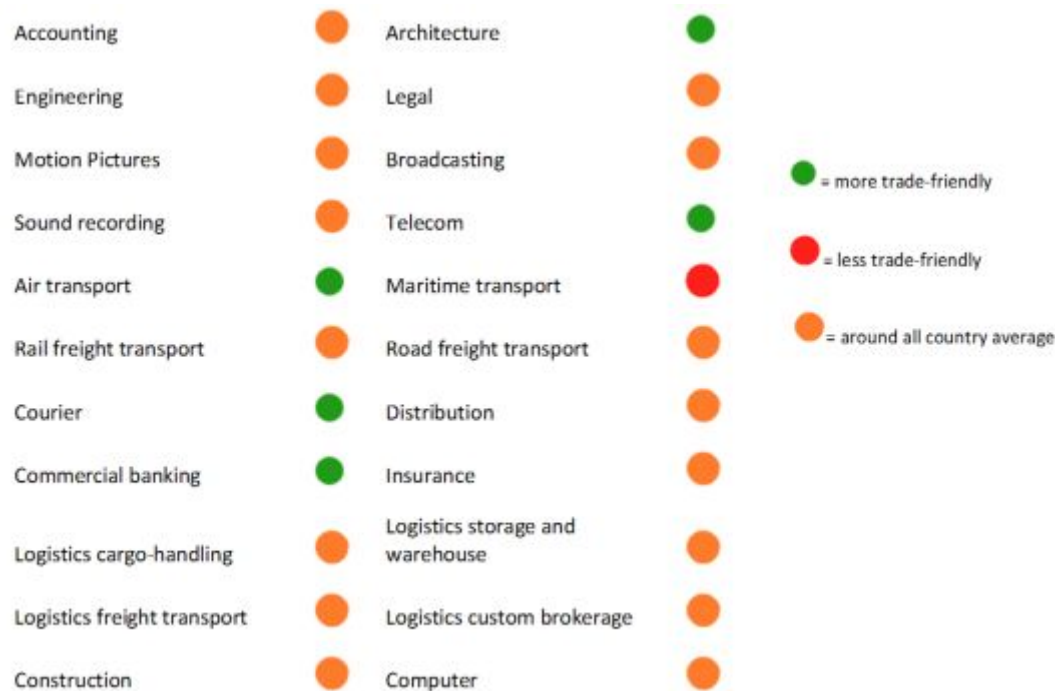
## Greece's trends 2012-2015



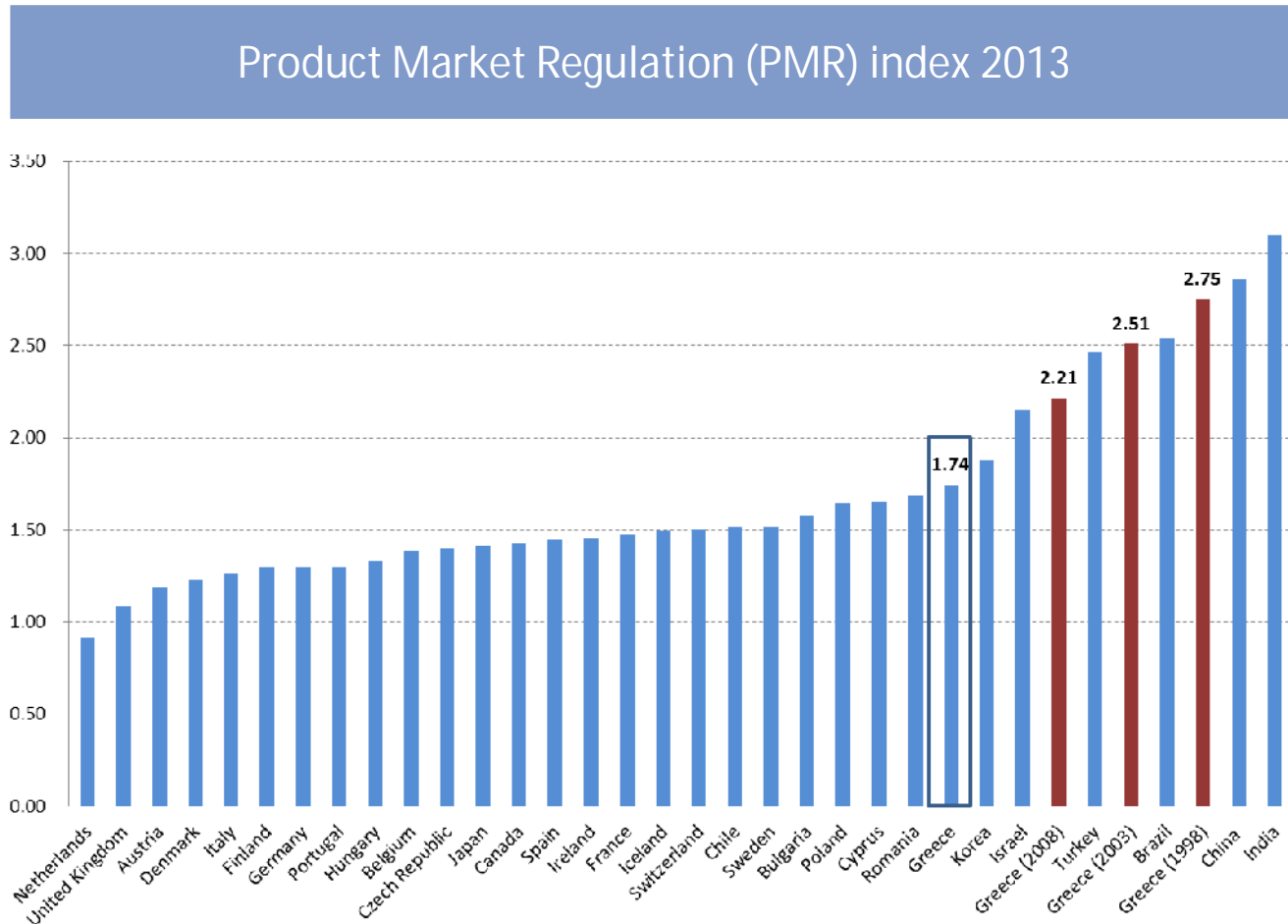


Greece has a lower STRI score in 16 out of 22 sectors compared to the sample average of OECD's 42 countries included in the ranking. The sectors with the highest STRI score are legal services, air transport (covers establishment only) and broadcasting services. Freight forwarding (logistics), courier services and commercial banking are the three sectors with the lowest STRI scores.

## Greece - Barriers to trade in services



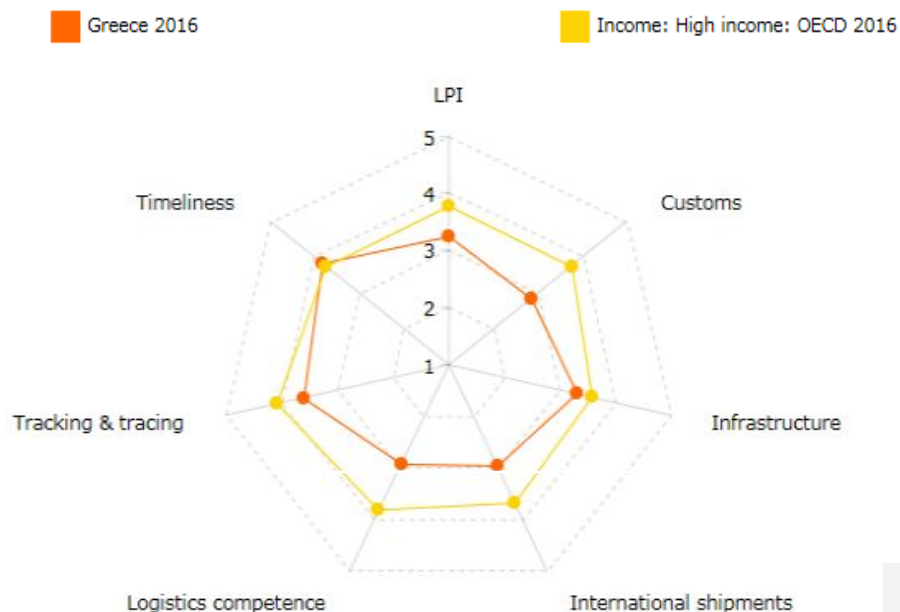
Between 2008 - 2013, Greece made some wide-ranging reforms to facilitate competition. Among OECD countries, Greece experienced the largest improvement in its overall score for total economy regulation. Nevertheless, the PMR indicator remains above OECD average.



In 2016, Greece ranked 47th (out of 160 countries) in the World Bank's Logistics Performance Index compared to 69th in 2012 (out of 155 countries) but has deteriorated since 2007. The improvement is evident in all six dimensions of trade and mainly in efficiency of the clearance process in customs (+39 places), ability to track and trace consignments and timeliness of shipments (+33 places to each category). Nevertheless, Greece's index is still lower compared to OECD average.

## Logistics Performance Index (LPI) Greece - OECD (2016)

## Greece's LPI ranking by indicator 2007-2016

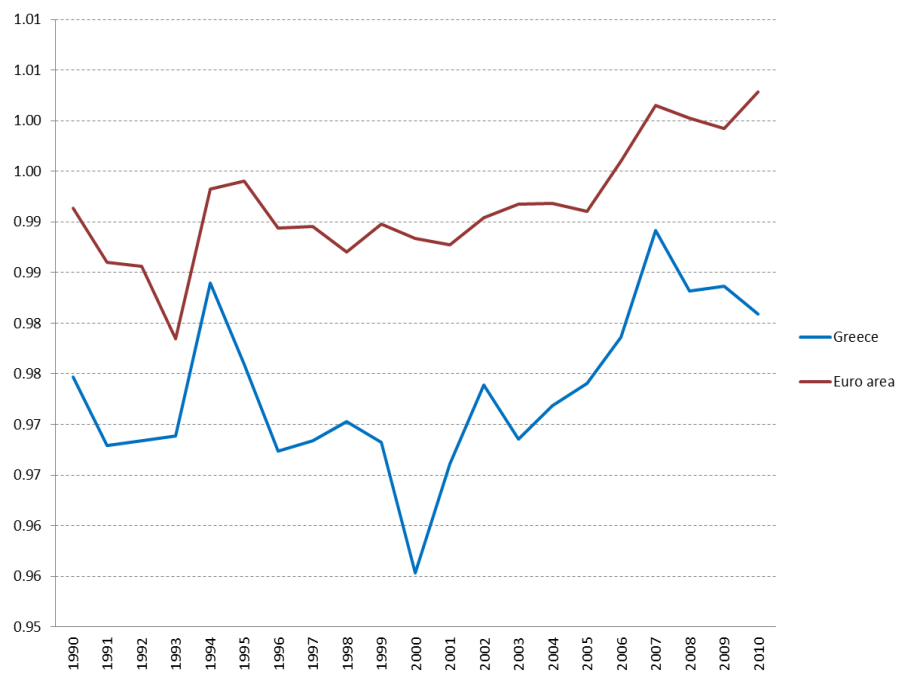


Year	LPI Rank	LPI Score	Customs	Infrastructure	Int/nal shipments	Logistics competence	Tracking & tracing	Timeliness
2016	47	3.24	55	37	64	60	30	34
2014	44	3.20	28	42	62	40	61	54
2012	69	2.83	94	53	87	73	63	67
2010	54	2.96	68	45	73	65	43	67
2007	29	3.36	31	35	37	28	27	16

LPI 2016 ranks 160 countries on six dimensions of trade - including customs performance, infrastructure quality, and timeliness of shipments - that have increasingly been recognized as important to development.

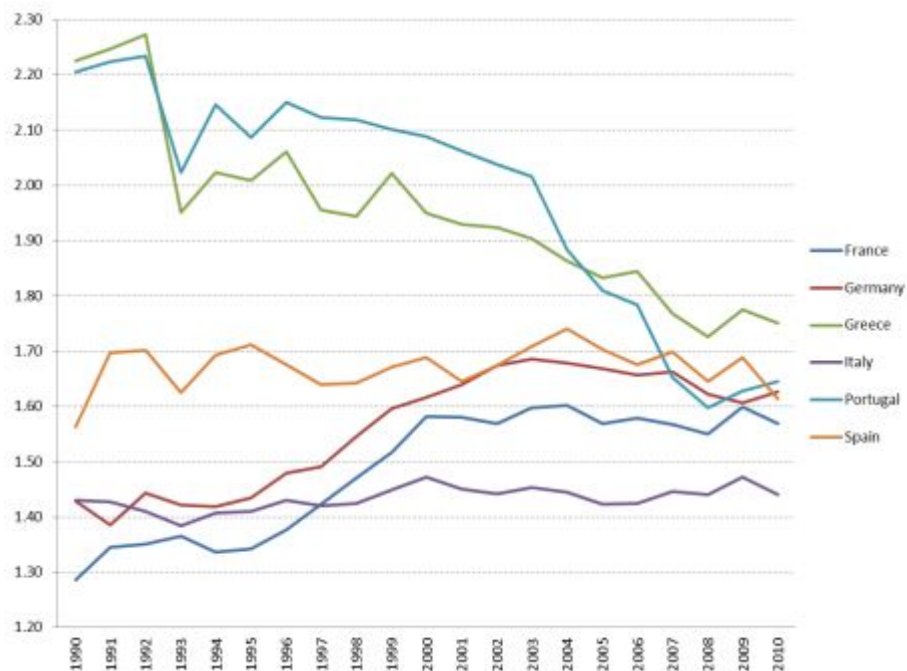
Although since 2000 Greece's Export Quality Index (IMF estimates) was gradually converging with the Euro area average, from 2008 onwards the gap is increasing. In terms of Quality Index by product category, chemicals and manufactured goods present the lowest gap with the Euro area average. Additionally, Greece's export diversification performance based on IMF's relevant Index is lower compared to most of EU countries.

## Export Quality Index



Higher values for the quality indices indicate higher quality levels

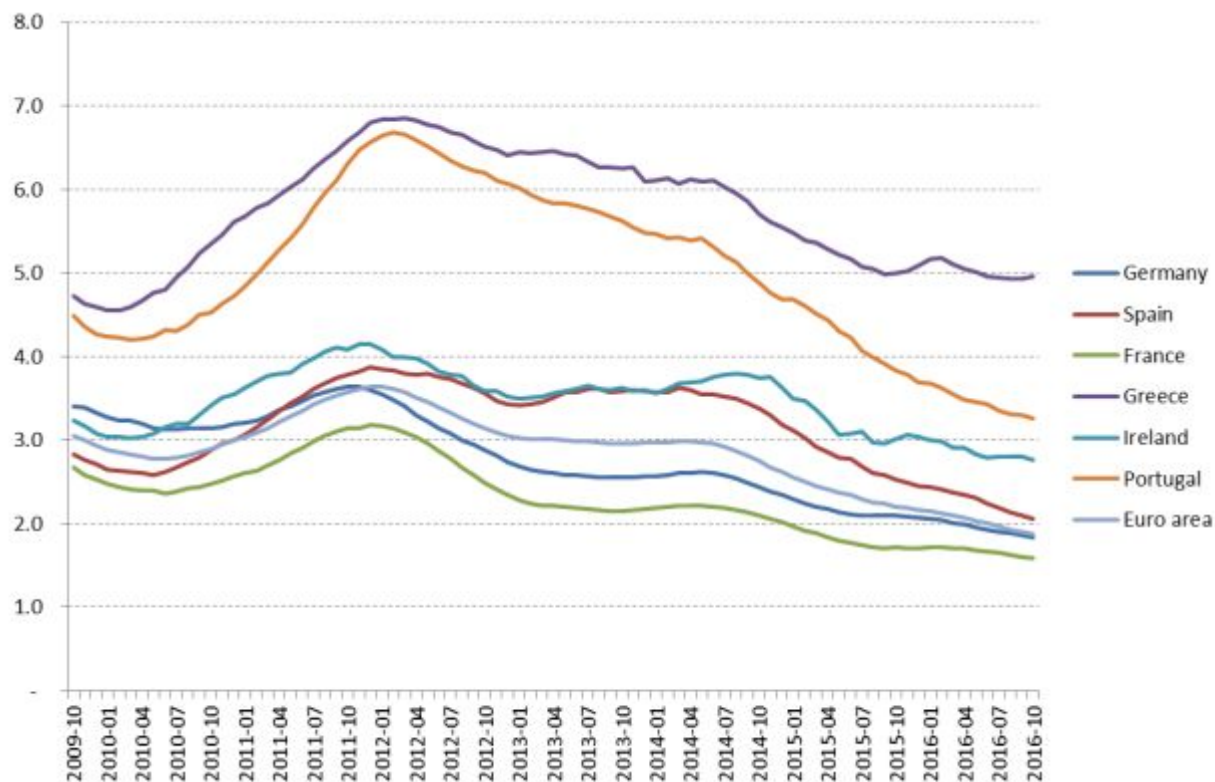
## Export Diversification Index



Higher value indicate lower diversification

Interest rates on bank loans to non-financial corporations are the highest among Euro Area countries, which reflect banks' credit risk assessment and the fact that banks are still facing financing constraints and increased funding costs mainly related to liquidity shortages and the high stock of NPLs.

## Interest rates\* on loans to non-financial corporations



\*Figures refer to total loans (defined for cost of borrowing purposes) to non-financial corporations. The total for maturity is calculated by weighting the volumes with a moving average.

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2. Importance of Trade & Export Performance

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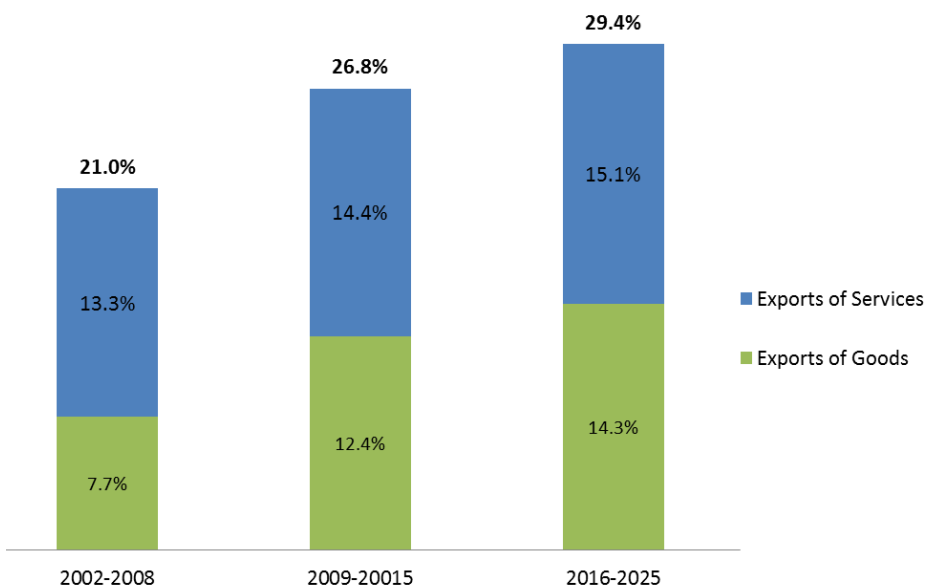
4. Entrepreneurship and International Trade

5. International Performance Indices

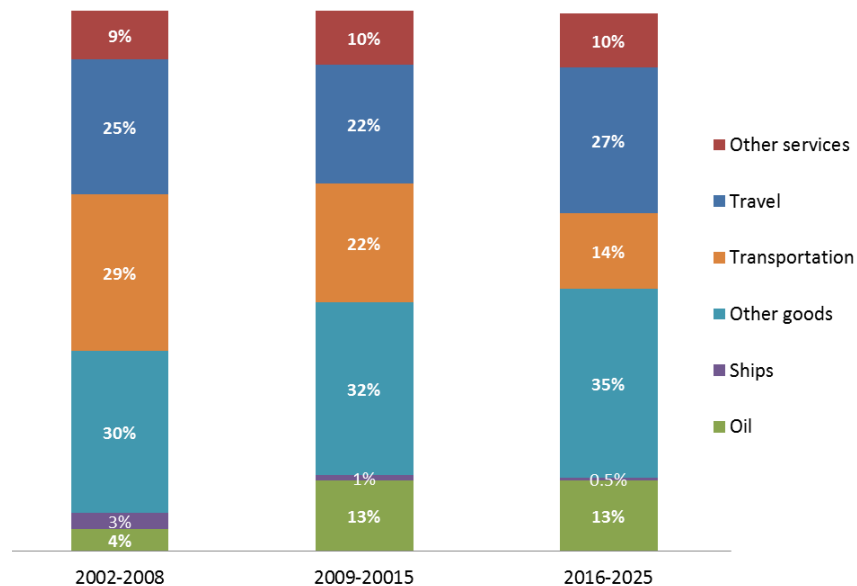
6. Forecasts - Conclusions

Goods & Services exports in Greece are expected to increase by an annual average of 2.7% in 2016-2025 reaching € 67.9 bn in 2025. Tourism sector is estimated to reach an average of 27% of total exports in 2016-2025 from 22% in 2009-2015. Exports of goods (excluding oil and ships) are estimated to increase by 32% between 2016-2025. Additionally for the same period, exports to GDP ratio are expected to increase by 260 bps compared to 2009-2015.

## Exports to GDP ratio



## Exports of goods and services by category



## GREECE'S GROWTH POTENTIAL

- For 2016, projections point to a negative real GDP growth, mostly due to the negative change rates of the demand-side. A similar path is projected for real exports and imports, with an estimated overall positive contribution of the external sector to GDP growth. GDP is estimated to return to positive territory from 2017 onwards.
- The successful completion of the upcoming reviews and acceleration of the privatization programme are expected to create an environment conducive to growth.

## INTERNATIONAL PROJECTIONS

- Although the global economy will expand at a higher rate in 2017 compared to 2016, the Euro Area economy will grow at a lower rate due to the consequences of "Brexit". The ECB will continue applying its QE programme until the end of 2017.

## GREECE'S EXPORT DRIVERS

- The impact of the structural reforms, which could bring about a potential additional economic impact, and the support of EU structural funds.
- The recovery of business sentiment, which in conjunction with declining risk premiums/financing costs, will support an acceleration in business investments.
- Targeted industrial and investment policy to develop potentially new areas of comparative advantage and establish the conditions needed for local firms to access export markets.
- Greece is leading the international shipping in terms of carrying capacity (dwt) with a 16.1% market share. Furthermore, Greek ports seem to be a natural port of entry to and from Central/Eastern Europe and Far East. Piraeus Port has already started developing as a significant trans-shipment centre.
- There is still a substantial potential for further expansion of the tourism industry particularly since arrivals from non-EU countries and other regions are expected to gradually increase. The main opportunities are related to strong tradition and professionalism, well developed infrastructure, exceptional diversity in a comparatively small area, safety and security, strong destination branding, human resources and quality.

## MAIN RISKS

- The main endogenous risks are related to the pace at which confidence will be restored in the Greek economy, and to the lifting of restrictions on capital transactions in the most timely manner, in order to boost investment and domestic demand.
- The depressed economy, the financial constraints Greek companies face and the remaining structural impediments. Also delay or failure to implement the MoU would cut Greece out of the Financial Assistance triggering macroeconomic instability.
- The slow progress of Greek banks in working through problem assets.
- The dominance of small firms in production which generally reduces export capability. The business economy is extremely dependent on microenterprises as they produce approximately 40% of value added and provide approximately 60% of all jobs.
- A significant slowdown in key export markets (Turkey, Italy, Germany, south-eastern Europe), would put drag on Greece's recovery.
- Uncertainty around the technical projection for the oil price remains high due to geopolitical tensions.
- Emerging global risks, such as weaker global trade and further implications of international developments, such as Brexit, which undermine the prospects for growth in the eurozone, would have negative impact on Greek exports.
- Increasing geopolitical tensions in the Middle East region and intensification of the refugee crisis, would place a significant additional burden on Greece and likely have negative economic consequences.



- Diversification, quality improvement and technological upgrading.
  - Diversification: products or activities requiring more skills or value-added - higher quality - technology-based products.
  - Quality improvement: quality awareness - provision of tax or financial incentives to SMEs – clusters.
  - Technological upgrading: incentives for companies to adopt new technologies - -attract FDI.
- Investing in manpower and skills development in order to increase high tech production and diversify exports. A diversified and high-value manufacturing export portfolio is correlated with a more educated workforce.
- Increase R&D expenditures which in Greece account only for 0.8% of GDP compared to 2.1% in the Euro Area (2014). In terms of R&D expenditures in business sector, Greece's performance is only 0.3% of GDP compared to 1.4% in the Euro area (2014).
- Development of infrastructure and logistics. Based on latest available data, investment in inland transport infrastructure stood at 1.3% as a percentage of GDP in 2013-2014 from average 0.8% in 2005-2012, but is still below OECD average. Boosting investments in logistics infrastructure through the most cost-efficient routes, and placing emphasis on the rail and port sectors is essential for export growth.
- Develop and implement a national outward-looking entrepreneurship policy, as a means of upgrading production in Greece towards high value-added goods and services. Straightening and more tensed activation of the Greek "Action Plan for Export Promotion" and the "Business Extroversion Committee" that should be based on the enlargement of the export base, export promotion (international certifications/accreditations, packaging, labelling, branding, marketing, distribution networks, clusters, etc.) and further development of initiatives for trade facilitation.
- Upgrade the function of commercial and finance offices mobilising business in international markets and fully operationalising the national single window for exports. Effective information and education services for export business processes. Roadshows business in international fora and networking with customers.
- Enhancing access to ICT (information and communications technology) networks and enabling SMEs to engage in e-commerce.

- Adequate firm financing is crucial for export performance since export companies depend more on external financing compared to domestic producers. Lending supply is related to further relaxation of capital controls, the liquidity position of Greek banks and the efficient resolution of NPEs. Development of additional financing tools such as venture capital, which can be an important source of funding, especially for young technology-based firms.
- The activation of the new Development Law 4399/2016, which among others gives the choice of reduced financial support, with reference to regional supports, or of increased tax exemptions, retains financial support towards cooperatives, clusters and innovative companies so as to enhance motives for investment and provides various investment motives through hedging tools, especially for SMEs.
- Targeted and front-loaded use of EU structural funds to companies with major export activities.
- Tax system should be more conducive to productivity growth and supportive of exports. It should be considered allowing refunds of research and development (R&D) tax credits for loss-making firms or extending the carry-forward period. Greece ranks 8th among EU countries in terms of the highest tax rate to companies.
- Full implementation of OECD toolkit in order to reduce regulatory and administrative obstacles on competition in sectors such as manufacturing, to increase export productivity.
- Further improvement of institutional and regulatory framework. Additionally, further product market reforms are crucial to increase productivity and allow investments to start again. Although reforms have so far moved Greece closer to the OECD average in restrictiveness of product markets, there is still significant room for improvement.
- In general, the potential effect of changes in policy reforms on Greek exports as regards stock of capital per employee, reducing market regulation, improving quality of institutions and increasing human capital could increase exports by more than 6% on average based on OECD estimates (OECD 2016).
- Improved penetration to world markets could be achieved with a better exploitation of the comparative advantages of specific groups of products and services, such as new technologies and industrial and maritime equipment, further development of processed agriculture products, etc. Especially the food processing, due to the availability of raw materials, high quality products and specialized know-how in Greece, presents many opportunities to increase the value and exports.

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