ИКОНОМИЧЕСКИ ИЗСЛЕДВАНИЯ
ECONOMIC STUDIES

Volume 32(5), 2023

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IMPORT SUBSTITUTION OR JUST "CATCHING THE WAVE"? EVIDENCE FROM THE GREEK MANUFACTURING EXPORTS[3]

The purpose of the present paper is to investigate the prospects of expanding domestic manufacturing production in Greece, through the review of merchandise imports from China. This strategy does not presuppose a targeted implementation of import substitution policies, but rather a strategy for the recovery of dormant productive sectors in Greece, in light of the restructuring of the country's productive model. National economies often gain a comparative advantage in exports through imports of products belonging to the same product group, which are further processed and re-exported to other countries, thus a comparative advantage in exports can eventually be accompanied by a comparative "disadvantage" in imports. We introduce here the Revealed Comparative Disadvantage (RCD) index as an additional control of the countries' export performance by industry, in complementarity with the use of the Revealed Comparative Advantage (RCA) estimations. The results suggest that a preferable strategy to import-substitution would rather be to deploy imports, in order to effectively promote targeted domestic production and boost export performance. There is strong evidence for the favourable prospects of expanding domestic production, and consequently exports, into various sub-sectors related to the clothing and footwear industry.
Keywords: China; Greece; Revealed comparative advantage; Revealed comparative disadvantage
JEL: F13; L16; M20

1. Introduction

In recent decades, the Greek manufacturing industry has suffered significant losses, which affected its former competitiveness in both domestic and international markets. The reasons are more or less well known: the strong competition from developing countries in labour-

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[3] This project has received funding from the Hellenic Foundation for Research and Innovation (HFRI) and the General Secretariat for Research and Innovation (GSRI), under grant agreement Nº 300.
This paper should be cited as: *Karkanis, D., Fotopoulou, M. (2023). Import Substitution or Just "Catching the Wave"? Evidence from the Greek Manufacturing Exports. – Economic Studies (Ikonomicheski Izsledvania), 32(5), pp. 3-15.*

intensive sectors, such as China, the business relocations that have taken place to various neighbouring Balkan countries with lower labour costs – especially during the economic crisis, the insufficient institutional framework for attracting multinational companies, the significant fluctuations in the relevant legislative framework and the unstable Greek tax system. Consequently, a key challenge for the Greek economy is to find a way to restart after a long period of deindustrialization and economic crisis.

According to the Foundation for Economic and Industrial Research, expanding manufacturing production in Greece is high-priority, as it is estimated that many professional sectors (services of accountants and lawyers, banking services) could benefit from such a development, while at the same time strengthening export trade (FEIR, 2018). With regard to Greek-Chinese trade relations, previous studies have highlighted the prospects of expanding Greek export activity towards China (Karkanis and Fotopoulou, 2021), without taking into consideration imports of Chinese products nonetheless. This paper intends to fill this gap. In this context, the main questions that arise can be summarized as follows: Is it possible to substitute part of the Chinese merchandise imports in Greece with domestic production? In which product groups are there favourable prospects for expanding domestic production? With regard to sectors characterized by higher intensity in terms of Chinese imports, is it possible to identify comparative advantages for Greek exports during the post-crisis period?

It should be stressed that the purpose of this paper is not necessarily to indicate sectors in which there are favourable prospects for the substitution of Greek imports from China – as well as from other countries – with future domestic production. On the contrary, it ultimately intends to highlight sectors with favourable prospects for expanding domestic production, while achieving complementarity with imports of Chinese products. The identification of these product sectors can be an opportunity for the re-orientation of productive activities, along with the given primacy of tourism in Greece. Furthermore, the added value of the present paper is further extended by introducing the Revealed Comparative Advantage and Disadvantage indexes, as well as their corresponding symmetric forms, which are estimated for specific productive sectors in Greece.

The remainder of the paper is organized as follows. Section 2 provides a review of the relevant literature, while Section 3 describes the methodological approach as well as the data sources deployed per product category. Section 4 presents the empirical results obtained and tries to identify the sectors in which favourable prospects for expanding domestic production emerge. Section 5 refers to the different factors that are expected to determine the prospects of expanding production in specific sectors, highlighting the policy implications in each case. Finally, the last section summarizes the main results and concludes the paper.

2. Literature Review

According to the relevant literature, the views expressed by the leading supporters of import substitution (Prebisch, Myrdal) were not at all uniform, each maintaining a different stance on the need or lack thereof to formulate appropriate export strategies (Irwin, 2020). However, it should be recalled that although import substitution strategies may seem outdated at least

for developed countries' economic strategies, they have been adopted by the majority of developed countries worldwide at some point in the past, as part of their economic transition. Some empirical studies suggest the adoption of import substitution industrialisation as a short-term stage towards their subsequent liberalisation, once the industrialisation process of developing countries has been completed (Adewale, 2017). Jayanthakumaran (2000) emphasises the negative impact of import substitution strategies on the incentive structure of a national economy, as well as the prospects for export expansion. Finally, Jackson and Jabbie (2020) provide recommendations for developing countries that choose to pursue import substitution policies, advocating fostering research and development activities, supporting regional integration and promotion of competitive advantages, as well as the pursuit of political stability, which in turn will contribute to FDI attraction.

The literature on the Revealed Comparative Advantage (RCA) index (Balassa, 1965) is undoubtedly extensive and with numerous applications in international trade analyses. Stellian and Danna Buitrago (2019) present standardised tools in order to compare RCA indexes estimated for a given set of countries. Oelgemöller (2013) employs the RCA index in order to shed light on the export structures of the EU countries which were severely affected by the economic crisis (Greece, Italy, Portugal, Spain), while Langhammer (2004) measures the RCAs in the trade of services of the United States, the European Union and Japan. Wosiek and Visvizi (2021) suggest a homonymous index (Visvizi-Wosiek RCA index) in order to assess the evolution of the services sector in Poland during the previous decade (2010-2019).

The introduction of the Revealed Comparative Disadvantage (RCD) estimates has already been reported for certain industries in the relevant literature (Aquino, 1999; Algieri, 2004). Maxir and Masullo (2017) provide estimations of the RCA and RCD scores in the forest product industry in Brazil during the period 2000-2014. Highlighting that national economies can be both exporters and importers of the same commodities overtime, they argue that not taking import flows into account in the analysis of countries' comparative advantages can lead to erroneous conclusions. Furthermore, the high degree of volatility which often characterizes the RCA and RCD scores has led to normalize the latter index values within the interval -1 and 1, a methodological procedure proposed by Laursen (1998) and also adopted by Algieri (2004).

3. Methodology and Data

As a first step, the analysis aims to identify the top imported Chinese products in Greece during the period 2017-2019, based on data from the UNCTAD database (3-digit SITC level). For the same sectors, we examine the most recent trends in terms of revealed comparative advantage in relation to Greek exports. The RCA index is already calculated and available from the same statistical database. A national economy is said to have a revealed comparative advantage in a given product *i* when the ratio of product *i* exports to its total exports (all products included) exceeds the same ratio for the world economy as a whole (RCA>1). Thus, the first objective is to identify the sectors in which a revealed comparative advantage exists during the recent period 2017-2019.

In the present study, we argue that the Balassa index does not necessarily lead to safe conclusions in every case, especially when RCA calculations concern groups of traded products. National economies often gain this comparative advantage in exports through imports of products belonging to the same product group, which are processed and re-exported to other countries. In this context, the supposed comparative advantage in exports is, in certain cases, accompanied by a comparative "disadvantage" in terms of import flows. In this view, we introduce here the Revealed Comparative Disadvantage (RCD) measure, essentially as a tool extension of the RCA index, and in accordance with the methodological approach proposed by Laursen (1998) and Algieri (2004). In our study, the RCD estimations derive from the following equation:

$$RCD_{Ai} = \frac{\frac{M_{Ai}}{\sum_{k=1}^{n} M_{Ak}}}{\frac{M_{Wi}}{\sum_{k=1}^{n} M_{Wk}}} \quad (1)$$

On the above equation, $RCDA_i$ stands for the revealed comparative disadvantage of country A on imports of product *i*, MA_i represents country A's imports of product *i*, *MWi* stands for the world imports of product *i*, $\sum_{k=1}^{n} M_{Ak}$ is the country A's total imports, while $\sum_{k=1}^{n} M_{Wk}$ is the world's total imports.

RCA and RCD measurements concern exclusively the thirty (30) major imported product groups from China. Based on these calculations, it is possible to further isolate the product groups which satisfy both conditions of a revealed comparative advantage in terms of Greek exports and a revealed comparative disadvantage in terms of imports by product group. Consequently, taking into account both indexes will explain whether Greece's comparative advantages in certain sectors are ultimately related to domestic production and resources or whether they are significantly dependent on imports of products belonging to the same product group. As a next step, we further normalize the estimated RCA and RCD scores within the value interval of -1 and 1, thus providing the Revealed Symmetric Comparative Advantage and Disadvantage estimates (RCA^*_{Ai} and RCD^*_{Ai}, respectively), based on the procedure proposed by Laursen (1998) and described by the equations (2) and (3):

$$RCA^*_{Ai} = (RCA_{Ai} - 1) / (RCA_{Ai} + 1) \quad (2)$$

$$RCD^*_{Ai} = (RCD_{Ai} - 1) / (RCD_{Ai} + 1) \quad (3)$$

Finally, in order to assess favourable prospects for expansion of domestic production in specific sectors reasonably raises a new question: Is an eventual expansion of domestic production expected to mainly substitute imports from third countries (non-EU members) or rather from Greece's European partners? The answer to this question requires an exploration of whether a possible expansion of domestic production in specific sectors in Greece would have a greater impact on the economies of EU partners or of third countries. This could imply that specific product groups where higher dependency on imports from third countries – including China – is observed, could be considered more appropriate for expanding domestic production, without underestimating the issues of availability of the relatively limited resources in the Greek case.

4. Results

According to the Foundation for Economic & Industrial Research (FEIR, 2018), Greece's industrial production index in manufacturing recovered by around 10% during the period 2014-2017 amidst the economic crisis, while investments in manufacturing recovered from 2015 onwards, exceeding 12 billion in 2017. This recent general recovery of the manufacturing sector is certainly the result of diverging trends among the different product groups. As mentioned above, the analysis concerns 30 product groups marked by the highest contribution to the total value of Greek imports of Chinese products during the period 2017-2019 (Table 1). The empirical results initially highlight the presence of high or, at least, rising RCA scores in exports of i) clothing and footwear, ii) automatic data processing machines, iii) toys, games and sporting goods, iv) paper and v) plastic items. It should be noted that imports of clothing, footwear and other similar products alone accounted for 15.6% of total imports from China – a percentage similar to that of automating data processing machines (15.28%).

Based on both RCA and RCD estimates (Table 1), it is firstly possible to distinguish two groups of sectors with a positive outlook for recovery: i) those sectors with high or gradually increasing RCA scores during the years 2017-2019 and $RCA_i < RCD_i$, and ii) those with high or gradually increasing RCA scores and $RCA_i > RCD_i$. The first group concerns bilateral trade of i) footwear, ii) articles of apparel of textile fabrics. iii) men's and women's clothing of textile fabrics, as well as iv) clothing accessories of textile fabrics. The second group comprises bilateral trade of i) automatic data processing machines, ii) baby carriages, toys, games and sporting goods, iii) aluminium, iv) articles of plastics, v) women's clothing, vi) man-made woven fabrics, vii) knitted or crocheted fabrics, viii) paper and paperboard.

The findings suggest a strong positive correlation between the RCA of the aforementioned product groups and import intensity (RCD) related to the industries, implying a significant dependence of Greece's exports on intermediate product imports from other countries. This suggests that an eventual import-substitution strategy in the product sectors mentioned above could simultaneously affect Greek exports. On the other hand, imports and merchandise trade in general can contribute positively to the transfer of know-how between trading partners, which is generally one of the positive externalities of bilateral trade.

Estimates on the Revealed Symmetric Comparative Advantage and Disadvantage indexes (Table 2) provide a clearer picture, depending on the sign of the RCA* and RCD* values. In particular, for the aluminium products, it is the only product group where significantly higher RCA* scores were recorded, compared to the corresponding RCD* scores. Similar results can also be derived, although to a lesser extent, from the sector of women's clothing trade. The general trend suggests that positive RCA* estimates are accompanied by both positive and similar values of the corresponding RCD* estimates. Exports of household equipment products seem to lose their comparative advantage, as revealed by the negative RCA* scores (2018 and 2019), at the same time with positive RCD* scores. Once more, it is possible to discern the primacy of the revealed comparative advantages in exports of aluminium, of clothing and textile products, but also in exports of paper and paperboard products, which, however, come along with revealed comparative disadvantages in Greek imports related to the same product groups.

Table 1. Major imported products from China to Greece: RCA and RCD estimations (2017-2019)

Index	Share of Chinese imports (%)	RCA			RCD (1)		
Product group	2017-2019	2017	2018	2019	2017	2018	2019
Automatic data processing machines	15.28	0.74	0.98	1.05	0.73	0.83	0.84
Baby carriages, toys, games & sporting goods	**5.35**	**1.22**	**1.28**	**1.30**	**1.13**	**1.15**	**1.15**
Footwear	4.28	0.48	0.54	0.94	1.33	1.36	1.58
Telecommunication equipment & parts	4.02	0.25	0.21	0.20	0.44	0.49	0.47
Aluminium	**3.71**	**7.25**	**6.77**	**7.03**	**2.42**	**2.48**	**2.20**
Heating & cooling equipment & parts	3.33	0.74	0.74	0.70	1.15	1.16	1.14
Household equipment, electrical or not	2.9	0.51	0.45	0.45	1.35	1.25	1.39
Furniture & parts	2.84	0.26	0.28	0.29	0.63	0.64	0.71
Electrical machinery & apparatus	2.72	0.55	0.31	0.44	0.49	0.50	0.55
Articles, n.e.s., of plastics	**2.49**	**1.07**	**0.98**	**1.02**	**0.90**	**0.93**	**0.95**
Articles of apparel, of textile fabrics	2.45	0.53	0.54	0.80	1.22	1.18	1.49
Travel goods, handbags & similar containers	2.24	0.26	0.22	0.34	0.95	0.93	1.04
Men's clothing of textile fabrics, not knitted	1.83	0.41	0.45	0.63	1.28	1.25	1.53
Ships, boats & floating structures	1.79	0.54	0.62	0.44	13.53	5.30	2.28
Lighting fixtures & fittings, n.e.s.	1.74	0.58	0.54	0.51	0.79	0.89	1.01
Women's clothing, of textile fabrics	1.74	0.67	0.69	0.81	1.43	1.42	1.57
Manufactures of base metal, n.e.s.	1.57	0.69	0.63	0.58	0.62	0.59	0.64
Women's clothing, of textile, knitted or crocheted	**1.55**	**2.34**	**2.23**	**2.82**	**1.88**	**1.82**	**2.44**
Miscellaneous manufactured articles	1.37	0.15	0.13	0.15	0.88	0.86	0.88
Fabrics, woven, of man-made fabrics	**1.29**	**1.19**	**1.10**	**1.26**	**0.99**	**0.99**	**1.08**
Made-up articles, of textile materials	1.17	0.42	0.43	0.50	0.99	0.94	1.05
Household equipment of base metal	**1.17**	**1.24**	**0.93**	**0.93**	**1.04**	**1.12**	**1.09**
Rotating electric plant & parts thereof	0.95	0.12	0.14	0.17	0.94	1.43	1.52
Clothing accessories, of textile fabrics	0.86	0.40	0.45	0.86	0.98	1.03	1.48
Mechanical handling equipment, parts	0.82	1.02	0.88	0.82	0.53	0.62	0.57
Paper & paperboard, cut to shape or size, articles	**0.82**	**1.70**	**1.61**	**1.68**	**1.65**	**1.59**	**1.62**
Other non-electr. machinery, tools & mechan. appar.	0.82	0.74	0.60	0.64	1.21	1.20	1.16
Instruments & appliances, medical, etc.	0.80	0.25	0.27	0.27	0.96	0.94	0.91
Knitted or crocheted fabrics, n.e.s.	**0.77**	**1.73**	**1.52**	**1.54**	**1.33**	**1.27**	**1.47**
Motorcycles & cycles	0.77	0.16	0.16	0.17	0.92	0.87	1.03

Source: UNCTADStat database, and own calculations.

The greater the dependency on imports from third countries in some of the aforementioned product sectors – and therefore the higher the import share from third countries – the harder it is for domestic firms to increase their market share, at either national or international level. Based on 2019 data, this is mainly the case for aluminium (87.6%), automatic data-processing machines (64%), as well as certain categories such as fabrics and clothing accessories (Table 3). It seems that high dependency on imports from third countries pertains mostly to raw or intermediate materials (for example, aluminium, woven, knitted or crocheted fabrics). This is quite expected, given that Greece cannot acquire a comparative advantage in labour-intensive productive sectors, in which China is, in any case, in a more advantageous position.

Table 2. Major imported products from China to Greece: RCA* and RCD* estimations (2017-2019)

Index	RCA* (2)			RCD* (3)		
Product group	2017	2018	2019	2017	2018	2019
Automatic data processing machines	-0.149	-0.010	0.024	-0.156	-0.093	-0.087
Baby carriages, toys, games, sporting goods	**0.099**	**0.123**	**0.130**	**0.061**	**0.070**	**0.070**
Footwear	-0.351	-0.299	-0.031	0.142	0.153	0.225
Telecommunication equipment, parts	-0.600	-0.653	-0.667	-0.389	-0.342	-0.361
Aluminium	**0.758**	**0.743**	**0.751**	**0.415**	**0.425**	**0.375**
Heating & cooling equipment, parts	-0.149	-0.149	-0.176	0.070	0.074	0.065
Household equipment, electric. or not	-0.325	-0.379	-0.379	0.149	0.111	0.163
Furniture & parts	-0.587	-0.563	-0.550	-0.227	-0.220	-0.170
Electrical machinery & apparatus	-0.290	-0.527	-0.389	-0.342	-0.333	-0.290
Articles, n.e.s., of plastics	**0.034**	**-0.010**	**0.010**	**-0.053**	**-0.036**	**-0.026**
Articles of apparel, of textile fabrics	-0.307	-0.299	-0.111	0.099	0.083	0.197
Travel goods, handbags & similar containers	-0.587	-0.639	-0.493	-0.026	-0.036	0.020
Men's clothing of textile fabrics, not knitted	-0.418	-0.379	-0.227	0.123	0.111	0.209
Ships, boats & floating structures	-0.299	-0.235	-0.389	0.862	0.683	0.390
Lighting fixtures & fittings, n.e.s.	-0.266	-0.299	-0.325	-0.117	-0.058	0.005
Women's clothing, of textile fabrics	-0.198	-0.183	-0.105	0.177	0.174	0.222
Manufactures of base metal, n.e.s.	-0.183	-0.227	-0.266	-0.235	-0.258	-0.220
Women's clothing, of textile, knitted or crocheted	**0.401**	**0.381**	**0.476**	**0.306**	**0.291**	**0.419**
Miscellaneous manufactured articles	-0.739	-0.770	-0.739	-0.064	-0.075	-0.064
Fabrics, woven, of man-made fabrics	**0.087**	**0.048**	**0.115**	**-0.005**	**-0.005**	**0.038**
Made-up articles, of textile materials	-0.408	-0.399	-0.333	-0.005	-0.031	0.024
Household equipment/base metal	**0.107**	**-0.036**	**-0.036**	**0.020**	**0.057**	**0.043**
Rotating electric plant & parts thereof	-0.786	-0.754	-0.709	-0.031	0.177	0.206
Clothing accessories, of textile fabrics	-0.429	-0.379	-0.075	-0.010	0.015	0.194
Mechanical handling equipment, parts	0.010	-0.064	-0.099	-0.307	-0.235	-0.274
Paper & paperboard, cut to shape or size, articles	**0.259**	**0.234**	**0.254**	**0.245**	**0.228**	**0.237**
Other non-electric. machinery, tools & mechanical apparatus	-0.149	-0.250	-0.220	0.095	0.091	0.074
Instruments & appliances, medical, etc.	-0.600	-0.575	-0.575	-0.020	-0.031	-0.047
Knitted or crocheted fabrics, n.e.s.	**0.267**	**0.206**	**0.213**	**0.142**	**0.119**	**0.190**
Motorcycles & cycles	-0.724	-0.724	-0.709	-0.042	-0.070	0.015

Source: UNCTADStat database, and own calculations.

Table 3. Major imported products from China to Greece: Import share from third countries and share of total imports (%)

Index	Import share from third countries (3)			Share of total imports (4)		
Product group	2017	2018	2019	2017	2018	2019
Automatic data processing machines	62.0	64.8	64.0	1.56	1.82	1.76
Baby carriages, toys, games & sporting goods	51.6	52.6	54.0	0.80	0.79	0.78
Footwear	34.0	33.9	42.6	1.04	1.04	1.26
Telecommunication equipment & parts	32.8	33.9	34.6	1.42	1.45	1.39
Aluminium	76.4	81.3	87.6	1.69	1.81	1.46
Heating & cooling equipment & parts thereof	40.4	39.2	39.4	0.79	0.77	0.82
Household-type equipment, electrical or not	46.7	46.9	49.9	0.77	0.71	0.82
Furniture & parts	45.9	46.0	48.4	0.63	0.63	0.72
Electrical machinery & apparatus, n.e.s.	42.3	44.1	36.1	0.66	0.71	0.79
Articles, n.e.s., of plastics	36.1	36.1	37.9	0.83	0.87	0.91
Articles of apparel, of textile fabrics	23.1	26.0	39.4	1.01	0.97	1.27
Travel goods, handbags & similar containers	47.0	45.0	49.3	0.34	0.34	0.39
Men's clothing of textile fabrics, not knitted	32.0	35.7	45.4	0.52	0.50	0.63
Ships, boats & floating structures	98.7	90.8	82.5	6.34	2.42	0.86
Lighting fixtures & fittings, n.e.s.	53.6	51.4	51.9	0.22	0.24	0.26
Women's clothing, of textile fabrics	21.7	23.1	28.9	0.73	0.71	0.82
Manufactures of base metal, n.e.s.	28.3	31.2	32.0	0.55	0.54	0.61
Women's clothing, of textile, knit. or croch.	29.6	32.3	49.1	0.51	0.47	0.65
Miscellaneous manufactured articles	32.3	30.3	32.8	0.47	0.46	0.50
Fabrics, woven, of man-made fabrics	63.0	61.8	70.7	0.21	0.21	0.23
Made-up articles, of textile materials	70.6	71.8	71.6	0.30	0.28	0.33
Household equipment of base metal	52.3	54.8	57.2	0.19	0.20	0.20
Rotating electric plant & parts thereof	11.4	21.7	20.8	0.49	0.76	0.84
Clothing accessories, of textile fabrics	31.5	42.5	60.5	0.15	0.15	0.22
Mechanical handling equipment, & parts	22.5	32.7	18.8	0.27	0.32	0.30
Paper & paperboard, articles	20.1	24.7	26.6	0.56	0.53	0.56
Other non-electric. machinery, tools, etc.	22.3	22.3	26.9	0.41	0.41	0.40
Instruments & appliances, medical, etc.	18.4	19.4	21.1	0.62	0.61	0.65
Knitted or crocheted fabrics, n.e.s.	79.5	79.0	78.9	0.21	0.20	0.24
Motorcycles & cycles	44.2	45.8	44.8	0.26	0.25	0.31

Source: UNCTADStat database, and own calculations.

Significant upward trends can be mainly observed in exports regarding the women's clothing sector (Appendix 1a), as well as footwear products. Similar trends can be observed for articles of plastics, paper and paperboard, as well as baby carriages, toys, games and sporting goods. Between 2017 and 2019, Greek exports of articles of plastics have increased by about 14% (Appendix 1b), while about one-third of Greek plastics' imports being imported from third countries, based on 2018 data (Plastics Europe, 2019). Steady upward trends are also observed in other sectors such as paper and paperboard, baby carriages, toys and sporting goods, automatic data processing machines and aluminium. Apropos of the EU policies with regard to the latter product sector, it is worth mentioning the recent imposition of provisional anti-dumping duty rates of up to 48% on Chinese aluminium imported products in October 2021 (European Union, 2020).

As regards the footwear industry, the European Union constitutes a major provider of high-quality footwear at an international level, although the economic crisis has led to a shift in global demand to cheaper products, such as those from China that contribute to more than 50% of world production (Blery, Kakokefalos, 2014). The literature points out the lack of investment in new technologies, given the high degree of fragmentation with numerous small family businesses (Roukova et al., 2016). The footwear industry in Greece is considered as high-quality, facing at the same time strong competition from Italian brands. This is also evident during the period 2017-2019 (Appendix 1a), as it appears to be the product group marked by the sharpest increase in export value (constant prices) at least during the three years under study. Finally, the trends seem stagnant with regard to aluminium and automatic data processing machines' exports (Appendix 1c), although export performance in these product sectors is significantly better than those observed in Appendices 1b and 1c.

Table 4. Total sales value and Number of businesses by industry

Industry	Index	2017	2018	2019
Textile industry	Total sales value (million euros)	415.6	421.8	429.3
	Businesses (N)	172	172	167
Clothing industry	Total sales value (million euros)	390.3	420.5	414.6
	Businesses (N)	298	312	307
Leather and leather products industry	Total sales value (million euros)	70.8	84.2	76.3
	Businesses (N)	68	73	74
Rubber products and plastics industry	Total sales value (million euros)	1544.0	1586.2	1593.7
	Businesses (N)	370	365	355

Source: EL.STAT. database, and own calculations.

It seems that moving away in time from the economic crisis, but also from the starting point of imposing capital controls (2015) on the banking system in Greece – which were fully phased out in 2019 – contributes to the gradually improving performance of Greek businesses operating in the clothing and textile industry, as well as in the leather and plastics sectors. The number of businesses remains practically unchanged during the study period, although slight increases in the case of clothing and leather sectors (Table 4). In terms of sales performance, textile and clothing businesses demonstrate significant resilience, estimating a 103%, 106% and 103% increase in total sales value in the textile, clothing and rubber industries between 2017 and 2019, respectively. It, therefore, becomes evident that the strong indications of favourable prospects for expanding domestic production in these specific sectors are confirmed by the Hellenic Statistical Authority data (EL.STAT.) – even more so, at a time when the Greek economy is still recovering from the recent economic crisis.

5. Future Prospects and Policy Implications

The recommendations of the Hellenic Federation of Enterprises (SEV, 2013) have already emphasized the formation of a mechanism for monitoring the performance of Greek companies and the creative industries, identifying favourable prospects in the production of traditional fabrics through the use of cotton and silk threads. Utilization of technology can contribute to the production of advanced raw materials (e.g. synthetics). The integration of

innovation as well as the latest technological developments in the production process are expected to play an important role in the expansion of domestic production in the clothing sector in Greece. The current challenges include policies that will ensure lower energy costs to businesses, accelerate business licensing and provide tax incentives for investments based on sustainable development (FEIR, 2018).

The prospect of developing collaborations between the academic and research community and companies in the sectors under study is also expected to play a key role. It seems that the performance indicators related to university-industry collaboration in Greece show a recent improvement (Bertoletti and Johnes, 2021). This could mean greater involvement of the business community in the academia (visiting lectures, co-organising conferences) or/and the greater involvement of the academic community in the production of directly-usable research knowledge by firms. At the same time, however, we argue that the development of the aforementioned types of cooperation should in no way lead to an asymmetric relationship between the two sides, making academic institutions dependent on private funding.

The demographic parameter is considered of great importance in all the aforementioned developments, both in production and consumption. The gradual decrease in the number of births in Greece has contributed to a shrinking domestic consumer base. Moreover, the repercussions of the recent economic crisis and depression on household income and poverty obviously affected consumer affordability. Production-wise, however, the future will show whether the impact of demographic ageing will severely affect the EU economies, including Greece. In any case, it should be borne in mind that the competitiveness of at least the older Member States is not based on labour-intensive production, but rather capital or knowledge-intensive production.

Some of the pillars of the project Greece 2.0 prescribe the digital transformation of the public sector and Greek companies, the further strengthening of the financial sector and the capital markets, along with the improvement of competitiveness through the promotion of private investments and exports (Hellenic Republic, 2021). Strengthening the country's energy interconnection with neighbouring states – as a key objective of the Greek economic diplomacy – as well as the exploitation of greener and cheaper alternative energy resources are expected to help boost the economic performance of Greek businesses. While import substitution of Chinese products could prove beneficial circumstantially, a preferable strategy for the Greek economy would be to capitalize on imports to more effectively promote Greek domestic production for exports. In this direction, the research results strongly indicate favourable prospects for the expansion of domestic production – and consequently exports – into various sub-sectors related to the clothing and footwear industry.

6. Conclusions and Discussion

The results of the above analysis provided strong indications for the favourable prospects for expanding domestic production in the textile and clothing sectors, as well as the leather, rubber products and plastics industry. Import substitution policies are no longer a common practice in shaping the framework of bilateral economic relations, especially in the cases of developed and open economies, such as Greece. Besides, apart from the fact that import of

Chinese products benefits domestic consumers in Greece, an eventual import substitution strategy could also have a reverse effect on Greek exports. Consequently, import substitution policies are not proposed here – rather, the Greek economy should "catch the wave" by taking advantage of raw materials or intermediate products, but also of the know-how incorporated in the imported intermediate products, in order to further enhance export performance.

In particular, with regard to sub-sectors involved in the clothing industry, which includes the majority of the aforementioned product groups with significantly developed prospects (women's and men's clothing, knitted, crocheted or woven fabrics, articles of apparel, clothing accessories), we consider that favourable multiplier effects can emerge through closer cooperation between the actors in the garment industry and tourism. Boosting the domestic production of Greek clothing and footwear products can be facilitated by the organisation of relevant fashion events, thus upgrading their promotion, along with the support of fashion tourism activities.

With regard to the rest of the product groups, very promising are the export trends for aluminium, paper and plastic products during the years under study, but also for exports included in the carriages, toys, games and sporting goods group. More specifically, the revealed symmetric comparative advantage and disadvantage measurements have shown the primacy of the aluminium export sector. Sales in both the garment industry and plastics and rubber products have also proved sufficiently resilient.

The negative impact of the pandemic has been significant for the majority of export sectors, though not for all of them. Especially in Greece, a considerable improvement in the export performance of fruits and vegetables has been observed even in the midst of the pandemic crisis, thus confirming the constant and increased demand for basic necessities such as food products, especially those of high nutritional value. The present study highlighted some of the promising "dormant" productive sectors with improving export growth prospects, given the primacy of the tourism industry.

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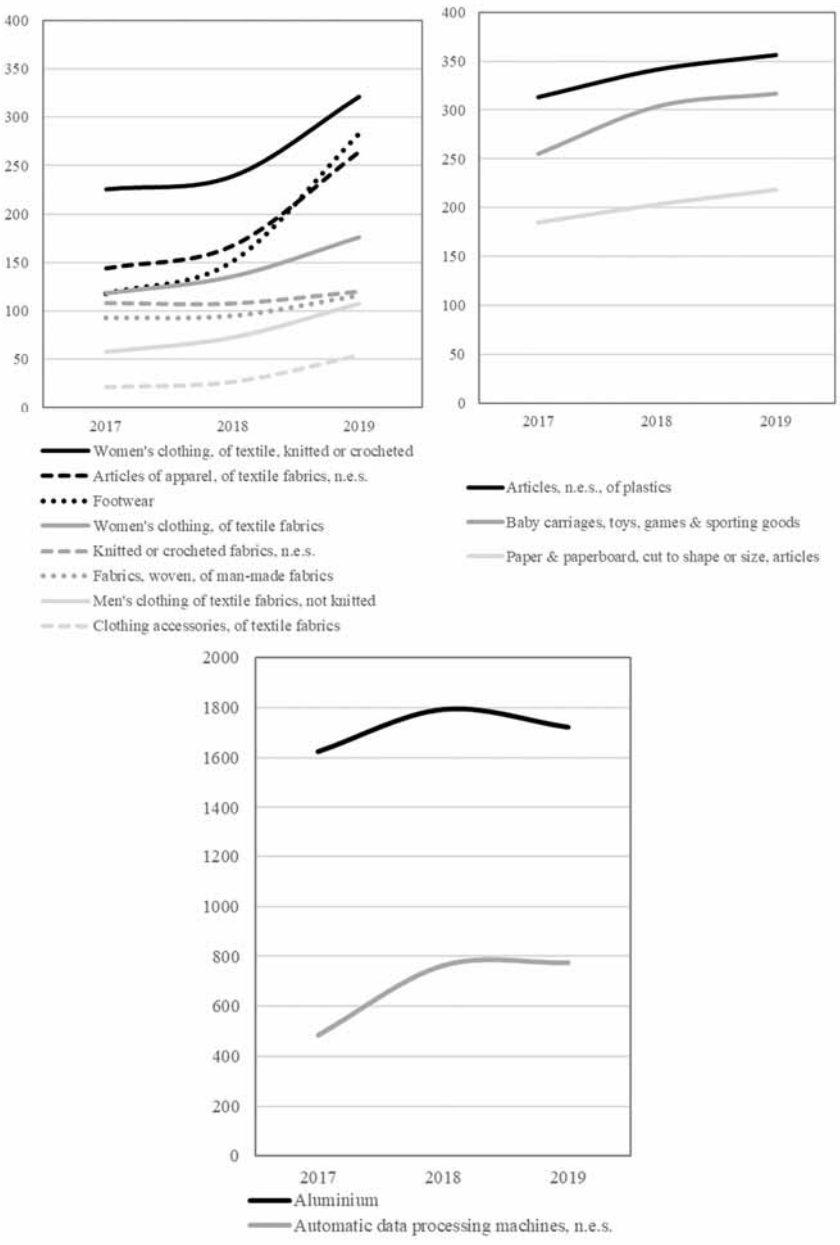
Appendices 1a, 1b, 1c

Greek merchandise exports by 3-digit SITC product category, 2017-2019 (millions of constant 2015 US dollars, GDP deflator)



Source: UNCTADStat database, and own calculations.