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# European Industrial Strategy in the recent context: Industrial Ecosystems and Strategic Dependencies' insights from Portugal

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# European Industrial Strategy in the recent context: Industrial Ecosystems and Strategic Dependencies' insights from Portugal

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**Abstract**

Globalisation is an important source of efficiency gains, contributing to boost economic growth, improve income, and enhance well-being worldwide.

The COVID-19 pandemic has re-ignited the debate around the pros and cons of globalisation, and the world economy is currently faced with a potential major reconfiguration.

In this context, the EU is updating its industrial strategy to increase Europe's self-sufficiency in strategic sectors, boost its own industry and assert its economic power. By acknowledging the richness of this analytical approach, the purpose of this article is to transpose EU's methodology to the Portuguese case to gain a country level perspective that improves the understanding of common versus specific challenges and vulnerabilities of the Portuguese economy vis-à-vis EU's economy.

Specifically, we reproduce the proposed key performance indicators for the 14 industrial strategic ecosystems at the EU level for Portugal and we apply the EC methodology to identify strategic dependencies at the national level.

**JEL Classification:** F13, F15, F60, L52, O14

**Keywords:** International Trade, Industrial strategic ecosystems, Strategic dependencies

**Note: This article is sole responsibility of the authors and do not necessarily reflect the positions of GEE or the Portuguese Ministry of Economy and Maritime Affairs.**

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## 1. Introduction

**Globalisation is an important source of efficiency gains**, contributing to boost economic growth, improve income, and enhance well-being worldwide. However, these benefits are mirrored by significant risks, as a globally integrated economy also represents an important channel for the diffusion and amplification of shocks across countries and sectors, with significant economic and social costs.

**The COVID-19 pandemic has re-ignited the debate around the pros and cons of globalisation, and the world economy is currently faced with a potential major reconfiguration**. For the European Union (EU), it has contributed to highlight several aspects. First, it has revealed the weaknesses of the current supply-chain model, by exposing EU's vulnerability to supply disruptions. Second, it has shown how much the EU economically and strategically relies on critical raw materials, often concentrated in just a few countries. Third, it has heightened the US-China trade competition, impacting on the current geopolitical context. Finally, as global competition increases, alliances are shifting, and Russia's decoupling from the West has also highlighted the vulnerability of Europe's energy supply that can impact economic recovery. Such geopolitical hardening has deepened EU's concerns and debate on excessive dependencies particularly on risky suppliers, calling for the reinforcement of European economic sovereignty and redesign of international trade flows.

**In this context, the EU is updating its industrial strategy to increase Europe's self-sufficiency in strategic sectors, boost its own industry and assert its economic power.** The European Commission (EC) has put forward an analytical approach to build a better understanding of the needs and challenges faced by the EU economy in this process and shape the appropriate policy actions that will set the way to increase supply-chain resilience, improve crisis preparedness and deliver the objectives of the industrial strategy.

By acknowledging the richness of this analytical approach, the purpose of this article is to **transpose EU's methodology to the Portuguese case** to gain a country level perspective that improves the understanding of common *versus* specific challenges and vulnerabilities of the Portuguese economy vis-à-vis EU's economy.

Specifically, we reproduce the proposed key performance indicators for the 14 **industrial strategic ecosystems** at the EU level for Portugal and we apply the EC methodology to identify **strategic dependencies** at the national level.

Currently, the Office for Strategy and Studies (*Gabinete de Estratégia e Estudos* – GEE) is developing analytical work in this area in Portugal and participating in initiatives from the European Commission, namely the EC Chief Economists' Network and the Task Force 3 Strategic Dependencies from the Industrial Forum on two goals related to supply chains:

identification and assessment of strategic dependencies; and monitoring supply chain distress.

The article is organized as follows. Section 2 offers a quick overview of EU's Industrial Strategy, explaining its ambitions and how it is being translated into practice. In sections 3 and 4 we present two specific data-driven analytical approaches developed by the EC for evidence-based policymaking, transpose them to the Portuguese case, and present the results comparing to those of the EU. Section 5 presents some final remarks.

## 2. Framework

The European industrial sector is a central pillar for the economy as it substantially contributes to value added, employment and innovation. Europe is a major player in many industrial sectors and technologies however, it has not been immune to the costs of globalisation. Globalisation presents both opportunities and challenges that, on the one hand, can make economies more productive and vibrant but, on the other hand, can lead to de-industrialisation and loss of international competitiveness. The impact of globalisation in the EU economy has varied significantly across members-states and sectors, impacting on the EU's ability to keep pace with its peers in a context of increasingly global competition, thus calling for ambitious and appropriate policy interventions to regenerate economic activity in areas that experienced negative effects and assert EU's economic power.

Against this backdrop, the EU is in the midst of rethinking its industrial policy to cope with the increasing challenges brought by the new geopolitical and economic context. Competitiveness is at the heart of this agenda.

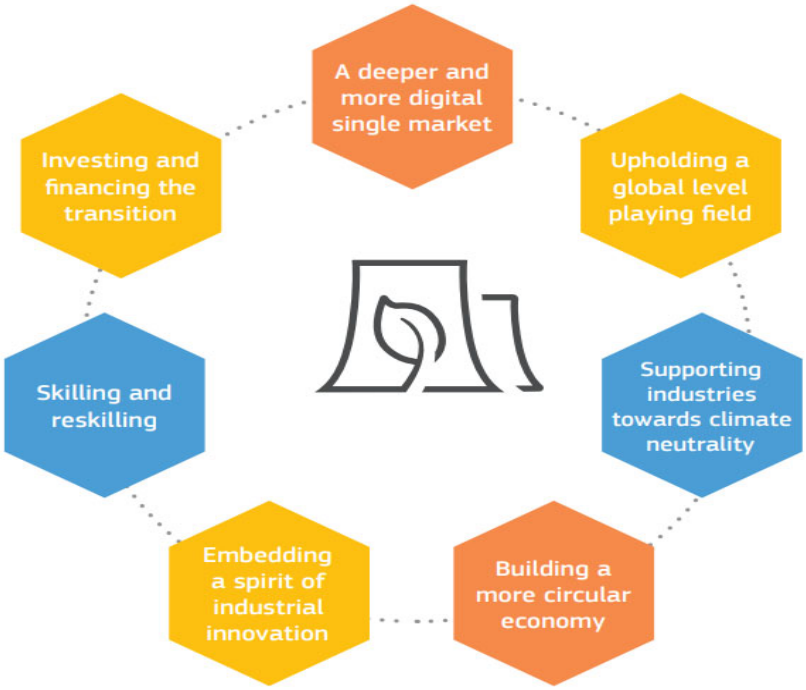
In March 2019, the European Council called on the European Commission to present a long-term vision on industrial policy. One year later, the Commission laid the foundations for *"A New Industrial Strategy for Europe"* focused in achieving industrial transformation that spurs change, innovation, and growth, towards a more sustainable, digital, and globally competitive economy.

In May 2021, the Commission updated the new industrial strategy to take full account of the challenges raised throughout the COVID-19 crisis. The crisis revealed the interdependence of global value chains, demonstrating the critical role of a globally integrated and well-functioning Single Market, but it also highlighted some important weaknesses, related to the current global supply chain model, that have the potential to induce significant economic vulnerabilities, thus reinforcing the relevance of the strategy itself. The updated new industrial strategy endures the priorities set out in the March 2020 communication and draws on the lessons learned from the Coronavirus outbreak, by addressing the need to strengthen the resilience of the Single Market, support Europe's Open

Strategic Autonomy, through dealing with dependencies, and support the business case for the twin transitions.

In a nutshell, the EU Industrial Strategy sets out three priorities for industrial transformation: i) maintaining European industry's global competitiveness and a level playing field, at home and globally, ii) making Europe climate-neutral by 2050 and iii) shaping Europe's digital future. But it also outlines a comprehensive set of inter-connected and reinforcing actions, to guide its implementation as illustrated in Figure 1.

**Figure 1 – The new European Industrial Strategy**



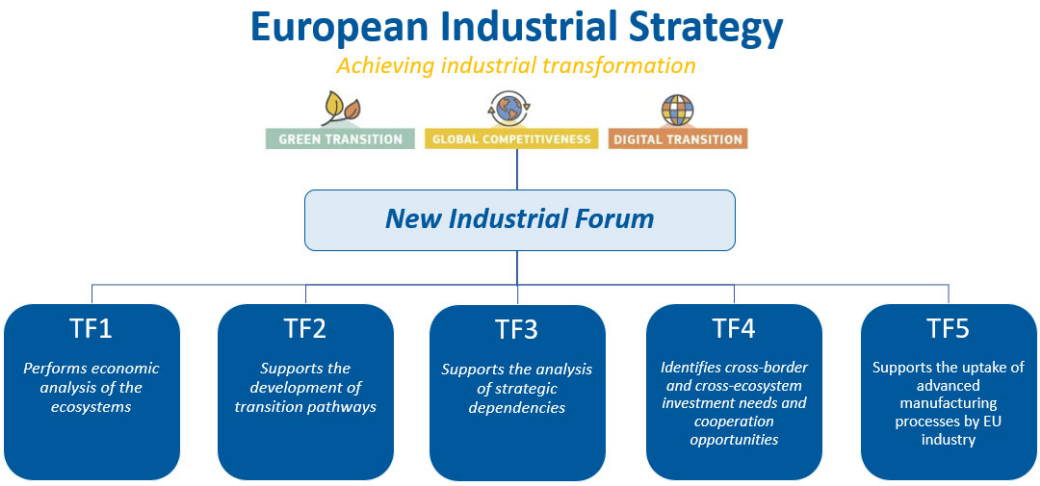

Source: Image reproduced from European Commission.

The first step for a successful and coherent implementation of the industrial strategy, is to fully understand the challenges, barriers, and vulnerabilities of the single market, including those raised throughout recent events such as the pandemic crisis and the war in Ukraine and propose measures to strengthen its resilience and functioning, driving European industry's global competitiveness in this new and increasingly uncertain global terrain.

To support the European institutions in this quest, a "New Industrial Forum" was launched as part of the Industrial Strategy, consisting of a multi-stakeholder initiative, that gathers industry, Member States, research institutions and social partners, to develop a tailored assessment of the challenges and needs faced by each industrial ecosystem on its journey towards climate neutrality and digital transformation, and co-design targeted solutions strategies.

Given the complexity and multidisciplinarity of these challenges, the New Industrial Forum was organised into five permanent task forces, as illustrated in figure 2, dedicated to important transversal topics, to deliver on the objectives of the Industrial Strategy: i) deepen the systematic analyses of the different industrial ecosystems; ii) deliver on transition pathways in different ecosystems; iii) improve understanding of the EU economy's strategic dependencies and vulnerabilities; iv) identify cross-border and cross-ecosystem investment needs and cooperation opportunities; and v) support the uptake of advanced manufacturing processes by EU industry.

**Figure 2 – Implementing the European Industrial Strategy**




Source: Own elaboration based on European Commission.

Two important Staff Working documents feed into the work of the Industrial Forum by offering the analytical underpinning to address such topics:

1) The *Annual Single Market Report, 2021* (European Commission, 2021b) is the first report of a forthcoming series that sets out the impact of the pandemic crisis on the Single Market, identifies fourteen industrial ecosystems, analysing their different needs and challenges, and presents a set of key performance indicators (KPI's), to monitor the progress in both the implementation of the industrial strategy and EU's competitiveness. The second Annual Single Market Report (European Commission, 2022a) provides updates on the latest developments across industrial ecosystems, looking at the path to recovery and recent challenges in global supply chains.
2) The *Strategic Dependencies and Capacities report, 2021* (European Commission, 2021c) offers an initial analysis of the EU's strategic dependencies and capacities, with an in-depth review for a number of technological and industrial strategic areas, for a better grasp of where Europe's strategic dependencies lie, how they may

develop in the future and the extent to which they could lead to vulnerabilities. The second stage of in-depth reviews (European Commission, 2022b) builds on the first stage analysis by deepening the assessments related to raw and processed materials. In particular, it looks at five areas – rare earths and magnesium, chemicals, solar panels, cybersecurity and IT software - where Europe faces strategic dependencies on third countries.

Acknowledging the richness of these analyses to set the stage for well-designed and future-proof policies, the purpose of the following sections is to transpose EU's methodology to the Portuguese case i) reproducing some of the proposed key performance indicators (KPI's) based on the same industrial ecosystem approach for a more granular view of the main trends characterizing specific parts of the Portuguese economy, and ii) performing a similar strategic dependencies analysis, to gain a country level perspective that improves the understanding of common versus specific risks for the Portuguese economy vis-à-vis EU's economy.

In the next section, we reproduce the proposed key performance indicators for industrial ecosystems in Portugal to provide a comprehensive view of their size, performance, strength and international dimension, using EU as a benchmark. In section 4, we present the methodology used by the EU to identify strategic dependencies, transpose it to the Portuguese case, and present the results comparing to those of the EU.

## 3. Strategic Industrial Ecosystems analysis

*The May 2021 update of the industrial strategy puts the industrial ecosystems at the heart of the COVID-19 recovery and transformation process. It builds on the flexible ecosystem-based approach outlined in the industry strategy presented in March 2020 as a lens to look at Europe's economy.*

*European Commission (2021a)*

The Council Conclusions on "*A recovery advancing the transition towards a more dynamic, resilient and competitive European industry", adopted on 16 November 2020*, "*calls on the Commission to define key performance indicators for monitoring the industrial strategy and competitiveness*". The conclusions also call "*for the objectives of the EU's industrial policy to be reflected in sound indicators, in particular concerning industrial competitiveness (…) and the Union's resilience and strategic autonomy while preserving an open economy*" (European Council, 2020b).

To address this request, the EC has proposed the analytical approach to assess EU's industry economic profile, weight its vulnerabilities and capacities and track progress in the implementation of the strategy.

In particular, the Annual Single Market Report (European Commission, 2021b, 2022a) presents a set of key performance indicators (KPIs), based on publicly accessible data sources, such as national accounts, Structural Business Statistics and Short-term business statistics, to report in a synthetic manner on the different goals identified as priorities for the European industrial policy, in particular concerning industrial competitiveness. Regular reporting based on reliable data sources, can help to adopt a strategic position on the EU economy, predict challenges and inform policy and investment decisions to provide timely policy responses.

The list of KPIs covered in the single market report is not stabilised. Instead, it is expected to evolve as new data becomes available or policy priorities evolve.

One important aspect to underline in the methodology of the Annual Single Market Report, is that the set of KPIs are designed to monitor economic activities beyond the narrow definition of industry, through the lens of industrial ecosystems, to incorporate the systemic importance of all the horizontal and vertical links among economic actors. To that purpose, a total of fourteen industrial ecosystems spanning across the EU have been identified, based on their economic and technological relevance, and their expected contribution to the decarbonisation, digitalisation, and resilience of the EU economy, as illustrated in Figure 3.

**Figure 3 – Industrial Ecosystems**


Source: Image reproduced from European Commission

Each Industrial Ecosystem considered in the Single Market Report was defined at the 2-digit level of NACE rev.2 classification to match existing data sources information. However, given the horizontal nature of certain activities, some 2-digit sectors are attributed to more than one ecosystem according to a set of weights that have been calculated by the EC staff based on more granular datasets when available or based on existing studies. Annex I a) and b) summarize the set of weights used in the definition of each industrial ecosystem [4]

Following the same methodology, this article offers the economic profile of each Industrial Ecosystem in Portugal, using EU as a benchmark to gain comparative insights in terms of size, performance, strength, and international dimension.

Given that the level of granularity is not optimal for a precise definition of the industrial ecosystems, the indicators that are presented below should be interpreted with caution.

[4] Please see the Single Market Report 2021 and 2022 for a more detailed explanation on the methodology followed by the EC staff.

Additionally, due to data availability, most of the indicators presented below do not capture the COVID-19 crisis period [5].

***Headline indicators: the size and performance of ecosystems***

The 14 industrial ecosystems, as defined in the EC Annual Single Market Report, account for about 80% of GVA and employment of the EU business economy[6]. In Portugal its representativeness is similar in terms of GVA (82%), but higher in terms of employment (98%)[7] (Figure 4). Portugal's specialization pattern is broadly similar to that of the EU. Retail, Construction and Health are the largest ecosystems both in terms of value-added and employment. However, as compared to the EU, the Tourism ecosystem in Portugal stands out with a stronger contribution to the economy and employment.

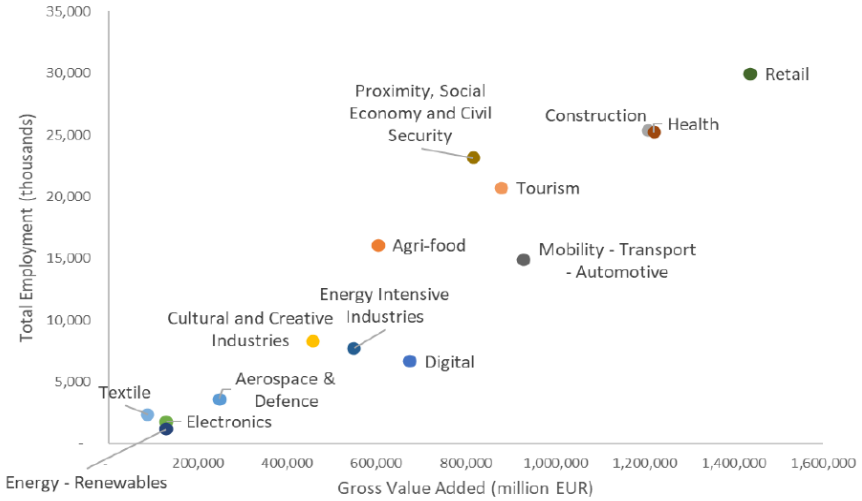
All ecosystems have grown in gross value added between 2015 and 2019, both in the EU and in Portugal (Figure 5). Digital, Construction and Tourism ecosystems exhibited the largest growth rates in the EU, whereas in Portugal the strongest growth rates were recorded in the Tourism, Digital and Construction ecosystems. Looking at employment dynamics, the Digital, Tourism and Mobility-Transport-Automotive ecosystems show the largest increase, both in the EU and in Portugal, while Textiles and Agri-food have marginally reduced total employment between 2015 and 2019. In Portugal, the Agri-food ecosystem has recorded the largest increase in productivity (+29%), signalling a possible modernisation of the sector. The renewable energy and retail ecosystems exhibited productivity losses (-7.7% and -1.8%, respectively).

The number of firms varies significantly across ecosystems, signalling differences not only of size, but also of market structure. Retail accounts for the largest number of companies and it is also the most labour-intensive in the EU. In Portugal, Tourism presents the highest concentration of firms and refers to the second most labour-intensive ecosystem, after the Retail ecosystem (Figure 6).

[5] The information for Portugal is already available, however the asset of the present work is the comparison with the EU profile, which in turn is not yet been made available by the EC.
[6] In the document, business economy is defined as total economy excluding financial services and public administration. While both financial services and public administration are clearly of great importance for the functioning of all industrial ecosystems, given their special nature, their inclusion in the calculation of the indicators would make some results more difficult to interpret.
[7] Since the shares computed based on employment data were not made available in the report, we assumed the same shares for both value-added and employment.

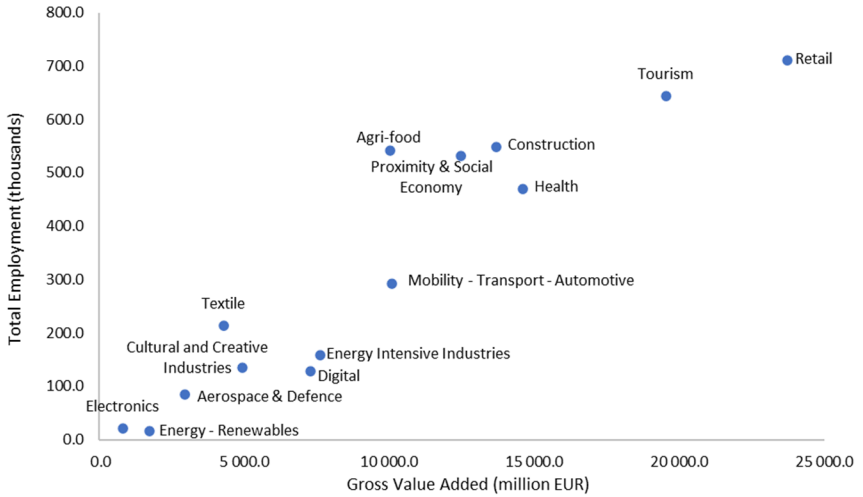
**Figure 4 – Gross value added and employment by industrial ecosystem, 2019**

**a) European Union**




Source: Image reproduced from European Commission (2022a); European Commission analysis based on Eurostat, national accounts data.

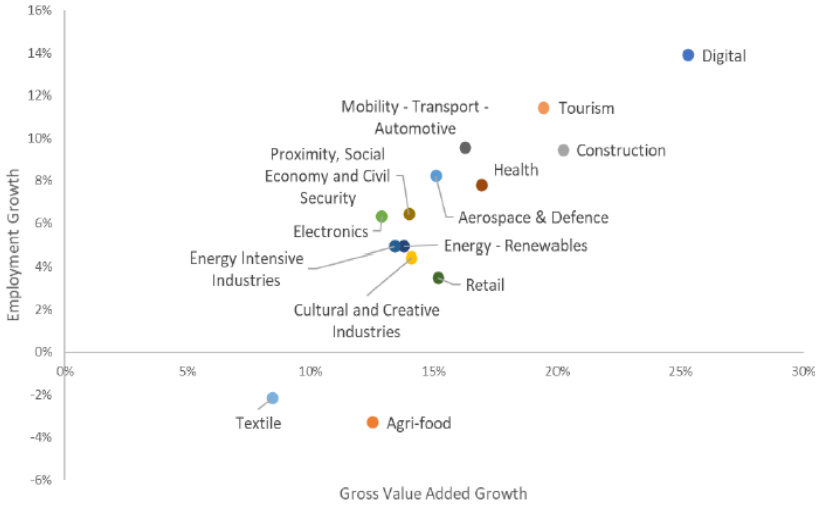
**b) Portugal**




Source: Own elaboration based on Statistics Portugal, national accounts data.

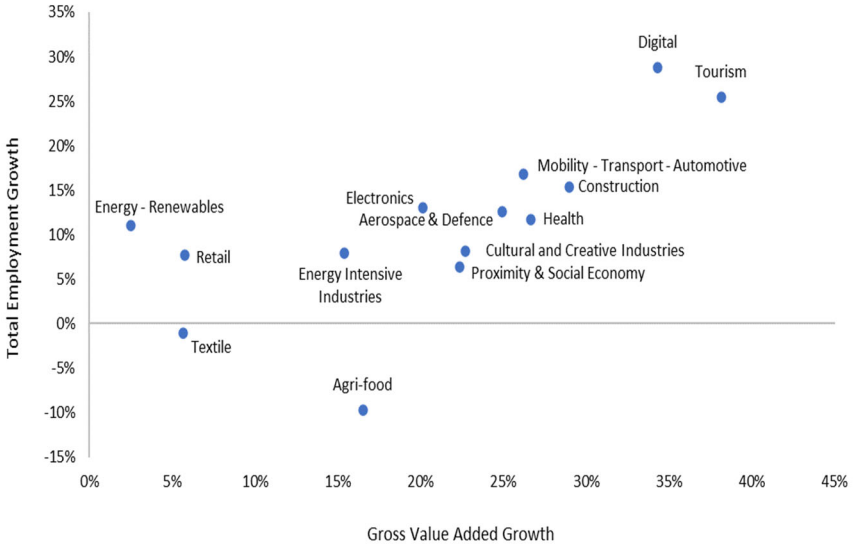
**Figure 5 – Change in Value Added and Employment, 2015-2019**

**a) European Union**




Source: Image reproduced from European Commission (2022a); European Commission analysis based on Eurostat, national accounts data.

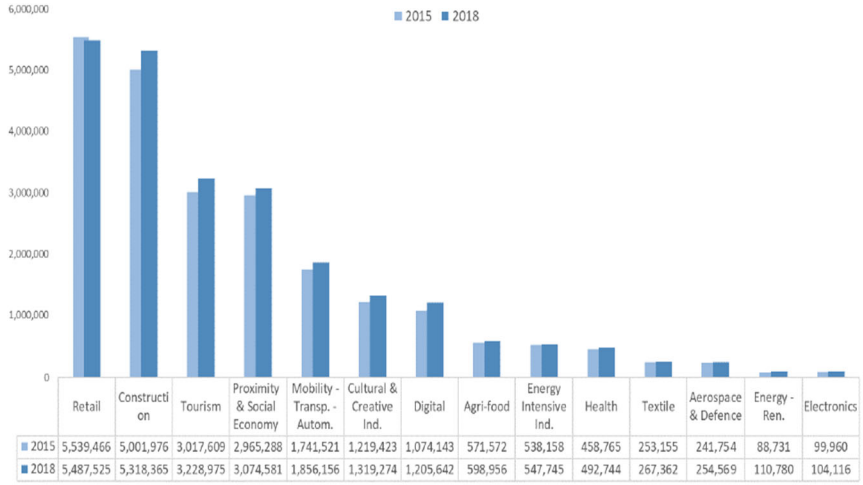
**b) Portugal**




Source: Own elaboration based on Statistics Portugal, national accounts data.

**Figure 6 – Number of Firms, 2015-2018**

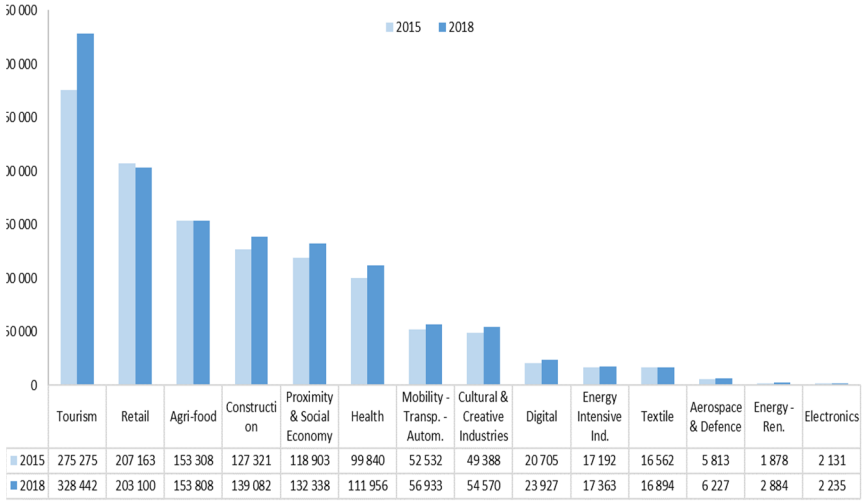
**a) European Union**




| | Retail | Construction | Tourism | Proximity & Social Economy | Mobility - Transp. - Autom. | Cultural & Creative Ind. | Digital | Agri-food | Energy Intensive Ind. | Health | Textile | Aerospace & Defence | Energy - Ren. | Electronics |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2015 | 5,539,466 | 5,001,976 | 3,017,609 | 2,965,288 | 1,741,521 | 1,219,423 | 1,074,143 | 571,572 | 538,158 | 458,765 | 253,155 | 241,754 | 88,731 | 99,960 |
| 2018 | 5,487,525 | 5,318,365 | 3,228,975 | 3,074,581 | 1,856,156 | 1,319,274 | 1,205,642 | 598,956 | 547,745 | 492,744 | 267,362 | 254,569 | 110,780 | 104,116 |

Source: Image reproduced from European Commission (2022a); European Commission analysis based on Eurostat Structural Business Statistics

**b) Portugal**




| | Tourism | Retail | Agri-food | Construction | Proximity & Social Economy | Health | Mobility - Transp. - Autom. | Cultural & Creative Industries | Digital | Energy Intensive Ind. | Textile | Aerospace & Defence | Energy - Ren. | Electronics |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2015 | 275 275 | 207 163 | 153 308 | 127 321 | 118 903 | 99 840 | 52 532 | 49 388 | 20 705 | 17 192 | 16 562 | 5 813 | 1 878 | 2 131 |
| 2018 | 328 442 | 203 100 | 153 808 | 139 082 | 132 338 | 111 956 | 56 933 | 54 570 | 23 927 | 17 363 | 16 894 | 6 227 | 2 884 | 2 235 |

Source: Own elaboration based on Statistics Portugal, Structural Business Statistics.

***Strength of the ecosystems: Value added to production value***

The share of value added to the value of production is a measure of the strength of the ecosystems, as it measures their capacity to generate value added using the intermediate inputs available. In the EU, Retail and Digital are the best performing among the ecosystems for which data is available (Figure 7). In Portugal, Proximity Activities and Social Economy display the highest capacity to generate GVA from intermediate inputs, whereas Energy-Intensive Industries exhibits the lowest robustness.

***International dimension: Trade***

All ecosystems rely more on intra EU trade than on extra EU trade, both in the EU and in Portugal (Figure 8). The changes since 2015 across ecosystems are relatively small.

The fourteen industrial ecosystems differ significantly in their export intensity[8], measured by the share of exports to value-added, remaining relatively stable between 2015 and 2019, both in the EU and in Portugal (Figure 9). Textile is a notable exception in the EU, with an increase of 16.1% (0.4% in Portugal). In the case of Portugal, Electronics is the best performing among the ecosystems, with an increase of 19% (2.7 in the EU), followed by the Aerospace & Defence ecosystem (6.7% as compared to 1,3% in the EU).

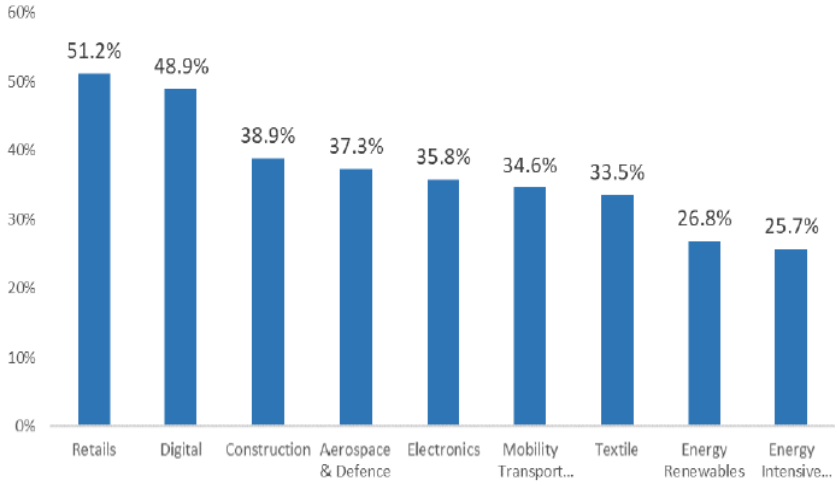
In the same period, Tourism, Cultural & Creative Industries and Renewable Energies, experienced a decrease in its export intensity[9] (-37.8%, -32.4% and -29.3% respectively).

[8] Given the profoundly different nature of the ecosystems analysed here, this divergence should not be interpreted as a signal of dismal performance by some of them. Indeed, export of goods is clearly not a core activity for ecosystems as Proximity, Social Economy and Civil Security, or for a service ecosystem as Retail

[9] The indicators should be interpreted with caution, since data used in the methodology refers to exports of goods, which, for example, partially explains tourism's performance.

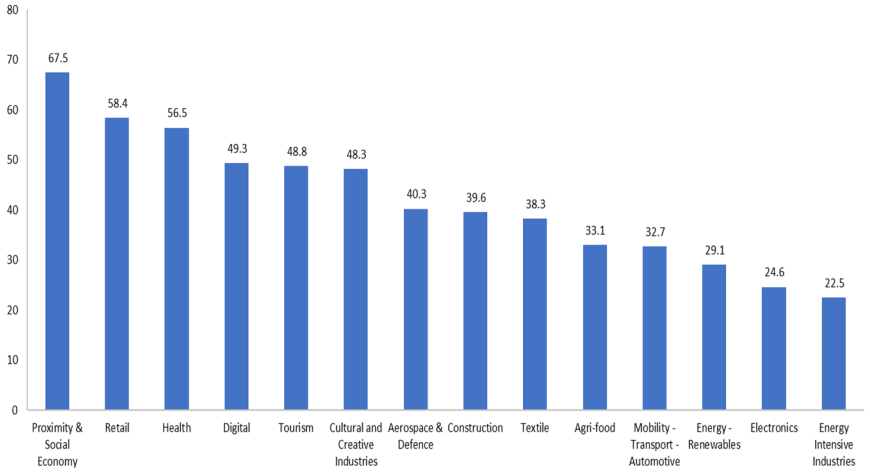
**Figure 7 – Ratio of value added to production value, 2019**

**a) European Union**




Source: Image reproduced from European Commission (2022a); European Commission analysis based on Eurostat, national accounts data and Structural Business Statistics.

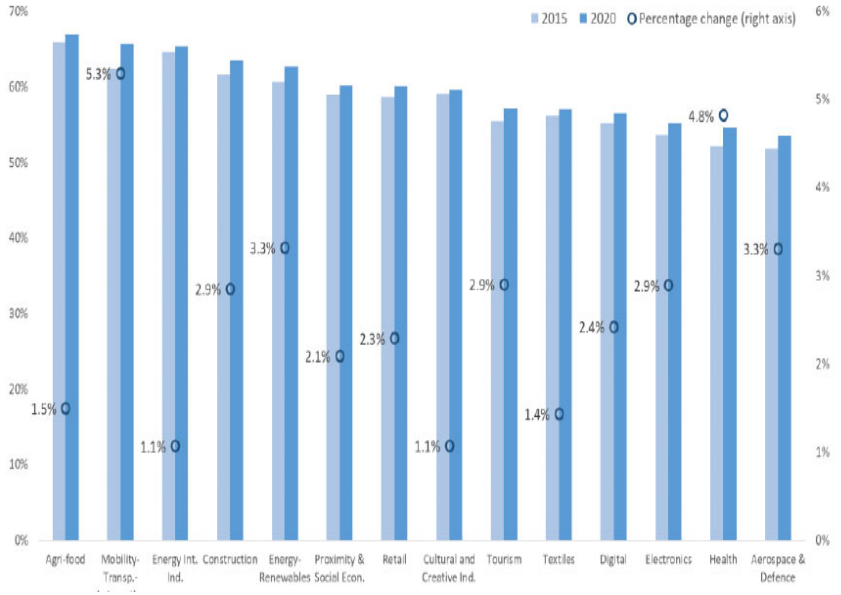
**a) Portugal**




Source: Own elaboration based on Statistics Portugal, national accounts data.

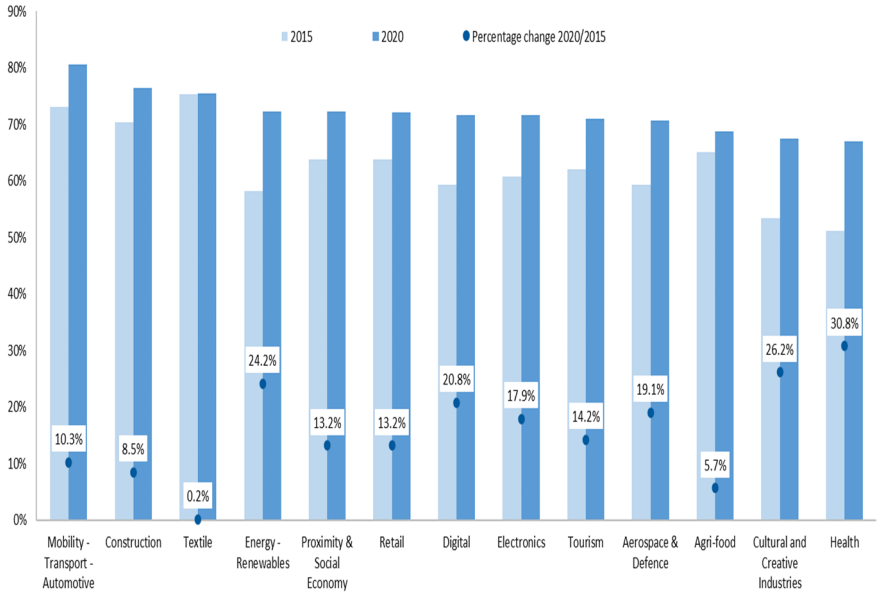
**Figure 8 – Intra EU Trade: share of total ecosystem trade, 2015-2020**

**a) European Union**




Source: Image reproduced from European Commission (2022a); European Commission analysis based on Eurostat EU Trade Statistics.

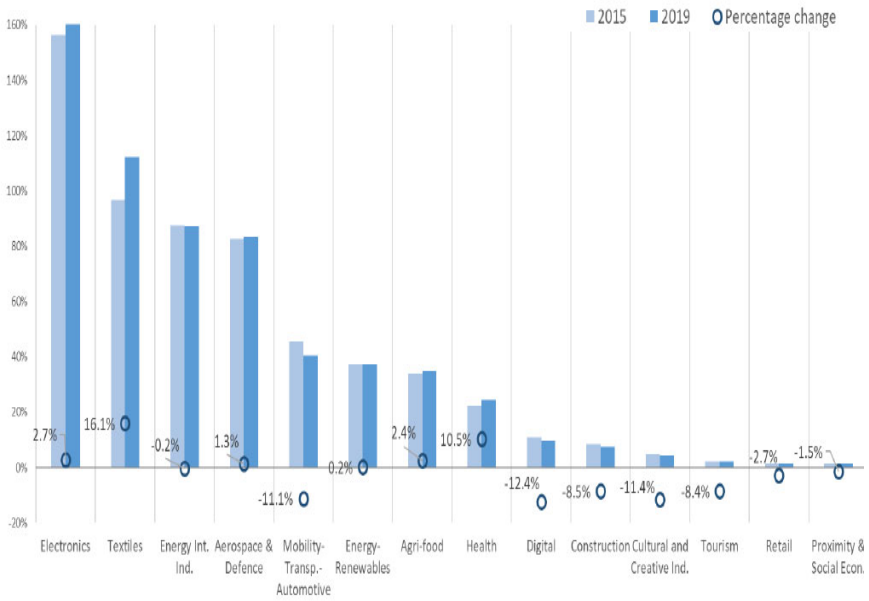
**b) Portugal**




Source: Own elaboration based on Statistics Portugal, International Trade Statistics.

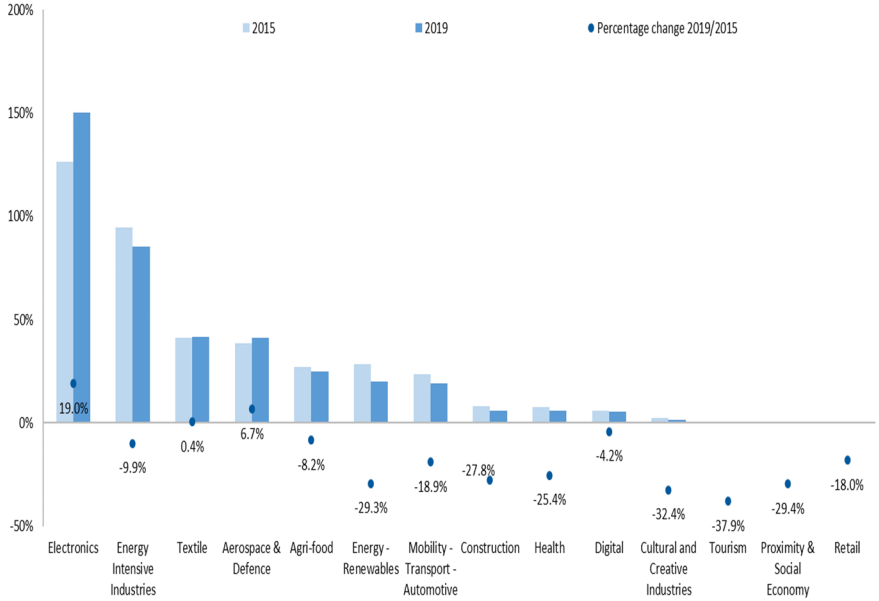
**Figure 9 – Export Intensity: extra EU exports as percentage of value added, 2015-2019**

**a) European Union**




Source: Image reproduced from European Commission (2022a); European Commission analysis based on Eurostat, national accounts data and EU Trade Statistics

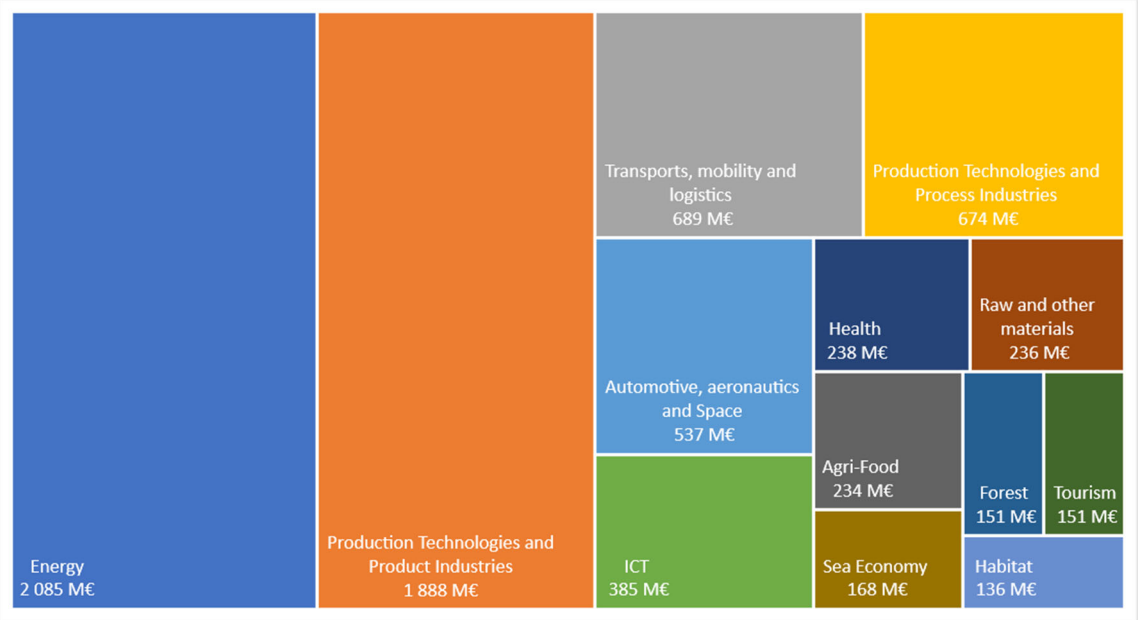
**b) Portugal**




Source: Own elaboration based on Statistics Portugal, national accounts data and International Trade Statistics.

The National Recovery and Resilience Plans (RRP) can work as an opportunity window for Member States to implement ambitious domestic reforms and investments that contribute to modernize their economies and deliver the objectives of EU's industrial strategy. In this context, Portugal has defined a flagship investment on its RRP - the **Mobilising agendas/ Alliances for business innovation** covering 13 fields of action (Figure 10).

**Figure 10 – Portugal's Mobilising agendas/Alliances for business innovation**




Source: Own elaboration based on IAPMEI data.

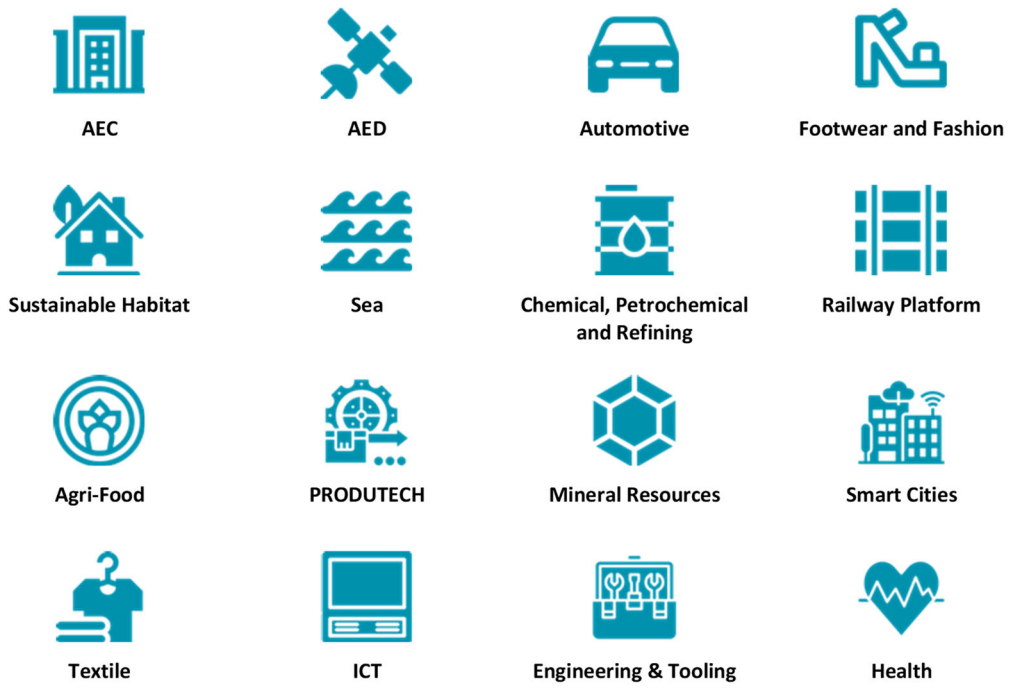
These Agendas configure an industrial policy mission, aiming at structurally reorient the investment in Portugal to tradable sectors, through goods and services of added and differentiated value, based on disruptive technologies and/or processes, in line with the macrotrends (digitalisation, decarbonisation, deglobalisation).

The novelty of the policy and the diversity of stakeholders involved in the consortia creates challenges to its evaluation and requires both a systemic approach and accurate and timely information to support decision-making to create lasting policy results. It is important to avoid that public funding is a cause of distortions regarding resources allocation (i.e., by funding firms or sector less viable) or that it induces existing productivity disparities among firms (i.e., by funding frontier firms without improving the mechanisms for knowledge and technology diffusion, which allow bottom/less-efficient firms converge to the frontier).

Other ongoing initiatives, aligned with the industrial ecosystems approach, can also be instrumental to empower the Portuguese industry. For example, The **Sectoral Pacts for Competitiveness and Internationalization**, which embody a set of initiatives in the domains of industrial digitization (I4.0), human resources qualifications, consolidation of

external attractiveness factors, internationalization, and R&D promotion, were designed to encourage circular economy initiatives among industrial clusters and support their energy transition towards sustainable energy systems. There are currently 16 signed Pacts [10] involving the industrial clusters represented in Figure 11.

**Figure 11 – Clusters with signed Sectoral Pacts for Competitiveness and Internationalization**




Source: Author's translation reproducing the image from IAPMEI.

[10] There are two additional Clusters - the Tourism Cluster and the Vineyard and Wine Cluster - that have already been recognized but don't have yet any signed Pact.

## 4. Strategic dependencies analysis

*"Resilience has become a new compass for EU policies with the COVID-19 crisis."*
*"Identifying and addressing the strategic dependencies is an essential step to increasing resilience."*

*European Commission (2020b, 2021b)*

The COVID-19 pandemic has shaken the EU to the core. On the one hand, it has emphasised the EU's capacity to face adversity and proved that the Single Market's integration into global value chains is essential in turbulent and challenging times to absorb, adjust and recover from shocks. On the other hand, it has clearly exposed vulnerabilities related to the current supply chain model that need to be addressed.

At first it was the pandemic-related lockdowns that threatened economic systems, paralysing a large part of production, disrupting supply chains around the world and affecting the availability of essential, sometimes critical, products such as medical and medical-pharmaceutical supplies. Then as lockdowns eased, the strong surge in demand amplified supply chain disruptions worldwide, creating inflationary pressures and multiple supply-side bottlenecks. Addressing these vulnerabilities calls for the need to rethink and reconfigure global production networks, by diversifying supply chain partners and rebuild production capacity to reduce excessive dependencies on foreign sources, strengthen supply-chain resilience and enhance crisis preparedness. More recently, the Russian invasion of Ukraine has emphasized the need to accelerate this process, to mitigate additional supply chain geopolitical risks. The identification of these strategic dependencies is the first step to cope with these challenges and increase resilience.

The European Council, highlighting that "*Achieving strategic autonomy while preserving an open economy is a key objective of the Union*", invited the Commission to "*identify strategic dependencies, particularly in the most sensitive industrial ecosystems such as for health, and to propose measures to reduce these dependencies, including by diversifying production and supply chains, ensuring strategic stockpiling, as well as fostering production and investment in Europe*" (European Council, 2020a).

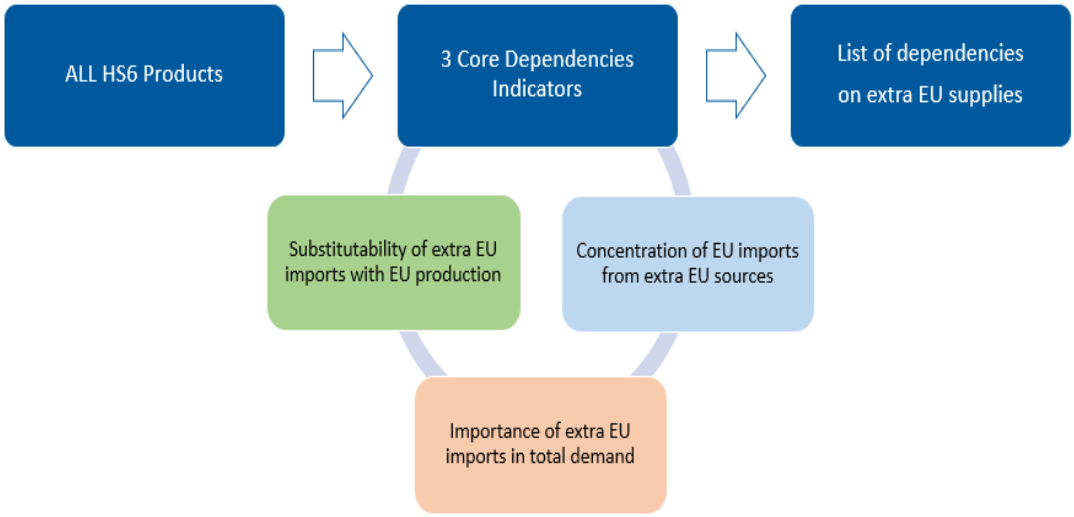
In response to the European Council request, the Commission has carried out a "bottom-up analysis", based on trade data to map foreign dependencies, providing first insights on the scope of the issues at stake.

As described at the report on strategic dependencies and capacities (European Commission, 2021b, 2022b), "*the bottom-up mapping of foreign dependencies relies on an agnostic, data-driven perspective with the objective of identifying products with extra EU dependency*". It follows a step-by-step approach, starting with the identification of traded products where the EU is more dependent on third countries sources.

Borrowing from the EC methodology, this article performs the same bottom-up analysis to map Portugal's foreign dependencies, to understand the challenges at stake, where to build up critical capacities, untangle common versus country-specific dependencies, and design better policies to strengthen the competitiveness and resilience of the Portuguese economy in the context of the European Union.

The bottom-up approach starts with a list of all traded HS 6-digit level products and refines this broad list into a narrower selection according to the combination of three complementary filtering criteria, referred to as core dependency indicators (Figure 12), to measure the overall foreign dependency of each product.

**Figure 12 – Bottom-up analysis for mapping foreign dependencies**




Source: Own elaboration based on European Commission (2021b, 2022b).

Broadly speaking, the methodology classifies products as highly foreign dependent if the levels of import diversification and potential substitutability with internal supply are low:

1) **The concentration of suppliers from extra-EU sources:**

The first indicator aims at quantifying the concentration of EU (Portugal's) imports with respect to the rest of the world, to capture the risk of disruptions faced by the EU (Portuguese) economy associated to low diversification of extra EU sources. In particular, this indicator identifies products for which EU (Portugal's) imports, in values, are highly concentrated in a few extra EU countries. To this end, the Herfindahl Hirschman Index (HHI) index is used, computed as detailed below:

$$CDI_1 = \sum_{i=1}^{n} (s_i{}^2) > 0.4$$

where $s_i$ is the market share of the extra EU supplying country *i* in EU (Portugal's) imports, and *n* is the total number of extra EU supplying countries.

The indicator suggests that the higher the concentration, the lower the diversification of a country's imports from extra EU sources. Consequently, this threshold implies that the EU import value originates mainly from 2.5 foreign countries. It is important to acknowledge that the diversification of imports could be complemented with additional information on the trading partner in question, so as to assess the overall level of risk.

**2) The relative importance of extra EU imports in total demand**

The second indicator measures the importance of extra EU imports in total EU (Portugal's) imports, to identify the products for which EU (Portugal) mainly relies on foreign sources. It is computed as the share of extra EU imports in total EU (Portugal) imports (in values):

$$CDI_2 = \frac{extra\ EU\ import\ value}{total\ import\ value} > 0.5$$

The indicator suggests that the higher the share, the higher the importance of extra EU imports in total imports. Hence, this threshold implies that the value of extra EU imports accounts for the majority (> 50%) of the value of total EU (Portugal's) imports.

**3) Substitutability of extra EU imports with EU production:**

The third indicator aims at capturing whether the EU (Portuguese) production can cover the extra EU import needs in the event of trade disruptions. For this purpose, EU total exports, including intra and extra EU exports, are used as a proxy for the EU internal production capacity.38 For each product, the ratio between the extra EU import value and the total EU export value (i.e. extra and intra EU exports) is computed as detailed below:

$$CDI_3 = \frac{extra\ EU\ import\ value}{total\ export\ value} > 1$$

The indicator suggests that the higher the ratio, the less able the EU (Portugal) is to substitute extra EU imports with EU (Portuguese) production in case of a trade disruption. Therefore, this threshold implies that the value of extra EU imports is higher than the value of total EU (Portuguese) exports.

Relying on international trade does not necessarily lead to vulnerabilities per se. It's rather the concentration of supply in some of the identified products, that are potentially considered of strategic importance, and the risks they entail to the resilience and functioning of the EU's industrial ecosystems that renders a vulnerability for the EU.

In the case of the EU the bottom-up quantitative analysis was followed by a two-steps qualitative assessment to narrow down the identified dependencies to the most sensitive ecosystems (Figure 13), with a possible strategic nature, resulting in a vulnerability for the EU economy[11], or that require further in-depth analysis to assess their impact and strategic nature.

**Figure 13 – More sensitive ecosystems for the purpose of the strategic and capacities report**


Source: Image reproduced from European Commission (2021c, 2022b)
Note: Circles represent a selection of more sensitive ecosystems for the purpose of the staff working document

In the case of the EU, the combination of this quantitative and qualitative assessment, using 2019 trade flows, led to a list of 137 HS-6 products (from a total of 5200 products analysed) in the most sensitive ecosystems for which the EU is highly dependent on imports

[11] Only those dependencies that significantly affect the EU's core interests and limit the EU's freedom to analyse, make decisions and act according to its own priorities can be considered strategic.

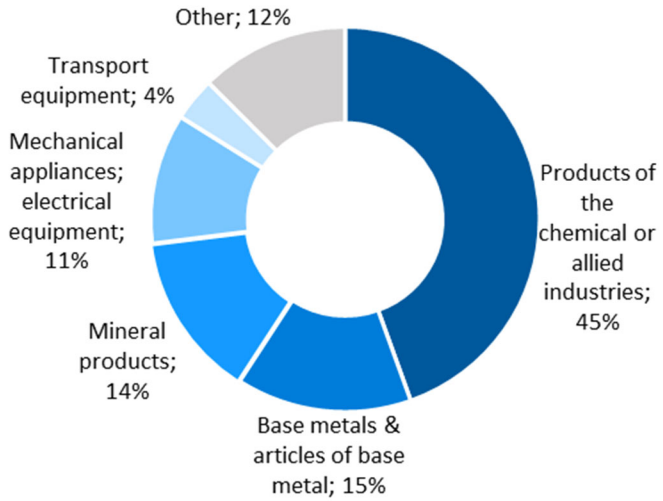
from third countries. These pre-identified products represent about 6% of the EU's total import value of goods, represents 6% of the extra-EU import value of goods and refers mainly to chemicals and raw or processed metal products (Figure 14; Annex II).

In the case of Portugal, performing only the bottom-up (quantitative) analysis part of the methodology, led to a list of 159 HS-6 products, representing 7% of extra-EU import value of goods. The product mix is clearly different from the EU, essentially focusing on textiles, chemicals, and vegetable products (Figure 15; Annex III).

Even though the results are not exactly comparable, cross-referencing the two lists leads to a total of 10 HS-6 overlapping products, i.e., products for which Portugal is highly dependent on imports from third countries, that match EU's strategic dependencies. These "common dependencies" refer mostly to mineral and chemicals products (Figure 16; Table 1).

**European Union**

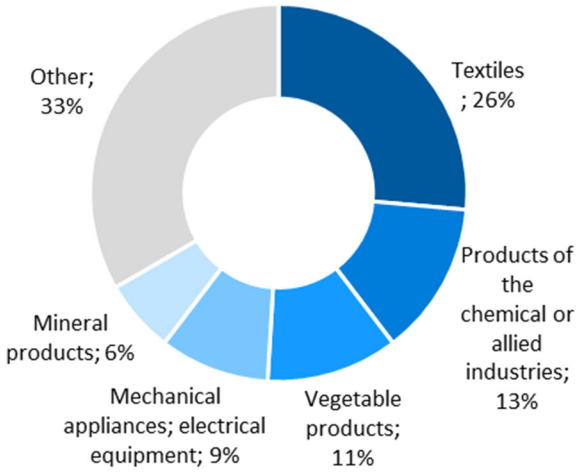
**Figure 14 - EU foreign strategic dependencies products (HS Sections), 2019**




Source: Own elaboration based on European Commission (2022b)

**Portugal [1]**

**Figure 15 – Portugal's foreign dependencies products (HS Sections), 2019**




Source: Own elaboration, based on International Trade data from Statistics Portugal
[1] Quantitative analysis

## Portugal's foreign dependencies, that match EU's strategic dependencies

*2019*

Figure 16

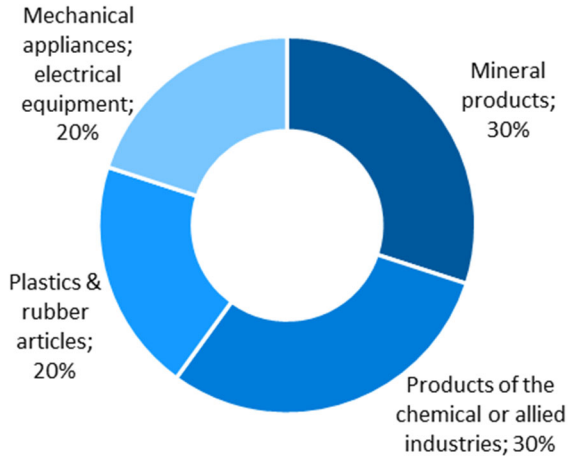



Table 1

| HS 6-Digit Code | HS Description |
|---|---|
| ***Mineral products*** | |
| 250620 | Quartzite, merely cut, by sawing or otherwise, in blocks or slabs of a square or rectangular shape |
| 250830 | Fireclay (excl. kaolin and other kaolinic clays and expanded clay) |
| 252930 | Leucite, nepheline and nepheline syenite |
| ***Products of the chemical or allied industries*** | |
| 284011 | Anhydrous disodium tetraborate "refined borax" |
| 293333 | Alfentanil "INN", anileridine "INN", bezitramide "INN", bromazepam "INN", difenoxin "INN", diphenoxylate "INN", dipipanone "INN", fentanyl "INN", ketobemidone "INN", methylphenidate "INN", pentazocine "INN", pethidine "INN", pethidine "INN" intermediate A, phencyclidine "INN" "PCP", phenoperidine "INN", pipradol "INN", piritramide "INN", propiram "INN" and trimeperidine "INN", and salts thereof |
| 293750 | Prostaglandins, thromboxanes and leukotrienes, their derivatives and structural analogues, used primarily as hormones |
| ***Plastics & rubber articles*** | |
| 392071 | Plates, sheets, film, foil and strip, of non-cellular regenerated cellulose, not reinforced, laminated, supported or similarly combined with other materials, without backing, unworked or merely surface-worked or merely cut into squares or rectangles (excl. self-adhesive products, and floor, wall and ceiling coverings of heading 3918) |
| 400260 | Isoprene rubber "IR", in primary forms or in plates, sheets or strip |
| ***Mechanical appliances; electrical equipment*** | |
| 841121 | Turbopropellers of a power <= 1.100 kW |
| 854040 | Data/graphic display tubes, monochrome; data/graphic display tubes, colour, with a phosphor dot screen pitch of < 0,4 mm (excl. photo cathode tubes and cathode ray tubes) |

Source: Own elaboration based on International Trade data from Statistics Portugal

Vulnerability may also be linked to specific partners due to political tensions and geo-political uncertainty, posing important risks for the EU at an international level.

Over half of the EU strategic dependencies originate in China (52%), followed by Vietnam (11%) and Brazil (5%) (Figure 17).

In the case of Portugal, the three main foreign sources of the Portuguese import value for the 159 HS6 products identified are the USA (24%), Colombia (9%) and Uruguay (6%) (Figure 18).

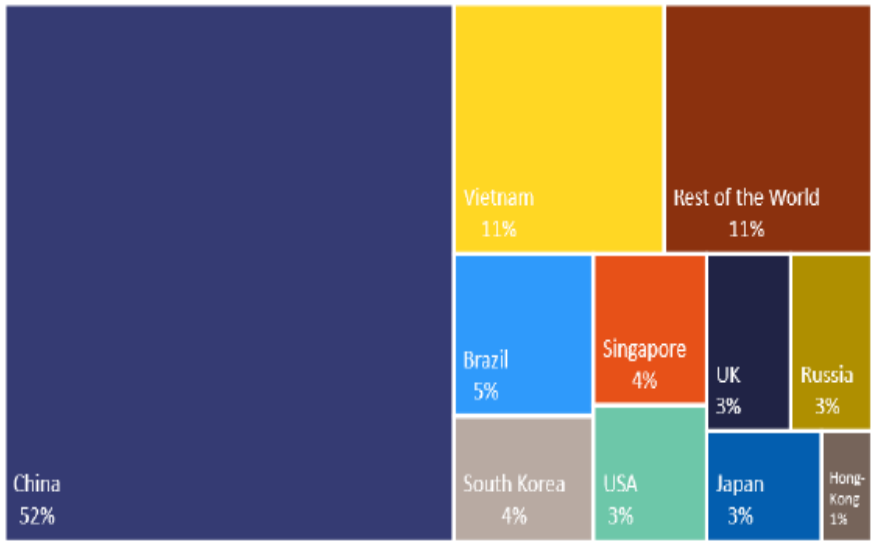
Zooming in on the subset of "common dependencies" (Figure 19), reveals a more similar, but still distinct, country-of-origin mix, between EU average and Portugal. In the case of the EU (Figure 10a), the USA is the top supplier (24%), followed by Russian Federation (20%) and Canada (11%), whereas in the case of Portugal (Figure 10b), Russian Federation refers to the top supplier (32%), mainly related with the import of rubber articles, followed by Singapore (18%) and Canada (13%).

This highlights that even though the undeniable usefulness of this analysis, to acknowledge the challenges at stake, the EU average does not account for important disparities among its member countries. Bringing the analysis down to the country-level can lead to different conclusions, according to, for example, different economic dimensions, different specialization patterns, or different resource profiles.

Another important limitation that adds to the EU average dimension is that the identification of dependent products would ideally use more granular product information (for example at the 8 or 10-digit level of the Harmonised Standardisation (HS) system, instead of the 6-digit level that is used in the proposed methodology). This has to do with the fact that dependencies may dissolve when using upper-level codes. However, it would jeopardise international comparability, because at this level of disaggregation, comparable data sources across all countries in the world are not available, as for example extra-EU countries have their own coding system for the 8$^{th}$ and 10$^{th}$ digit of the HS.

## European Union

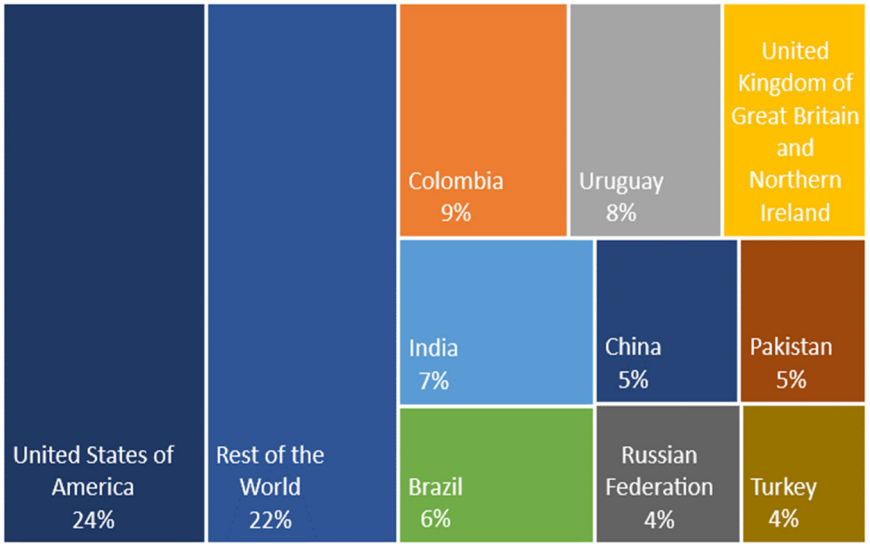
**Figure 17 - Share of EU imports value of dependent products, 2019**




Source: Image reproduced from European Commission (2022b); European Commission based on BACI database

## Portugal [1]

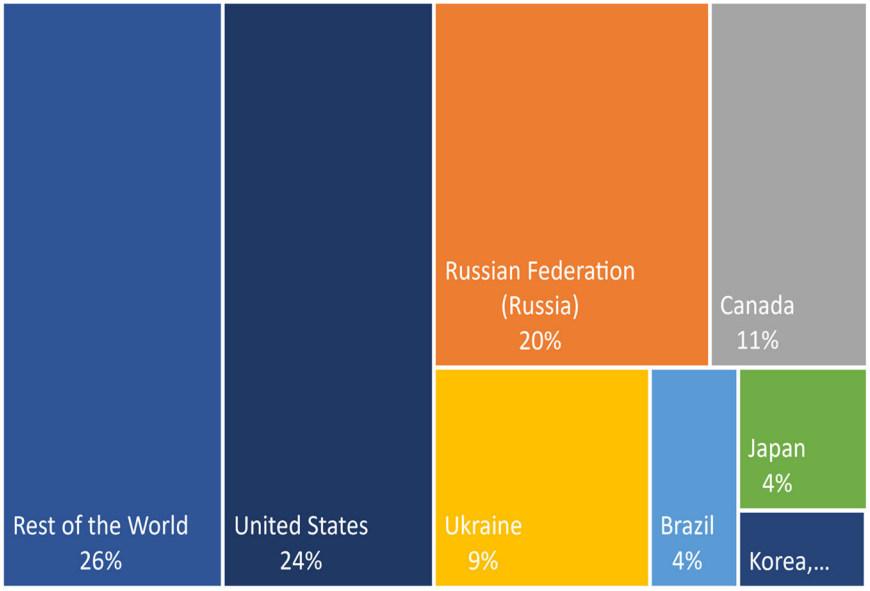
**Figure 18 – Share of Portugal's imports value of dependent products, 2019**




Source: Own elaboration based on International Trade data from Statistics Portugal
[1] Quantitative analysis

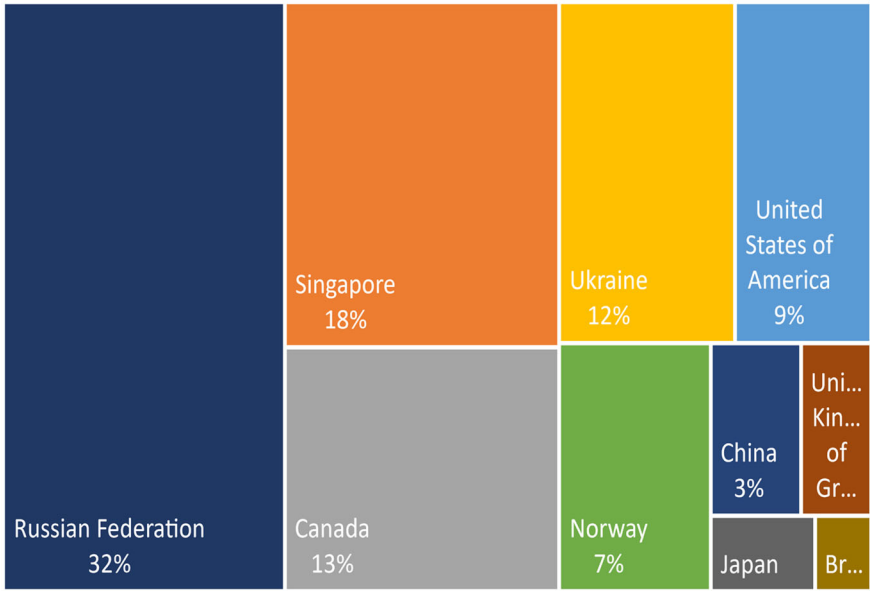
**Figure 19 – Share of "Common dependencies" import value of dependent products**

**a) European Union**




Source: Own elaboration based on International Trade data from Eurostat

**b) Portugal**




Source: Own elaboration based on International Trade data from Statistics Portugal
[1] Quantitative analysis

Aside from identification, monitoring foreign dependencies is also of key importance. First because firms adapt and undergo strategies to develop resilience to supply-side shocks on their own, such as diversifying import sources, if there are alternatives, substituting imports with domestic production, whenever possible, and stockpiling to ensure that supply chains can continue to operate. But also, because consumers preferences change, and firms have to adapt to these trends by innovating, reinventing their products, or adjusting their supply chain, to meet environmental and labour standards. This dynamic may lead to some turbulence in the set of foreign dependencies, both in terms of products and partner countries thus requiring regular updating to attend the changing nature of dependencies.

Subsequently, it is important to extend the present analysis on two related strands. The first one aims to capture changing or emerging trends in trade dependencies, and the second one tries to eliminate this implicit turbulence to focus on the "stable" dependencies only, as these are more permanent in nature and require different, more structural, solutions.

To capture changing or emerging trends in trade dependencies, we performed the same exercise for 2021 and compared it to the pre-pandemic year of 2019. In 2021, the Portuguese list of foreign dependencies grew to 176 HS6 products (Figure 20; Annex IV), by including additional vulnerabilities in what refers to, for example, mechanical appliances, electrical equipment, food and beverages and wood products. On the other hand, for example, the number of vegetables and mineral products, in the list has decrease. The country-of-origin mix of these products has also changed, with China ranking on top in 2021 (29%; +23 p.p. as compared to 2019), followed by the USA (16%; -9 p.p.) and Russian Federation (10%; +5 p.p.).

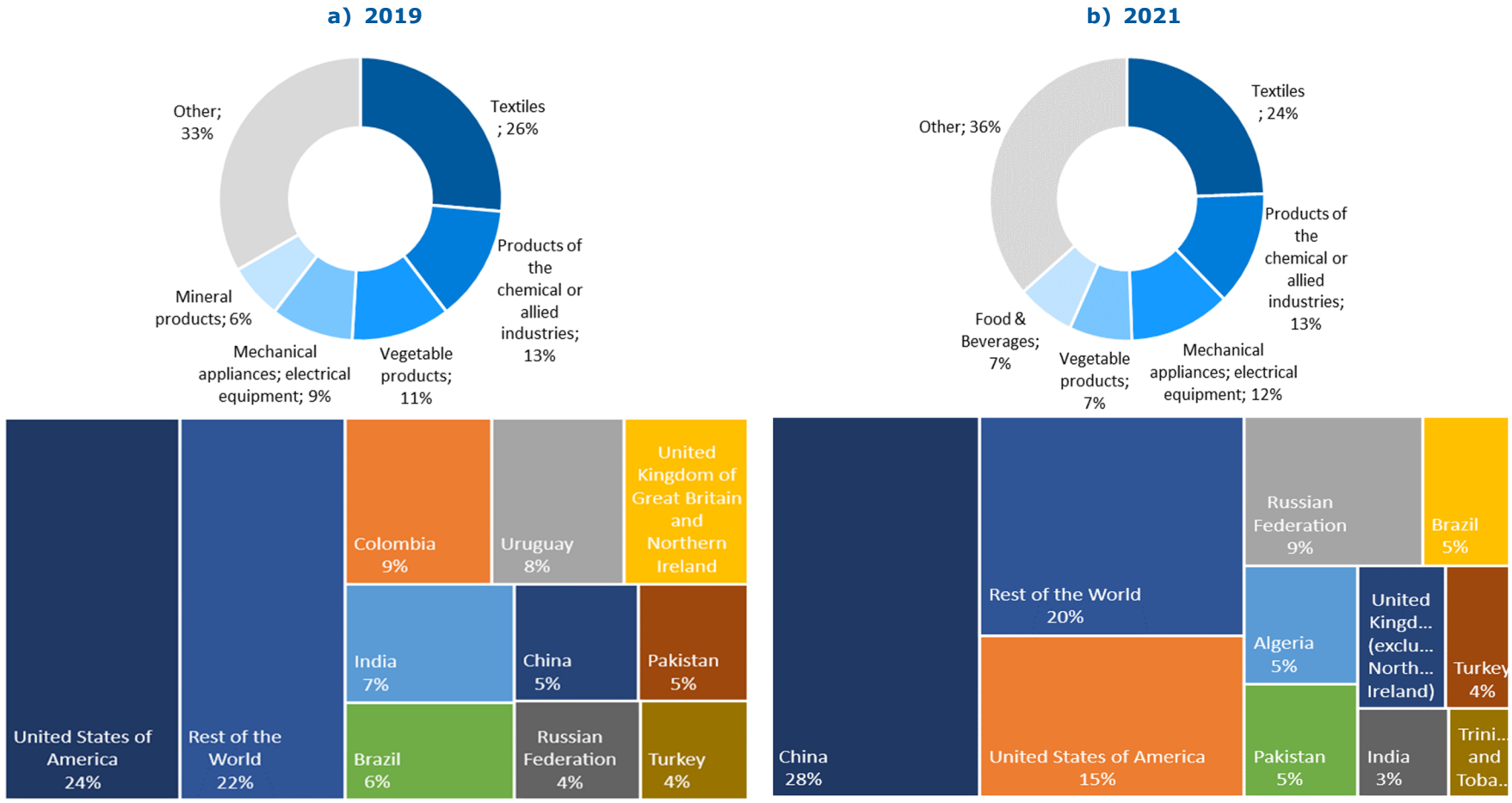
To eliminate this implicit turbulence, and focus only on the "stable" dependencies, we have performed the same bottom-up (quantitative) analysis for a three-year period ranging from 2019 to 2021, imposing the referred three core dependencies indicators and their respective thresholds in the three years simultaneously. We have reached a list of 55 products of "stable" dependencies for Portugal (Figure 22; Annex V), referring mainly to textiles, vegetable and chemical products. The country-of-origin of these "stable" dependencies are the USA (25%), Russia (11%) and Brazil (9%).

COVID-19 and Ukraine Invasion made particularly relevant the need to ensure a diverse supplier base. For example, China's stringent measures associated to the Zero-COVID-19 strategy and the war in Ukraine are both major sources of uncertainty , that have been causing persistent disruptions in industrial production, thus highlighting the risks associated to the concentration of supply sources.

For Portugal, China and Russia together concentrated:

- 9% of Portugal's foreign dependencies in 2019 (55% in the case of EU)
- 37% of Portugal's foreign dependencies in 2021
- 18% of Portugal's "stable" foreign dependencies throughout 2019-2021

**Figure 20 – Evolution of Portugal's foreign dependencies**
*2019 versus 2021*




Source: Own elaboration based on International Trade data from Statistics Portugal

## 2021 Portugal's foreign dependencies, that match 2019 EU's strategic dependencies

Figure 21

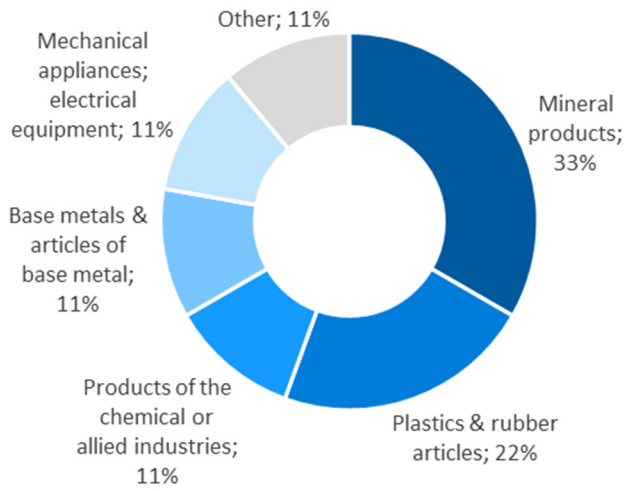


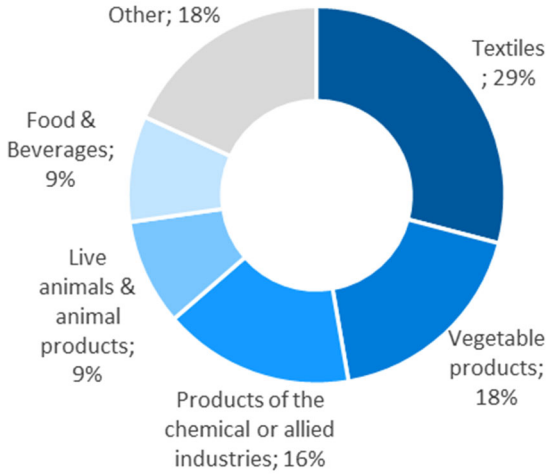

Table 2

| HS 6-Digit Code | HS Description |
|---|---|
| ***Mineral products*** | |
| 250620 | Quartzite, merely cut, by sawing or otherwise, in blocks or slabs of a square or rectangular shape |
| 250830 | Fireclay (excl. kaolin and other kaolinic clays and expanded clay) |
| 252930 | Leucite, nepheline and nepheline syenite |
| ***Products of the chemical or allied industries*** | |
| 280470 | Phosphorus |
| ***Plastics & rubber articles*** | |
| 392071 | Plates, sheets, film, foil and strip, of non-cellular regenerated cellulose, not reinforced, laminated, supported similarly combined with other materials, without backing, unworked or merely surface-worked or merely c into squares or rectangles (excl. self-adhesive products, and floor, wall and ceiling coverings of heading 3918 |
| 400260 | Isoprene rubber "IR", in primary forms or in plates, sheets or strip |
| ***Base metals & articles of base metal*** | |
| 720310 | Ferrous products obtained by direct reduction of iron ore, in lumps, pellets or similar forms |
| ***Mechanical appliances; electrical equipment*** | |
| 841121 | Turbopropellers of a power <= 1.100 kW |
| ***Transport equipment*** | |
| 871491 | Frames and forks, and parts thereof, for cycles, n.e.s. (excl. for motorcycles) |

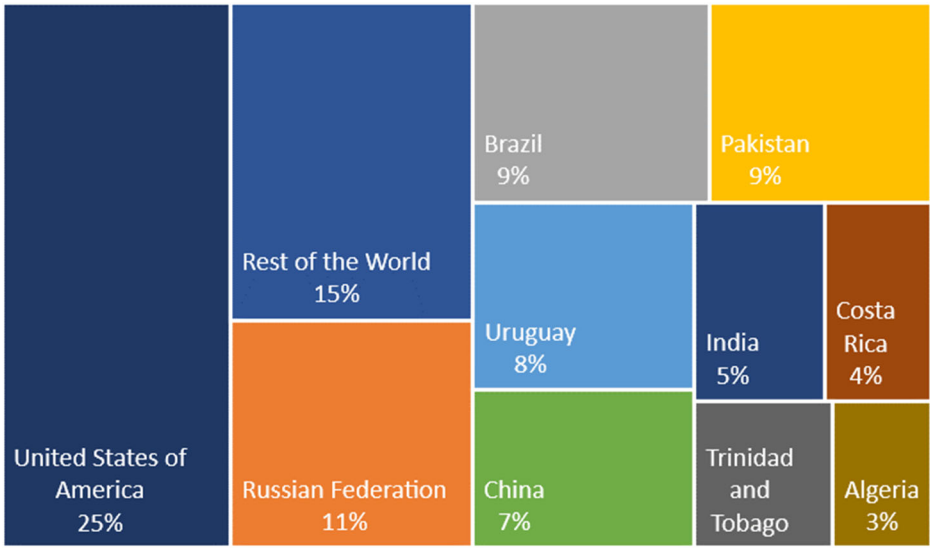
Source: Own elaboration based on International Trade data from Statistics Portugal

**Figure 22 – Portugal's "stable" foreign dependencies**
*2019-2021*

**a) Portugal's foreign dependencies products (HS Sections)**




**b) Share of Portugal's imports value of dependent products**




Source: Own elaboration based on International Trade data from Statistics Portugal

Finally, it should be emphasized that acknowledging this heterogeneity among European Union's Member-States, over time, untangling short-term from more structural dependencies is of capital importance to build resilience from within, but it can also contribute to build up or reinforce internal strengths and production capacities in the EU, by scanning trade diversion opportunities for EU Members-States.

To this purpose, as a proxy for internal production capacity, we computed Portugal's trade balance for each of the 137 HS-6 products in the most sensitive ecosystems for which the EU is highly dependent on imports from third countries, to scan potential trade opportunities for the Portuguese economy, yielding a total of 9 products for which Portugal had a trade surplus (> 100 000 EUR), throughout the period 2019-2021 (Figure 23), thus potentially qualifying to supply the intra-EU-market as an alternative to non-European sources.

## 2019 EU's strategic dependencies where Portugal had a positive (> 100 000 EUR) net balance throughout the period 2019-2021

Figure 23

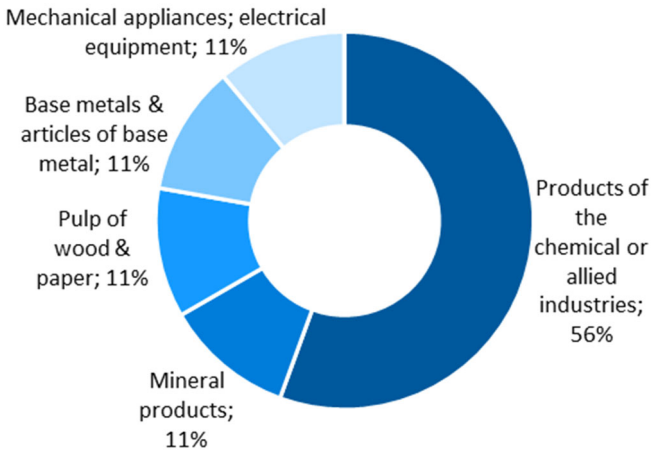



Table 3

| HS 6-Digit Code | Description |
|---|---|
| ***Mineral products*** | |
| 261900 | Slag, dross, scalings and other waste from the manufacture of iron or steel (excl. granulated slag) |
| ***Products of the chemical or allied industries*** | |
| 290110 | Saturated acyclic hydrocarbons |
| 292142 | Aniline derivatives and their salts |
| 293712 | Insulin and its salts, used primarily as hormones |
| 293722 | Halogenated derivatives of corticosteroidal hormones |
| 310390 | Mineral or chemical phosphatic fertilisers (excl. superphosphates, those in pellet or similar forms, or in packages with a gross weight of <= 10 kg) |
| ***Pulp of wood & paper*** | |
| 470329 | Semi-bleached or bleached non-coniferous chemical wood pulp, soda or sulphate (excl. dissolving grades) |
| ***Base metals & articles of base metal*** | |
| 720280 | Ferro-tungsten and ferro-silico-tungsten |
| ***Mechanical appliances; electrical equipment*** | |
| 848020 | Mould bases (other than of graphite or other carbon, ceramic meterials or glass) |

Source: Own elaboration based on International Trade data from Statistics Portugal

## 5. Final remarks

**Globalisation is an important driver of efficiency gains, but it is also prone to significant challenges related to global value chains' dependence and disruptions due to exogenous risks**. Over the years, the European Union has been faced with these challenges, with COVID-19 pandemics and the invasion o Ukraine re-igniting the debate around the pros and cons of a global production system, with the world economy undergoing a possible reconfiguration of value chains' geographies.

**In a context of increased global competition and geopolitical instability, the EU is updating its industrial strategy to increase Europe's self-sufficiency in strategic sectors, boost its own industry and assert its economic power**. The European Commission has put forward an analytical approach to build a better understanding of the needs and challenges faced by the EU economy in this process and shape the appropriate policy actions that will set the way to increase supply-chain resilience, improve crisis preparedness and deliver the objectives of the industrial strategy.

Acknowledging the richness of these assessments to set the stage for well-designed and future-proof policies, this article transposes EU's methodology to the Portuguese case on two specific data-driven analytical approaches – industrial ecosystems and strategic dependencies.

The first approach reproduces some of the proposed key performance indicators (KPI's) based on key **industrial ecosystems** to assess its economic profile for the Portuguese economy and uses EU as a benchmark to gain comparative insights in terms of size, performance, strength, and international dimension of each ecosystem. The results highlight that the Portuguese economy has a different specialization profile compared with the European economy, calling for different policy approaches in the implementation of the industrial strategy that properly reflects its specific needs, vulnerabilities, and challenges.

The second approach performs a **strategic dependencies** analysis, to map Portugal's foreign dependencies and gain a country level perspective that improves the understanding of common versus specific risks for the Portuguese economy vis-à-vis EU's economy. Building resilience has become a top priority in this new strategy, and as stated by the European Commission, "*Identifying and addressing the strategic dependencies is an essential step to increasing resilience".* Transposing European Commission's methodology to the Portuguese economy highlights that even though the undeniable usefulness of the analysis to acknowledge the challenges at stake, the EU average hides important disparities among its member countries. Bringing the analysis down to the country-level can lead to different conclusions, according to, for example, different economic dimensions, different specialization patterns, or different resource profiles. In this sense, it should also be implemented at the country-level, to enrich the debate on EU's foreign dependencies and deliver better policy actions across Europe. In addition, aside from identification, monitoring

foreign dependencies is also of key importance, and in this sense, it is important to extend the original analysis to capture changing or emerging trends in trade dependencies, but also to eliminate the implicit turbulence and focus on the "stable" dependencies only, as these are more permanent in nature and require different, more structural, solutions.

In conclusion, **providing the best framework conditions to empower EU's industry calls for the need to take heterogeneity into account**. Acknowledging the existing heterogeneity across industrial ecosystems and European Union's Member-States, over time, untangling short-term from more structural needs, challenges and dependencies is of capital importance to close the gap and build resilience from within. But it can also contribute to build up or reinforce internal strengths and production capacities in the EU, by allowing to scan trade diversion opportunities for EU Members-States. For example, among the 137 HS-6 products in the most sensitive ecosystems for which the EU is highly dependent on imports from third countries, Portugal had a trade surplus (> 100 000 EUR) in a total of nine products, throughout the period 2019-2021, thus potentially qualifying to supply the intra-EU-market as an alternative to non-European sources.

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# Annexes

## Annex I

## Industrial Ecosystems definition

### a)

| Ecosystem | NACE_R2 | Description | Share* |
|---|---|---|---|
| Aerospace & Defence | C25 | Manufacture of fabricated metal products, except machinery and equipment | 0.01^ |
| Aerospace & Defence | C26 | Manufacture of computer, electronic and optical products | 0.44 |
| Aerospace & Defence | C27 | Manufacture of electrical equipment | 0.24 |
| Aerospace & Defence | C30 | Manufacture of other transport equipment | 0.68 |
| Aerospace & Defence | C33 | Repair and installation of machinery and equipment | 0.08^ |
| Aerospace & Defence | H51 | Air transport | 0.09 |
| Aerospace & Defence | H52 | Warehousing and support activities for transportation | 0.18 |
| Aerospace & Defence | J61 | Telecommunications | 0.07 |
| Aerospace & Defence | N80 | Security and investigation activities | 1 |
| Agri-food | A | Agriculture, forestry and fishing | 1 |
| Agri-food | C10 | Manufacture of food products | 1 |
| Agri-food | C11 | Manufacture of beverages | 1 |
| Agri-food | C12 | Manufacture of tobacco products | 1 |
| Construction | C31 | Manufacture of furniture | 1 |
| Construction | F | Construction | 1 |
| Construction | M71 | Architectural and engineering activities; technical testing and analysis | 1 |
| Construction | N81 | Services to buildings and landscape activities | 1 |
| Cultural and Creative Industries | C18 | Printing and reproduction of recorded media | 1 |
| Cultural and Creative Industries | C32 | Other manufacturing | 0.08 |
| Cultural and Creative Industries | G47 | Retail trade, except of motor vehicles and motorcycles | 0.01 |
| Cultural and Creative Industries | J58 | Publishing activities | 1 |
| Cultural and Creative Industries | J59 | Motion picture, video and television programme production, sound recording and music publishing activities | 1 |
| Cultural and Creative Industries | J60 | Programming and broadcasting activities | 1 |
| Cultural and Creative Industries | J62_63 | Computer programming, consultancy and related activities | 0.004 |
| Cultural and Creative Industries | M71 | Architectural and engineering activities; technical testing and analysis | 0.15^ |
| Cultural and Creative Industries | M73 | Advertising and market research | 1 |
| Cultural and Creative Industries | M74 | Other professional, scientific and technical activities and veterinary activities | 0.44 |
| Cultural and Creative Industries | N77 | Rental and leasing activities | 0.0001^ |
| Cultural and Creative Industries | P85 | Education | 0.1 |
| Cultural and Creative Industries | R90-R92 | Creative, arts and entertainment activities; libraries, archives, museums and other cultural activities; gambling and betting activities | 0.8 |
| Cultural and Creative Industries | S94 | Activities of membership organisations | 0.02 |
| Cultural and Creative Industries | S95 | Repair of computers and personal and household goods | 0.26 |
| Digital | C26 | Manufacture of computer, electronic and optical products | 0.29 |
| Digital | J58 | Publishing activities | 1 |
| Digital | J61 | Telecommunications | 0.97 |
| Digital | J62 | Computer programming, consultancy and related activities | 1 |
| Digital | J63 | Information service activities | 1 |
| Digital | S95 | Repair of computers and personal and household goods | 0.48 |
| Electronics | C26 | Manufacture of computer, electronic and optical products | 1 |
| Electronics | C28 | Manufacture of machinery and equipment n.e.c. | 0.10^ |
| Energy - Renewables | C27 | Manufacture of electrical equipment | 0.38 |
| Energy - Renewables | D35 | Electricity, gas, steam and air conditioning supply | 0.29 |
| Energy Intensive Industries | C16 | Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials | 1 |
| Energy Intensive Industries | C17 | Manufacture of paper and paper products | 1 |
| Energy Intensive Industries | C19 | Manufacture of coke and refined petroleum products | 1 |
| Energy Intensive Industries | C20 | Manufacture of chemicals and chemical products | 1 |
| Energy Intensive Industries | C22 | Manufacture of rubber and plastic products | 1 |
| Energy Intensive Industries | C23 | Manufacture of other non-metallic mineral products | 1 |
| Energy Intensive Industries | C24 | Manufacture of basic metals | 1 |
| Health | C21 | Manufacture of basic pharmaceutical products and pharmaceutical preparations | 1 |
| Health | C32 | Other manufacturing | 1 |
| Health | Q86 | Human health activities | 1 |
| Health | Q87_Q88 | Residential care activities and social work activities without accommodation | 1 |
| Mobility - Transport - Automotive | C27 | Manufacture of electrical equipment | 0.03 |
| Mobility - Transport - Automotive | C29 | Manufacture of motor vehicles, trailers and semi-trailers | 1 |
| Mobility - Transport - Automotive | C30 | Manufacture of other transport equipment | 0.32 |
| Mobility - Transport - Automotive | G45 | Wholesale and retail trade and repair of motor vehicles and motorcycles | 1 |
| Mobility - Transport - Automotive | H49 | Land transport and transport via pipelines | 0.52 |
| Mobility - Transport - Automotive | H50 | Water transport | 0.69 |
| Mobility - Transport - Automotive | H52 | Warehousing and support activities for transportation | 0.39 |
| Proximity & Social Economy | G47 | Retail trade, except of motor vehicles and motorcycles | 0.16 |
| Proximity & Social Economy | I | Accommodation and food service activities | 0.14 |
| Proximity & Social Economy | L | Real estate activities | 0.08 |
| Proximity & Social Economy | N81 | Services to buildings and landscape activities | 0.28 |
| Proximity & Social Economy | N82 | Office administrative, office support and other business support activities | 0.11 |
| Proximity & Social Economy | Q87_Q88 | Residential care activities and social work activities without accommodation | 1 |
| Proximity & Social Economy | S95 | Repair of computers and personal and household goods | 1 |
| Proximity & Social Economy | S96 | Other personal service activities | 1 |
| Proximity & Social Economy | T | Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use | |
| Retail | G46 | Wholesale trade, except of motor vehicles and motorcycles | 1 |
| Retail | G47 | Retail trade, except of motor vehicles and motorcycles | 1 |
| Retail | H53 | Postal and courier activities | 1 |
| Textile | C13 | Manufacture of textiles | 1 |
| Textile | C14 | Manufacture of wearing apparel | 1 |
| Textile | C15 | Manufacture of leather and related products | 1 |
| Tourism | H49 | Land transport and transport via pipelines | 0.45 |
| Tourism | H50 | Water transport | 0.21 |
| Tourism | H51 | Air transport | 0.91 |
| Tourism | I | Accommodation and food service activities | 1 |
| Tourism | N79 | Travel agency, tour operator and other reservation service and related activities | 1 |
| Tourism | N82 | Office administrative, office support and other business support activities | 1 |
| Tourism | R90-R92 | Creative, arts and entertainment activities; libraries, archives, museums and other cultural activities; gambling and betting activities | 0.67 |
| Tourism | R93 | Sports activities and amusement and recreation activities | 1 |

* Shares shown in the table are computed based on value-added. Shares computed based on employment data are also used for EU data but not shown. For this reason, in the case of Portugal, we assume the same shares for both value-added and employment.
^ Additional share on top of horizontal component

b)

| | C25 | C28 | C33 | E36 | E37-E39 | M69_M70 | M71 | M72 | N77_N78 |
|---|---|---|---|---|---|---|---|---|---|
| Aerospace & Defence | 6.74% | 6.79% | 7.76% | 1.74% | 2.74% | 2.50% | 3.37% | 5.65% | 2.71% |
| Agri-food | 6.62% | 7.82% | 11.85% | 12.18% | 9.48% | 7.72% | 6.02% | 7.21% | 8.21% |
| Construction | 30.52% | 19.84% | 15.54% | 10.25% | 13.67% | 11.51% | 25.68% | 10.41% | 12.92% |
| Cultural and Creative Industries | 0.90% | 1.26% | 1.32% | 2.47% | 1.89% | 2.77% | 2.03% | 2.72% | 2.85% |
| Digital | 2.09% | 3.05% | 3.29% | 2.22% | 2.78% | 5.13% | 4.42% | 6.90% | 5.17% |
| Electronics | 1.96% | 2.26% | 1.53% | 0.69% | 1.02% | 1.17% | 1.46% | 5.07% | 1.30% |
| Energy - Renewables | 1.56% | 1.60% | 1.64% | 1.13% | 1.43% | 0.97% | 1.17% | 0.83% | 0.85% |
| Energy Intensive Industries | 3.63% | 4.01% | 4.74% | 4.01% | 8.62% | 4.91% | 3.68% | 3.06% | 3.13% |
| Health | 5.16% | 5.62% | 6.86% | 11.10% | 8.53% | 8.76% | 7.61% | 14.22% | 10.00% |
| Mobility - Transport - Automotive | 23.55% | 27.76% | 16.53% | 5.82% | 9.82% | 8.62% | 9.29% | 13.00% | 8.55% |
| Proximity, Social Economy and Civil Security | 2.35% | 3.00% | 3.57% | 7.65% | 5.37% | 5.72% | 4.42% | 4.65% | 6.12% |
| Retail | 4.42% | 5.73% | 6.47% | 7.41% | 7.76% | 13.45% | 8.00% | 8.14% | 12.69% |
| Textile | 0.85% | 1.00% | 0.97% | 1.29% | 1.44% | 1.15% | 1.12% | 1.15% | 0.99% |
| Tourism | 3.68% | 5.01% | 7.17% | 10.46% | 7.12% | 6.76% | 5.49% | 4.85% | 8.28% |

# Annex II

## EU's Strategic Dependencies, 2019

| H6-Digit Code (2012) | H6-Digit Code (2017) | HDescription |
|---|---|---|
| ***Base metals & articles of base metal*** | | |
| 720219 | 720219 | Ferro-alloys: ferro-manganese |
| 720229 | 720229 | Ferro-silicon |
| 720280 | 720280 | Ferro-tungsten and ferro-silico-tungsten |
| 720293 | 720293 | Ferro-niobium |
| 720310 | 720310 | Ferrous products: obtained by direct reduction |
| 721891 | 721891 | Steel, stainless: semi-finished products |
| 741022 | 741022 | Copper: foil |
| 750110 | 750110 | Nickel: nickel mattes |
| 760320 | 760320 | Aluminium: powders of lamellar structure, flakes |
| 760410 | 760410 | Aluminium: (not alloyed), bars, rods and profiles |
| 810294 | 810294 | Molybdenum: unwrought |
| 810411 | 810411 | Magnesium: unwrought |
| 810430 | 810430 | Magnesium: raspings, turnings and granules |
| 810590 | 810590 | Cobalt: articles |
| 810730 | 810730 | Cadmium: waste and scrap |
| 811020 | 811020 | Antimony: waste and scrap |
| 811100 | 811100 | Manganese: articles thereof |
| 811219 | 811219 | Beryllium and articles thereof |
| 820420 | 820420 | Tools, hand: interchangeable spanner sockets |
| 830110 | 830110 | Padlocks: metal, key combination or electrically operated |
| ***Footwears and gears*** | | |
| 650500 | 650500 | Hats and other headgear: (COVID-19 related) |
| 650691 | 650691 | Headgear |
| ***Mechanical appliances; electrical equipment*** | | |
| 840721 | 840721 | Engines: outboard motors for marine propulsion |
| 840731 | 840731 | Engines: reciprocating piston engines, used for the propulsion of vehicles |
| 841121 | 841121 | Turbo-propellers: power < 1100kW |
| 847130 | 847130 | Automatic data processing machines: portable |
| 848020 | 848020 | Mould bases |
| 850133 | 850133 | Electric motors and generators: DC, 75kW < output < 375kW |
| 850511 | 850511 | Magnets: permanent magnets of metal |
| 850519 | 850519 | Permanent magnets (other than of metal) |
| 850750 | 850750 | Electric accumulators: nickel-metal hydride |
| 851712 | 851712 | Telephones for cellular networks |
| 852713 | 852713 | Radio broadcast receivers: apparatus combined with sound recording or reproducing apparatus |
| 852719 | 852719 | Radio broadcast receivers operating without an external power source |
| 852792 | 852792 | Radio-broadcast receivers combined with a clock |
| 854040 | 854040 | Tubes: data/graphic display tubes, monochrome |
| 852851 | 852852 | Monitors used in an automatic data processing system |
| ***Mineral products*** | | |
| 250620 | 250620 | Quartzite |
| 250830 | 250830 | Clays: fireclay, whether or not calcined |
| 250860 | 250860 | Clays: mullite |
| 252510 | 252510 | Mica: crude and rifted |
| 252530 | 252530 | Mica: waste |
| 252800 | 252800 | Natural borates: natural boric acid |
| 252910 | 252910 | Feldspar |
| 252921 | 252921 | Fluorspar |
| 252930 | 252930 | Nepheline and nepheline syenite |
| 260200 | 260200 | Manganese ores and concentrates |
| 261000 | 261000 | Chromium ores and concentrates |
| 261210 | 261210 | Uranium ores and concentrates |
| 261390 | 261390 | Molybdenum ores and concentrates |
| 261710 | 261710 | Antimony ores and concentrates |
| 261900 | 261900 | Slag, dross: from the manufacture of iron or steel |
| 270111 | 270111 | Coal |
| 270820 | 270820 | Pitch coke |
| 271129 | 271129 | Petroleum gases and other gaseous hydrocarbons |
| 271311 | 271311 | Petroleum coke |
| ***Miscellaneous manufactured articles*** | | |
| 940179 | 940179 | Seats: with metal frames, not upholstered |
| 950450 | 950450 | Video game consoles and machines |
| ***Plastics & rubber articles*** | | |
| 391211 | 391211 | Cellulose acetates |
| 392071 | 392071 | Plastics: plates, sheets, film, foil and strip (not self-adhesive), of regenerated cellulose |
| 392620 | 392620 | Plastics: gloves (COVID-19 related) |
| 400260 | 400260 | Rubber: synthetic, isoprene rubber (IR) |
| ***Precious or semi-precious stones & metals*** | | |
| 710210 | 710210 | Diamonds |
| 710590 | 710590 | Precious and semi-precious stones, excluding diamonds |

*[cont.]*

*[cont.]*

| H6-Digit Code (2012) | H6-Digit Code (2017) | HDescription |
|---|---|---|
| ***Precision & medical instruments*** | | |
| 901380 | 901380 | Optical devices: including liquid crystal devices |
| 910811 | 910811 | Watch movements: complete and assembled, electrically operated |
| 911019 | 911019 | Watches: rough movements |
| ***Products of the chemical or allied industries*** | | |
| 280120 | 280120 | Iodine |
| 280130 | 280130 | Fluorine: bromine |
| 280470 | 280470 | Phosphorus |
| 281990 | 281990 | Chromium oxides and hydroxides |
| 282520 | 282520 | Lithium oxide and hydroxide |
| 282570 | 282570 | Molybdenum oxides and hydroxides |
| 283325 | 283325 | Sulphates: of copper |
| 283421 | 283421 | Nitrates: of potassium |
| 283510 | 283510 | Phosphinates and phosphonates |
| 283691 | 283691 | Lithium carbonate |
| 284011 | 284011 | Borates: (refined borax) |
| 284019 | 284019 | Borates |
| 284180 | 284180 | Tungstates (wolframates) |
| 284321 | 284321 | Silver compounds: silver nitrates |
| 284450 | 284450 | Spent fuel elements of nuclear reactors |
| 284510 | 284510 | Heavy water (deuterium oxide) |
| 290110 | 290110 | Acyclic hydrocarbons: saturated |
| 290242 | 290242 | Cyclic hydrocarbons: m-xylene |
| 290322 | 290322 | Trichloroethylene |
| 290372 | 290372 | Dichlorotrifluoroethane |
| 290373 | 290373 | Dichlorofluoroethanes |
| 290379 | 290379 | Halogenated derivatives of acyclic hydrocarbons |
| 290629 | 290629 | Alcohols: aromatic and derivatives |
| 290891 | 290891 | Dinoseb (ISO) and its salts |
| 290941 | 290941 | Diethylene glycol, digol |
| 290943 | 290943 | Monobutyl ethers of ethylene glycol or of diethylene glycol |
| 291040 | 291040 | Epoxides, epoxyalcohols, epoxyphenols and epoxyethers |
| 291300 | 291300 | Aldehydes |
| 291431 | 291431 | Ketones: aromatic, phenylacetone |
| 291711 | 291711 | Acids: oxalic acid, its salts and esters |
| 291713 | 291713 | Acids: azelaic acid, sebacic acid, their salts and esters |
| 292142 | 292142 | Amine-function-compounds: aromatic monoamines and their derivatives |
| 292221 | 292221 | Amino-naphthols and other amino-phenols |
| 292231 | 292231 | Amino-aldehydes, amino-ketones and amino-quinones: salts thereof |
| 292243 | 292243 | Amino-acids: anthranilic acid and its esters |
| 292249 | 292249 | Amino-acids, other than those containing more than one kind of oxygen function, their esters |
| 292423 | 292423 | Cyclic amides and their derivatives: 2-acetamidobenzoic acid |
| 292511 | 292511 | Imides and their derivatives: saccharin and its salts |
| 292630 | 292630 | Fenproporex (INN) and its salts |
| 292800 | 292800 | Organic derivatives of hydrazine or of hydroxylamine |
| 293212 | 293212 | Heterocyclic compounds: furfuraldehyde |
| 293293 | 293293 | Heterocyclic compounds: piperonal |
| 293294 | 293294 | Heterocyclic compounds: safrole |
| 293332 | 293332 | Heterocyclic compounds: piperidine and its salts |
| 293333 | 293333 | Heterocyclic compounds: other than pyridine and its salts, other than piperidine and its salts |
| 293352 | 293352 | Heterocyclic compounds: malonylurea (barbituric acid) and its salts |
| 293354 | 293354 | Heterocyclic compounds: other derivatives of malonylurea (barbituric acid) and salts thereof |
| 293627 | 293627 | Vitamins: vitamin C and its derivatives |
| 293712 | 293712 | Insulin and its salts |
| 293722 | 293722 | Halogenated derivatives of corticosteroidal hormones |
| 293750 | 293750 | Prostaglandins, thromboxanes and leukotrienes, their derivatives and structural analogues |
| 293943 | 293943 | Alkaloids, vegetable: cathine (INN) |
| 294140 | 294140 | Antibiotics: chloramphenicol and its derivatives |
| 310390 | 310390 | Fertilizers, mineral or chemical: phosphatic |
| 310540 | 310540 | Fertilizers: monoammonium phosphate and diammonium phosphate |
| 370120 | 370120 | Photographic plates and film: instant print film |
| 370191 | 370191 | Photographic plates and film: for colour photography (polychrome), in the flat |
| 370241 | 370241 | Photographic film: for colour photography (polychrome), in rolls |
| 381119 | 381119 | Anti-knock preparations |
| 382541 | 382541 | Halogenated waste organic solvents |
| 300340 | 300341 | Medicaments: containing alkaloids or their derivatives for therapeutic or prophylactic uses |
| | 300342 | Medicaments containing pseudoephedrine "INN" or its salts, not containing hormones, steroids used as hormones or antibiotics, not in measured doses or put up for retail sale |
| | 300343 | Medicaments containing norephedrine or its salts, not containing hormones, steroids used as hormones or antibiotics, not in measured doses or put up for retail sale |
| | 300349 | Medicaments containing alkaloids or derivatives thereof, not containing hormones, steroids used as hormones or antibiotics, not in measured doses or put up for retail sale (excl. containing ephedrine, pseudoephedrine "INN", norephedrine or their salts) |
| ***Pulp of wood & paper*** | | |
| 470329 | 470329 | Wood pulp: chemical wood pulp, soda or sulphate |
| 470610 | 470610 | Pulp: cotton linters pulp |
| ***Textiles*** | | |
| 621010 | 621010 | Garments: of felt or non-wovens (COVID-19 related) |
| 630790 | 630790 | Textiles: made up articles (COVID-19 related) |
| ***Transport equipment*** | | |
| 871140 | 871140 | Type of motorcycles (including mopeds) and cycles |
| 871491 | 871491 | Cycles: frames and forks |
| 890120 | 890120 | Tankers |
| 890520 | 890520 | Floating or submersible drilling or production platforms |
| 890590 | 890590 | Vessels: light, fire-floats, floating cranes and other vessels |

*Source:* Own elaboration *based on International Trade data from Statistics Portugal*

# Annex III

## Portugal's foreign dependencies, 2019

| HS 6-Digit Code | HS Description |
|---|---|
| ***Live animals & animal products*** | |
| 030323 | Frozen tilapia "Oreochromis spp." |
| 030461 | Frozen fillets of tilapia "Oreochromis spp." |
| 030462 | Frozen fillets of catfish "Pangasius spp., Silurus spp., Clarias spp., Ictalurus spp." |
| 030475 | Frozen fillets of Alaska pollack "Theragra chalcogramma" |
| 030483 | Frozen fillets of flat fish "Pleuronectidae, Bothidae, Cynoglossidae, Soleidae, Scophthalmidae and Citharidae" |
| 030559 | Fish, dried, even salted but not smoked, n.e.s. (excl. fillets and offal) |
| 030633 | Crabs, whether in shell or not, live, fresh or chilled |
| ***Vegetable products*** | |
| 071231 | Dried mushrooms of the genus "Agaricus", whole, cut, sliced, broken or in powder, but not further prepared |
| 071232 | Dried wood ears "Auricularia spp.", whole, cut, sliced, broken or in powder, but not further prepared |
| 071233 | Dried jelly fungi "Tremella spp.", whole, cut, sliced, broken or in powder, but not further prepared |
| 071360 | Dried, shelled pigeon peas "Cajanus cajan", whether or not skinned or split |
| 071410 | Fresh, chilled, frozen or dried roots and tubers of manioc "cassava", whether or not sliced or in the form of pellets |
| 071440 | Taro "Colocasia spp.", fresh, chilled, frozen or dried, whether or not sliced or in the form of pellets |
| 080430 | Fresh or dried pineapples |
| 080540 | Fresh or dried grapefruit |
| 080720 | Fresh pawpaws "papayas" |
| 100710 | Grain sorghum, for sowing |
| 100830 | Canary seed |
| 110422 | Hulled, pearled, sliced, kibbled or otherwise worked oat grains (excl. rolled, flaked, pellets and flour) |
| 110814 | Manioc starch |
| 120241 | Groundnuts, in shell (excl. seed for sowing, roasted or otherwise cooked) |
| 120510 | Low erucic acid rape or colza seeds "yielding a fixed oil which has an erucic acid content of < 2% and yielding a solid component of glucosinolates of < 30 micromoles/g" |
| 121294 | Chicory roots, fresh, chilled, frozen or dried, whether or not ground |
| 130190 | Lac; natural gums, resins, gum-resins, balsams and other natural oleoresins (excl. gum Arabic) |
| 140110 | Bamboos |
| ***Fats and oils*** | |
| 151110 | Crude palm oil |
| 151229 | Cotton-seed oil and its fractions, whether or not refined, but not chemically modified (excl. crude) |
| ***Food & Beverages*** | |
| 160556 | Clams, cockles and arkshells, prepared or preserved (excl. smoked) |
| 170310 | Cane molasses resulting from the extraction or refining of sugar |
| 170390 | Beet molasses resulting from the extraction or refining of sugar |
| 180310 | Cocoa paste (excl. defatted) |
| 200591 | Bamboo shoots, prepared or preserved otherwise than by vinegar or acetic acid (excl. frozen) |
| 230320 | Beet-pulp, bagasse and other waste of sugar manufacture |
| 230330 | Brewing or distilling dregs and waste |
| 230400 | Oilcake and other solid residues, whether or not ground or in the form of pellets, resulting from the extraction of soya-bean oil |
| ***Mineral products*** | |
| 250610 | Quartz (excl. quartz sands) |
| 250620 | Quartzite, merely cut, by sawing or otherwise, in blocks or slabs of a square or rectangular shape |
| 250700 | Kaolin and other kaolinic clays, whether or not calcined |
| 250830 | Fireclay (excl. kaolin and other kaolinic clays and expanded clay) |
| 251020 | Natural calcium phosphates and natural aluminium calcium phosphates, natural and phosphatic chalk, ground |
| 252010 | Gypsum; anhydrite |
| 252930 | Leucite, nepheline and nepheline syenite |
| 270112 | Bituminous coal, whether or not pulverised, non-agglomerated |
| 270799 | Oils and other products of the distillation of high temperature coal tars; similar products in which the weight of the aromatic constituents exceeds that of the non-aromatic constituents (excl. chemically-defined compounds, benzol "benzene", toluol "toluene", xylol "xylenes", naphthalene, aromatic hydrocarbon mixtures of subheading 2707.50, and creosote oils) |
| 271112 | Propane, liquefied |
| ***Products of the chemical or allied industries*** | |
| 280920 | Phosphoric acid; polyphosphoric acids, whether or not chemically defined |
| 281610 | Hydroxide and peroxide of magnesium |
| 282300 | Titanium oxides |
| 284011 | Anhydrous disodium tetraborate "refined borax" |
| 284590 | Non-radioactive isotopes; inorganic or organic compounds of such isotopes, whether or not chemically defined (excl. heavy water "deuterium oxide") |
| 290511 | Methanol "methyl alcohol" |
| 290619 | Cyclanic, cyclenic or cycloterpenic alcohols and their halogenated, sulphonated, nitrated or nitrosated derivatives (excl. menthol, cyclohexanol, methylcyclohexanols, dimethylcyclohexanols, sterols and inositols) |
| 290930 | Aromatic ethers and their halogenated, sulphonated, nitrated or nitrosated derivatives |
| 291229 | Cyclic aldehydes, without other oxygen function (excl. benzaldehyde) |
| 291450 | Ketone-phenols and ketones with other oxygen function |
| 291521 | Acetic acid |
| 291816 | Gluconic acid, its salts and esters |
| 292151 | o-Phenylenediamine, m-phenylenediamine, p-phenylenediamine or diaminotoluenes and their derivatives; salts thereof |
| 293139 | Separate chemically defined organo-phosphorous derivatives, n.e.s. |
| 293311 | Phenazone "antipyrin" and its derivatives |
| 293333 | Alfentanil "INN", anileridine "INN", bezitramide "INN", bromazepam "INN", difenoxin "INN", diphenoxylate "INN", dipipanone "INN", fentanyl "INN", ketobemidone "INN", methylphenidate "INN", pentazocine "INN", pethidine "INN", pethidine "INN" intermediate A, phencyclidine "INN" "PCP", phenoperidine "INN", pipradol "INN", piritramide "INN", propiram "INN" and trimeperidine "INN", and salts thereof |
| 293719 | Polypeptide hormones, protein hormones and glycoprotein hormones, their derivatives and structural analogues, used primarily as hormones (excl. somatropin, its derivatives and structural analogues, and insulin and its salts) |
| 293750 | Prostaglandins, thromboxanes and leukotrienes, their derivatives and structural analogues, used primarily as hormones |
| 310530 | Diammonium hydrogenorthophosphate "diammonium phosphate" (excl. that in tablets or similar forms, or in packages with a gross weight of <= 10 kg) |
| 320120 | Wattle extract |
| 382561 | Wastes from chemical or allied industries, mainly containing organic constituents (excl. anti-freeze fluids) |
| ***Plastics & rubber articles*** | |
| 392063 | Plates, sheets, film, foil and strip, of non-cellular unsaturated polyesters, not reinforced, laminated, supported or similarly combined with other materials, without backing, unworked or merely surface-worked or merely cut into squares or rectangles (excl. those of poly"methyl methacrylate", self-adhesive products, and floor, wall and ceiling coverings of heading 3918) |
| 392071 | Plates, sheets, film, foil and strip, of non-cellular regenerated cellulose, not reinforced, laminated, supported or similarly combined with other materials, without backing, unworked or merely surface-worked or merely cut into squares or rectangles (excl. self-adhesive products, and floor, wall and ceiling coverings of heading 3918) |
| 400231 | Isobutylene isoprene rubber "IIR", in primary forms or in plates, sheets or strip |
| 400239 | Halo-isobutene-isoprene rubber "CIIR" or "BIIR", in primary forms or in plates, sheets or strip |
| 400260 | Isoprene rubber "IR", in primary forms or in plates, sheets or strip |
| 400300 | Reclaimed rubber in primary forms or in plates, sheets or strip |
| 400700 | Vulcanised rubber thread and cord (excl. ungimped single thread with a diameter of > 5 mm and textiles combined with rubber thread, e.g. textile-covered thread and cord) |

*[cont.]*

*[cont.]*

| HS 6-Digit Code | HS Description |
|---|---|
| | ***Leather products*** |
| 410210 | Raw skins of sheep or lambs, with wool on, fresh or salted, dried, limed, pickled or otherwise preserved (excl. those of Astrakhan, Caracul, Persian, Broadtail or similar lambs, or of Indian, Chinese, Mongolian or Tibetan lambs and tanned, parchment-dressed or further prepared) |
| | ***Wood products*** |
| 440122 | Wood in chips or particles (excl. those of a kind used principally for dying or tanning purposes, and coniferous wood) |
| 440728 | Iroko, sawn or chipped lengthwise, sliced or peeled, whether or not planed, sanded or end-jointed, of a thickness of > 6 mm |
| 440793 | Maple "Acer spp.", sawn or chipped lengthwise, sliced or peeled, whether or not planed, sanded or end-jointed, of a thickness of > 6 mm |
| 441919 | Tableware and kitchenware, of bamboo (excl. chopsticks, bread boards, chopping boards and similar boards) |
| | ***Pulp of wood & paper*** |
| 480451 | Unbleached kraft paper and paperboard, uncoated, in rolls of a width > 36 cm or in square or rectangular sheets with one side > 36 cm and the other side > 15 cm in the unfolded state, weighing >= 225 g/m² (excl. kraftliner, sack kraft paper and goods of heading 4802, 4803 or 4808) |
| 480452 | Kraft paper and paperboard, uncoated, in rolls of a width > 36 cm or in square or rectangular sheets with one side > 36 cm and the other side > 15 cm in the unfolded state, weighing >= 225 g/m², bleached uniformly in the mass, containing > 95% chemically processed wood fibre by weight in relation to the total fibre content (excl. kraftliner, sack kraft paper and goods of heading 4802, 4803 or 4808) |
| | ***Textiles*** |
| 510129 | Degreased wool, non-carbonised, neither carded nor combed (excl. shorn wool) |
| 510620 | Carded wool yarn containing predominantly, but < 85% wool by weight (excl. that put up for retail sale) |
| 520291 | Garnetted stock of cotton |
| 520513 | Single cotton yarn, of uncombed fibres, containing >= 85% cotton by weight and with a linear density of 192,31 decitex to < 232,56 decitex "> MN 43 to MN 52" (excl. sewing thread and yarn put up for retail sale) |
| 520514 | Single cotton yarn, of uncombed fibres, containing >= 85% cotton by weight and with a linear density of 125 decitex to < 192,31 decitex "> MN 52 to MN 80" (excl. sewing thread and yarn put up for retail sale) |
| 520515 | Single cotton yarn, of uncombed fibres, containing >= 85% cotton by weight and with a linear density of < 125 decitex "> MN 80" (excl. sewing thread and yarn put up for retail sale) |
| 520523 | Single cotton yarn, of combed fibres, containing >= 85% cotton by weight and with a linear density of 192,31 decitex to < 232,56 decitex "> MN 43 to MN 52" (excl. sewing thread and yarn put up for retail sale) |
| 520524 | Single cotton yarn, of combed fibres, containing >= 85% cotton by weight and with a linear density of 125 decitex to < 192,31 decitex "> MN 52 to MN 80" (excl. sewing thread and yarn put up for retail sale) |
| 520526 | Single cotton yarn, of combed fibres, containing >= 85% cotton by weight and with a linear density of 106,38 decitex to < 125 decitex "> MN 80 to MN 94" (excl. sewing thread and yarn put up for retail sale) |
| 520528 | Single cotton yarn, of combed fibres, containing >= 85% cotton by weight and with a linear density of < 83,33 decitex "> MN 120" (excl. sewing thread and yarn put up for retail sale) |
| 520532 | Multiple "folded" or cabled cotton yarn, of uncombed fibres, containing >= 85% cotton by weight and with a linear density of 232,56 decitex to < 714,29 decitex "> MN 14 to MN 43" per single yarn (excl. sewing thread and yarn put up for retail sale) |
| 520533 | Multiple "folded" or cabled cotton yarn, of uncombed fibres, containing >= 85% cotton by weight and with a linear density of 192,31 decitex to < 232,56 decitex "> MN 43 to MN 52" per single yarn (excl. sewing thread and yarn put up for retail sale) |
| 520534 | Multiple "folded" or cabled cotton yarn, of uncombed fibres, containing >= 85% cotton by weight and with a linear density of 125 decitex to < 192,31 decitex "> MN 52 to MN 80" per single yarn (excl. sewing thread and yarn put up for retail sale) |
| 520543 | Multiple "folded" or cabled cotton yarn, of combed fibres, containing >= 85% cotton by weight and with a linear density of 192,31 decitex to < 232,56 decitex "> MN 43 to MN 52" per single yarn (excl. sewing thread and yarn put up for retail sale) |
| 520544 | Multiple "folded" or cabled cotton yarn, of combed fibres, containing >= 85% cotton by weight and with a linear density of 125 decitex to < 192,31 decitex "> MN 52 to MN 80" per single yarn (excl. sewing thread and yarn put up for retail sale) |
| 520546 | Multiple "folded" or cabled cotton yarn, of combed fibres, containing >= 85% cotton by weight and with a linear density of 106,38 decitex to < 125 decitex "> MN 80 to MN 94" per single yarn (excl. sewing thread and yarn put up for retail sale) |
| 520613 | Single cotton yarn containing predominantly, but < 85% cotton by weight, of uncombed fibres and with a linear density of 192,31 decitex to < 232,56 decitex "> MN 43 to MN 52" (excl. sewing thread and yarn put up for retail sale) |
| 520621 | Single cotton yarn containing predominantly, but < 85% cotton by weight, of combed fibres and with a linear density of >= 714,29 decitex "<= MN 14" (excl. sewing thread and yarn put up for retail sale) |
| 520634 | Multiple "folded" or cabled cotton yarn containing predominantly, but < 85% cotton by weight, of uncombed fibres and with a linear density of 125 decitex to < 192,31 decitex "> MN 52 to MN 80" per single yarn (excl. sewing thread and yarn put up for retail sale) |
| 520644 | Multiple "folded" or cabled cotton yarn containing predominantly, but < 85% cotton by weight, of combed fibres and with a linear density of 125 decitex to < 192,31 decitex "> MN 52 to MN 80" per single yarn (excl. sewing thread and yarn put up for retail sale) |
| 520812 | Plain woven fabrics of cotton, containing >= 85% cotton by weight and weighing > 100 g to 200 g/m², unbleached |
| 520813 | Woven fabrics of cotton, containing >= 85% cotton by weight and weighing <= 200 g/m², in three-thread or four-thread twill, incl. cross twill, unbleached |
| 520819 | Woven fabrics of cotton, containing >= 85% cotton by weight and weighing <= 200 g/m², unbleached (excl. those in three-thread or four-thread twill, incl. cross twill, and plain woven fabrics) |
| 521019 | Woven fabrics of cotton, containing predominantly, but < 85% cotton by weight, mixed principally or solely with man-made fibres and weighing <= 200 g/m², unbleached (excl. plain woven fabrics) |
| 521021 | Plain woven fabrics of cotton, containing predominantly, but < 85% cotton by weight, mixed principally or solely with man-made fibres and weighing <= 200 g/m², bleached |
| 530500 | Coconut, abaca "Manila hemp or Musa textilis Nee", ramie, agave and other vegetable textile fibres, n.e.s., raw or processed, but not spun; tow, noils and waste of such fibres, incl. yarn waste and garnetted stock |
| 530610 | Single flax yarn |
| 530720 | Multiple "folded" or cabled yarn of jute or of other textile bast fibres of heading 5303 |
| 530820 | Hemp yarn |
| 540251 | Filament yarn of nylon or other polyamides, incl. monofilament of < 67 decitex, single, with a twist of > 50 turns per metre (excl. sewing thread, yarn put up for retail sale, high-tenacity yarn or textured yarn) |
| 540781 | Woven fabrics of yarn containing predominantly, but < 85% synthetic filament by weight, incl. monofilament of >= 67 decitex and a maximum diameter of <= 1 mm, mixed principally or solely with cotton, unbleached or bleached |
| 550290 | Artificial filament tow, as specified in Note 1 to chapter 55 (excl. of acetate) |
| 550992 | Yarn containing predominantly, but < 85% synthetic staple fibres by weight, mixed principally or solely with cotton (excl. sewing thread, yarn put up for retail sale and yarn of polyester, acrylic or modacrylic staple fibres) |
| 551311 | Plain woven fabrics containing predominantly, but < 85% polyester staple fibres by weight, mixed principally or solely with cotton and weighing <= 170 g/m², unbleached or bleached |
| 551319 | Woven fabrics containing predominantly, but < 85% synthetic staple fibres by weight, mixed principally or solely with cotton and weighing <= 170 g/m², unbleached or bleached (excl. those of polyester staple fibres) |
| 551341 | Plain woven fabrics containing predominantly, but < 85% polyester staple fibres by weight, mixed principally or solely with cotton and weighing <= 170 g/m², printed |
| 551349 | Woven fabrics containing predominantly, but < 85% synthetic staple fibres by weight, mixed principally or solely with cotton and weighing <= 170 g/m², printed (excl. plain woven fabrics of polyester staple fibres) |
| 580126 | Chenille fabrics, of cotton (excl. terry towelling and similar woven terry fabrics, tufted textile fabrics and narrow woven fabrics of heading 5806) |
| 600522 | Dyed cotton warp knit fabrics "incl. those made on galloon knitting machines", of a width of > 30 cm (excl. those containing by weight >= 5% of elastomeric yarn or rubber thread, and pile fabrics, incl. "long pile", looped pile fabrics, labels, badges and similar articles, and knitted or crocheted fabrics, impregnated, coated, covered or laminated) |
| 600544 | Printed warp knit fabrics of artificial fibres "incl. those made on galloon knitting machines", of a width of > 30 cm (excl. those containing by weight >= 5% of elastomeric yarn or rubber thread, and pile fabrics, incl. "long pile", looped pile fabrics, labels, badges and similar articles, and knitted or crocheted fabrics, impregnated, coated, covered or laminated) |
| 611692 | Gloves, mittens and mitts, of cotton, knitted or crocheted (excl. impregnated, coated or covered with plastics or rubber, and for babies) |
| 620722 | Men's or boys' nightshirts and pyjamas of man-made fibres (excl. knitted or crocheted, vests, singlets and underpants) |

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| HS 6-Digit Code | HS Description |
|---|---|
| ***Footwears and gears*** | |
| 670300 | Human hair, dressed, thinned, bleached or otherwise worked; wool, other animal hair or other textile materials, prepared for use in making wigs or the like (excl. natural plaits of human hair, whether or not washed and degreased, but not otherwise processed) |
| 670490 | Wigs, false beards, eyebrows and eyelashes, switches and the like, of animal hair or textile materials (excl. synthetic textile materials) |
| ***Stone, cement, ceramic, glass and their products*** | |
| 681320 | Friction material and articles thereof, e.g. sheets, rolls, strips, segments, discs, washers and pads, for clutches and the like, not mounted, containing asbestos, whether or not combined with textile or other materials |
| 700420 | Sheets of glass, drawn or blown, coloured throughout the mass "body tinted" opacified, flashed or having an absorbent, reflecting or non-reflecting layer, but not otherwise worked |
| ***Precious or semi-precious stones & metals*** | |
| 711029 | Palladium in semi-manufactured forms |
| ***Base metals & articles of base metal*** | |
| 721069 | Flat-rolled products of iron or non-alloy steel, of a width of >= 600 mm, hot-rolled or cold-rolled "cold-reduced", plated or coated with aluminium (excl. products plated or coated with aluminium-zinc alloys) |
| 721810 | Steel, stainless, in ingots and other primary forms (excl. waste and scrap in ingot form, and products obtained by continuous casting) |
| 760521 | Wire of aluminium alloys, with a maximum cross-sectional dimension of > 7 mm (excl. stranded wire, cables, plaited bands and the like and other articles of heading 7614, and electrically insulated wires) |
| 800200 | Tin waste and scrap (excl. ash and residues from the manufacture of tin of heading 2620, and ingots and similar unwrought tin produced from melted tin waste and scrap of heading 8001) |
| 830150 | Clasps and frames with clasps, incorporating locks, of base metal |
| 830610 | Bells, gongs and the like, non-electric, of base metal (excl. musical instruments) |
| ***Mechanical appliances; electrical equipment*** | |
| 840682 | Steam and other vapour turbines, of an output <= 40 MW (excl. those for marine propulsion) |
| 841112 | Turbojets of a thrust > 25 kN |
| 841121 | Turbopropellers of a power <= 1.100 kW |
| 841122 | Turbopropellers of a power > 1.100 kW |
| 841181 | Gas turbines of a power <= 5.000 kW (excl. turbojets and turbopropellers) |
| 843710 | Machines for cleaning, sorting or grading seed, grain or dried leguminous vegetables |
| 846320 | Thread rolling machines, for working metal |
| 847510 | Machines for assembling electric or electronic lamps, tubes or valves or flashbulbs, in glass envelopes |
| 847751 | Machinery for moulding or retreading pneumatic tyres or for moulding or otherwise forming inner tubes of rubber or plastics |
| 850120 | Universal AC-DC motors of an output > 37,5 W |
| 851420 | Furnaces and ovens functioning by induction or dielectric loss |
| 852729 | Radio-broadcast receivers not capable of operating without an external source of power, of a kind used in motor vehicles, not combined with sound recording or reproducing apparatus |
| 853529 | Automatic circuit breakers for a voltage >= 72,5 kV |
| 854040 | Data/graphic display tubes, monochrome; data/graphic display tubes, colour, with a phosphor dot screen pitch of < 0,4 mm (excl. photo cathode tubes and cathode ray tubes) |
| 854290 | Parts of electronic integrated circuits, n.e.s. |
| ***Transport equipment*** | |
| 880100 | Balloons and dirigibles; gliders, hang gliders and other non-powered aircraft |
| 880230 | Aeroplanes and other powered aircraft of an unladen weight > 2.000 kg but <= 15.000 kg (excl. helicopters and dirigibles) |
| 880529 | Ground flying trainers and parts thereof, n.e.s. (excl. air combat simulators and parts thereof) |
| ***Precision & medical instruments*** | |
| 900651 | Cameras with a through-the-lens viewfinder [single lens reflex "SLR"] for roll film of a width of <= 35 mm (excl. instant print cameras and special camereas of subheading 9006.10 or 9006.30) |
| 901420 | Instruments and appliances for aeronautical or space navigation (excl. compasses and radio navigational equipment) |
| 903082 | Instruments and apparatus for measuring or checking semiconductor wafers or devices |
| 911120 | Cases for wrist-watches, pocket-watches and other watches of heading 9101 or 9102, of base metal, whether or not gold- or silver-plated |
| 911430 | Dials for clocks or watches |
| ***Miscellaneous manufactured articles*** | |
| 940110 | Seats for aircraft |
| 950612 | Ski bindings |
| 960190 | Worked bone, tortoiseshell, horn, antlers, coral, mother-of-pearl and other animal carving material, and articles of these materials, n.e.s. (excl. ivory) |

*Source:* Own elaboration *based on International Trade data from Statistics Portugal*

# Annex IV

## Portugal's foreign dependencies, 2021

| HS 6-Digit Code | HS Description |
|---|---|
| ***Live animals & animal products*** | |
| 010611 | Live primates |
| 030323 | Frozen tilapia "Oreochromis spp." |
| 030329 | Frozen, Nile perch (Lates niloticus) and snakeheads (Channa spp.) |
| 030367 | Frozen Alaska pollack "Theragra chalcogramma" |
| 030462 | Frozen fillets of catfish "Pangasius spp., Silurus spp., Clarias spp., Ictalurus spp." |
| 030475 | Frozen fillets of Alaska pollack "Theragra chalcogramma" |
| 030483 | Frozen fillets of flat fish "Pleuronectidae, Bothidae, Cynoglossidae, Soleidae, Scophthalmidae and Citharidae" |
| 030559 | Fish, dried, even salted but not smoked, n.e.s. (excl. fillets and offal) |
| ***Vegetable products*** | |
| 071231 | Dried mushrooms of the genus "Agaricus", whole, cut, sliced, broken or in powder, but not further prepared |
| 071360 | Dried, shelled pigeon peas "Cajanus cajan", whether or not skinned or split |
| 071410 | Fresh, chilled, frozen or dried roots and tubers of manioc "cassava", whether or not sliced or in the form of pellets |
| 071440 | Taro "Colocasia spp.", fresh, chilled, frozen or dried, whether or not sliced or in the form of pellets |
| 080430 | Fresh or dried pineapples |
| 080720 | Fresh pawpaws "papayas" |
| 100830 | Canary seed |
| 110814 | Manioc starch |
| 120242 | Groundnuts, shelled, whether or not broken (excl. seed for sowing, roasted or otherwise cooked) |
| 120590 | High erucic rape or colza seeds "yielding a fixed oil which has an erucic acid content of >= 2% and yielding a solid component of glucosinolates of >= 30 micromoles/g", whether or not broken |
| 121294 | Chicory roots, fresh, chilled, frozen or dried, whether or not ground |
| 130190 | Lac; natural gums, resins, gum-resins, balsams and other natural oleoresins (excl. gum Arabic) |
| 140110 | Bamboos |
| 150890 | Groundnut oil and its fractions, whether or not refined (excl. chemically modified and crude) |
| ***Food & Beverages*** | |
| 160553 | Mussels, prepared or preserved (excl. smoked) |
| 160556 | Clams, cockles and arkshells, prepared or preserved (excl. smoked) |
| 170390 | Beet molasses resulting from the extraction or refining of sugar |
| 180310 | Cocoa paste (excl. defatted) |
| 180400 | Cocoa butter, fat and oil |
| 190300 | Tapioca and substitutes therefor prepared from starch, in the form of flakes, grains, pearls, siftings or similar forms |
| 200591 | Bamboo shoots, prepared or preserved otherwise than by vinegar or acetic acid (excl. frozen) |
| 220830 | Whiskies |
| 220850 | Gin and Geneva |
| 230320 | Beet-pulp, bagasse and other waste of sugar manufacture |
| 230330 | Brewing or distilling dregs and waste |
| 240311 | Water-pipe tobacco (excl. tobacco-free. See subheading note 1.) |
| ***Mineral products*** | |
| 250620 | Quartzite, merely cut, by sawing or otherwise, in blocks or slabs of a square or rectangular shape |
| 250830 | Fireclay (excl. kaolin and other kaolinic clays and expanded clay) |
| 252010 | Gypsum; anhydrite |
| 252930 | Leucite, nepheline and nepheline syenite |
| 270799 | Oils and other products of the distillation of high temperature coal tars; similar products in which the weight of the aromatic constituents exceeds that of the non-aromatic constituents (excl. chemically-defined compounds, benzol "benzene", toluol "toluene", xylol "xylenes", naphthalene, aromatic hydrocarbon mixtures of subheading 2707.50, and creosote oils) |
| 271112 | Propane, liquefied |
| ***Products of the chemical or allied industries*** | |
| 280470 | Phosphorus |
| 280920 | Phosphoric acid; polyphosphoric acids, whether or not chemically defined |
| 281219 | Chlorides and chloride oxides (excl. carbonyl dichloride "phosgene", phosphorus oxy-, tri- and pentachloride, sulphur monochloride, sulphur dichloride and thionyl chloride) |
| 281410 | Anhydrous ammonia |
| 281610 | Hydroxide and peroxide of magnesium |
| 282090 | Manganese oxides (excl. manganese dioxide) |
| 282690 | Fluorosilicates, fluoroaluminates and other complex fluorine salts (excl. sodium hexafluoroaluminate "synthetic cryolite" and inorganic or organic compounds of mercury) |
| 282741 | Chloride oxides and chloride hydroxides of copper |
| 283620 | Disodium carbonate |
| 283660 | Barium carbonate |
| 284590 | Non-radioactive isotopes; inorganic or organic compounds of such isotopes, whether or not chemically defined (excl. heavy water "deuterium oxide") |
| 290329 | Unsaturated chlorinated derivatives of acyclic hydrocarbons (excl. vinyl chloride "chloroethylene", trichloroethylene and tetrachloroethylene "perchloroethylene") |
| 290511 | Methanol "methyl alcohol" |
| 290559 | Halogenated, sulphonated, nitrated or nitrosated derivatives or acyclic alcohols (excl. ethchlorvynol "INN") |
| 290930 | Aromatic ethers and their halogenated, sulphonated, nitrated or nitrosated derivatives |
| 291219 | Acyclic aldehydes, without other oxygen function (excl. methanal [formaldehyde] and ethanal [acetaldehyde]) |
| 291816 | Gluconic acid, its salts and esters |
| 292151 | o-Phenylenediamine, m-phenylenediamine, p-phenylenediamine or diaminotoluenes and their derivatives; salts thereof |
| 293491 | Aminorex "INN", brotizolam "INN", clotiazepam "INN", cloxazolam "INN", dextromoramide "INN", haloxazolam "INN", ketazolam "INN", mesocarb "INN", oxazolam "INN", pemoline "INN", phendimetrazine "INN", phenmetrazine "INN" and sufentanil "INN", and salts thereof |
| 300213 | Immunological products, unmixed, not put up in measured doses or in forms or packings for retail sale |
| 310530 | Diammonium hydrogenorthophosphate "diammonium phosphate" (excl. that in tablets or similar forms, or in packages with a gross weight of <= 10 kg) |
| 310559 | Mineral or chemical fertilisers containing the two fertilising elements nitrogen (excl. nitrate) and phosphorus but not nitrates (excl. ammonium dihydrogenorthophosphate "monoammonium phosphate", diammonium hydrogenorthophosphate "diammonium phosphate" in tablets or similar forms, or in packages with a gross weight of <= 10 kg) |
| 320120 | Wattle extract |
| ***Plastics & rubber articles*** | |
| 392071 | Plates, sheets, film, foil and strip, of non-cellular regenerated cellulose, not reinforced, laminated, supported or similarly combined with other materials, without backing, unworked or merely surface-worked or merely cut into squares or rectangles (excl. self-adhesive products, and floor, wall and ceiling coverings of heading 3918) |
| 400231 | Isobutylene isoprene rubber "IIR", in primary forms or in plates, sheets or strip |
| 400251 | Latex of acrylonitrile-butadiene rubber "NBR" |
| 400260 | Isoprene rubber "IR", in primary forms or in plates, sheets or strip |
| 401310 | Inner tubes, of rubber, of a kind used on motor cars, incl. station wagons and racing cars, buses and lorries |

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| HS 6-Digit Code | HS Description |
|---|---|
| ***Leather products*** | |
| 410530 | Skins of sheep or lambs, in the dry state "crust", without wool on, whether or not split (excl. further prepared and pre-tanned only) |
| 420600 | Articles of gut, goldbeater's skin, bladders or tendons (excl. silkworm gut, sterile catgut, other sterile surgical suture material and strings for musical instruments) |
| ***Wood products*** | |
| 440122 | Wood in chips or particles (excl. those of a kind used principally for dying or tanning purposes, and coniferous wood) |
| 440410 | Hoopwood; split poles; piles, pickets and stakes of wood, pointed but not sawn lengthwise; wooden sticks, roughly trimmed but not turned, bent or otherwise worked, suitable for the manufacture of walking sticks, umbrellas, tool handles or the like; chipwood and the like, of coniferous wood (excl. hoopwood sawn lengthwise and carved or notched at the ends; brushmounts, lasts) |
| 440722 | Virola, imbuia and balsa, sawn or chipped lengthwise, sliced or peeled, of a thickness of > 6 mm, sanded, or end-jointed, whether or not planed |
| 440728 | Iroko, sawn or chipped lengthwise, sliced or peeled, whether or not planed, sanded or end-jointed, of a thickness of > 6 mm |
| 440793 | Maple "Acer spp.", sawn or chipped lengthwise, sliced or peeled, whether or not planed, sanded or end-jointed, of a thickness of > 6 mm |
| 440795 | Ash "Fraxinus spp.", sawn or chipped lengthwise, sliced or peeled, whether or not planed, sanded or end-jointed, of a thickness of > 6 mm |
| 440922 | Tropical wood, incl. strips and friezes for parquet flooring, not assembled, continuously shaped "tongued, grooved, rebated, chamfered, V-jointed beaded, moulded, rounded or the like" along any of its edges, ends or faces, whether or not planed, sanded or end-jointed |
| 441233 | Plywood consisting solely of sheets of wood <= 6 mm thick, with at least one outer ply of non-coniferous wood of the species alder, ash, beech, birch, cherry, chestnut, elm, eucalyptus, hickory, horse chestnut, lime, maple, oak, plane tree, poplar, aspen, robinia, tulipwood or walnut (excl. of bamboo, with an outer ply of tropical wood, and sheets of compressed wood, cellular wood panels, inlaid wood and sheets identifiable as furniture components) |
| ***Pulp of wood & paper*** | |
| 470100 | Mechanical wood pulp, not chemically treated |
| 480449 | Kraft paper and paperboard, uncoated, in rolls of a width > 36 cm or in square or rectangular sheets with one side > 36 cm and the other side > 15 cm in the unfolded state, weighing > 150 g to < 225 g/m² (excl. unbleached, bleached uniformly in the mass and containing > 95% chemically processed wood fibre by weight in relation to the total fibre content, kraftliner, sack kraft paper and goods of heading 4802, 4803 or 4808) |
| 480452 | Kraft paper and paperboard, uncoated, in rolls of a width > 36 cm or in square or rectangular sheets with one side > 36 cm and the other side > 15 cm in the unfolded state, weighing >= 225 g/m², bleached uniformly in the mass, containing > 95% chemically processed wood fibre by weight in relation to the total fibre content (excl. kraftliner, sack kraft paper and goods of heading 4802, 4803 or 4808) |
| 480540 | Filter paper and paperboard, in rolls of a width > 36 cm or in square or rectangular sheets with one side > 36 cm and the other side > 15 cm in the unfolded state |
| ***Textiles*** | |
| 510320 | Waste of wool or of fine animal hair, incl. yarn waste (excl. noils and garnetted stock) |
| 520513 | Single cotton yarn, of uncombed fibres, containing >= 85% cotton by weight and with a linear density of 192,31 decitex to < 232,56 decitex "> MN 43 to MN 52" (excl. sewing thread and yarn put up for retail sale) |
| 520514 | Single cotton yarn, of uncombed fibres, containing >= 85% cotton by weight and with a linear density of 125 decitex to < 192,31 decitex "> MN 52 to MN 80" (excl. sewing thread and yarn put up for retail sale) |
| 520515 | Single cotton yarn, of uncombed fibres, containing >= 85% cotton by weight and with a linear density of < 125 decitex "> MN 80" (excl. sewing thread and yarn put up for retail sale) |
| 520532 | Multiple "folded" or cabled cotton yarn, of uncombed fibres, containing >= 85% cotton by weight and with a linear density of 232,56 decitex to < 714,29 decitex "> MN 14 to MN 43" per single yarn (excl. sewing thread and yarn put up for retail sale) |
| 520533 | Multiple "folded" or cabled cotton yarn, of uncombed fibres, containing >= 85% cotton by weight and with a linear density of 192,31 decitex to < 232,56 decitex "> MN 43 to MN 52" per single yarn (excl. sewing thread and yarn put up for retail sale) |
| 520534 | Multiple "folded" or cabled cotton yarn, of uncombed fibres, containing >= 85% cotton by weight and with a linear density of 125 decitex to < 192,31 decitex "> MN 52 to MN 80" per single yarn (excl. sewing thread and yarn put up for retail sale) |
| 520544 | Multiple "folded" or cabled cotton yarn, of combed fibres, containing >= 85% cotton by weight and with a linear density of 125 decitex to < 192,31 decitex "> MN 52 to MN 80" per single yarn (excl. sewing thread and yarn put up for retail sale) |
| 520644 | Multiple "folded" or cabled cotton yarn containing predominantly, but < 85% cotton by weight, of combed fibres and with a linear density of 125 decitex to < 192,31 decitex "> MN 52 to MN 80" per single yarn (excl. sewing thread and yarn put up for retail sale) |
| 520812 | Plain woven fabrics of cotton, containing >= 85% cotton by weight and weighing > 100 g to 200 g/m², unbleached |
| 520813 | Woven fabrics of cotton, containing >= 85% cotton by weight and weighing <= 200 g/m², in three-thread or four-thread twill, incl. cross twill, unbleached |
| 520819 | Woven fabrics of cotton, containing >= 85% cotton by weight and weighing <= 200 g/m², unbleached (excl. those in three-thread or four-thread twill, incl. cross twill, and plain woven fabrics) |
| 520911 | Plain woven fabrics of cotton, containing >= 85% cotton by weight and weighing > 200 g/m², unbleached |
| 520912 | Woven fabrics of cotton, containing >= 85% cotton by weight and weighing > 200 g/m², in three-thread or four-thread twill, incl. cross twill, unbleached |
| 521019 | Woven fabrics of cotton, containing predominantly, but < 85% cotton by weight, mixed principally or solely with man-made fibres and weighing <= 200 g/m², unbleached (excl. plain woven fabrics) |
| 521021 | Plain woven fabrics of cotton, containing predominantly, but < 85% cotton by weight, mixed principally or solely with man-made fibres and weighing <= 200 g/m², bleached |
| 521112 | Woven fabrics of cotton, containing predominantly, but < 85% cotton by weight, mixed principally or solely with man-made fibres and weighing > 200 g/m², in three-thread or four-thread twill, incl. cross twill, unbleached |
| 521141 | Plain woven fabrics of cotton, containing predominantly, but < 85% cotton by weight, mixed principally or solely with man-made fibres and weighing > 200 g/m², made of yarn of different colours |
| 521221 | Woven fabrics of cotton, containing predominantly, but < 85% cotton by weight, other than those mixed principally or solely with man-made fibres, weighing > 200 g/m², unbleached |
| 530610 | Single flax yarn |
| 530710 | Single yarn of jute or of other textile bast fibres of heading 5303 |
| 530720 | Multiple "folded" or cabled yarn of jute or of other textile bast fibres of heading 5303 |
| 530820 | Hemp yarn |
| 530921 | Woven fabrics of flax, containing predominantly, but < 85% flax by weight, unbleached or bleached |
| 540781 | Woven fabrics of yarn containing predominantly, but < 85% synthetic filament by weight, incl. monofilament of >= 67 decitex and a maximum diameter of <= 1 mm, mixed principally or solely with cotton, unbleached or bleached |
| 550190 | Synthetic filament tow as specified in Note 1 to chapter 55 (excl. that of acrylic, modacrylic, polyesters, polypropylene, nylon or other polyamide filament) |
| 550810 | Sewing thread of synthetic staple fibres, whether or not put up for retail sale |
| 550931 | Single yarn containing >= 85% acrylic or modacrylic staple fibres by weight (excl. sewing thread and yarn put up for retail sale) |
| 550992 | Yarn containing predominantly, but < 85% synthetic staple fibres by weight, mixed principally or solely with cotton (excl. sewing thread, yarn put up for retail sale and yarn of polyester, acrylic or modacrylic staple fibres) |
| 551311 | Plain woven fabrics containing predominantly, but < 85% polyester staple fibres by weight, mixed principally or solely with cotton and weighing <= 170 g/m², unbleached or bleached |
| 551312 | Woven fabrics containing predominantly, but < 85% polyester staple fibres by weight, mixed principally or solely with cotton and weighing <= 170 g/m², in three-thread or four-thread twill, incl. cross twill, unbleached or bleached |
| 551313 | Woven fabrics containing predominantly, but < 85% polyester staple fibres by weight, mixed principally or solely with cotton and weighing <= 170 g/m², unbleached or bleached (excl. those in three-thread or four-thread twill, incl. cross twill, and plain woven fabrics) |
| 551319 | Woven fabrics containing predominantly, but < 85% synthetic staple fibres by weight, mixed principally or solely with cotton and weighing <= 170 g/m², unbleached or bleached (excl. those of polyester staple fibres) |
| 551329 | Woven fabrics containing predominantly, but < 85% synthetic staple fibres by weight, mixed principally or solely with cotton and weighing <= 170 g/m², dyed (excl. those of polyester staple fibres) |
| 551341 | Plain woven fabrics containing predominantly, but < 85% polyester staple fibres by weight, mixed principally or solely with cotton and weighing <= 170 g/m², printed |
| 551349 | Woven fabrics containing predominantly, but < 85% synthetic staple fibres by weight, mixed principally or solely with cotton and weighing <= 170 g/m², printed (excl. plain woven fabrics of polyester staple fibres) |
| 551411 | Plain woven fabrics containing predominantly, but < 85% polyester staple fibres by weight, mixed principally or solely with cotton and weighing > 170 g/m², unbleached or bleached |
| 551412 | Woven fabrics containing predominantly, but < 85% polyester staple fibres by weight, mixed principally or solely with cotton and weighing > 170 g/m², in three-thread or four-thread twill, incl. cross twill, unbleached or bleached |
| 551423 | Woven fabrics containing predominantly, but < 85% polyester staple fibres by weight, mixed principally or solely with cotton and weighing > 170 g/m², dyed (excl. those in three-thread or four-thread twill, incl. cross twill, and plain woven fabrics) |
| 580123 | Cut weft pile fabrics, of cotton (excl. terry towelling and similar woven terry fabrics, tufted textile fabrics and narrow woven fabrics of heading 5806) |
| 580211 | Terry towelling and similar woven terry fabrics, of cotton, unbleached (excl. narrow woven fabrics of heading 5806, carpets and other floor coverings) |
| 580410 | Tulles and other net fabrics (excl. woven, knitted or crocheted fabrics) |
| 611692 | Gloves, mittens and mitts, of cotton, knitted or crocheted (excl. impregnated, coated or covered with plastics or rubber, and for babies) |
| ***Footwears and gears*** | |
| 670490 | Wigs, false beards, eyebrows and eyelashes, switches and the like, of animal hair or textile materials (excl. synthetic textile materials) |
| ***Stone, cement, ceramic, glass and their products*** | |
| 700232 | Tubes of glass having a linear coefficient of expansion <= 5 x 10-6 per kelvin within a temperature range of 0°C to 300°C, unworked (excl. tubes of glass having a linear coefficient of expansion <= 5 x 10-6 per kelvin within a temperature range of 0°C to 300°C) |
| 701940 | Woven fabrics of glass fibres made from rovings |

*[cont.]*

*[cont.]*

| HS 6-Digit Code | HS Description |
|---|---|
| ***Precious or semi-precious stones & metals*** | |
| 710229 | Industrial diamonds, worked, but not mounted or set (excl. unmounted stones for pick-up styluses, stones suitable for use as parts of meters, measuring instruments or other articles of chapter 90) |
| 711100 | Base metals, silver or gold, clad with platinum, not further worked than semi-manufactured |
| 711510 | Catalysts in the form of wire cloth or grill, of platinum |
| ***Base metals & articles of base metal*** | |
| 720310 | Ferrous products obtained by direct reduction of iron ore, in lumps, pellets or similar forms |
| 721061 | Flat-rolled products of iron or non-alloy steel, of a width of >= 600 mm, hot-rolled or cold-rolled "cold-reduced", plated or coated with aluminium-zinc alloys |
| 721899 | Semi-finished products of stainless steel (excl. of rectangular [other than square] cross-section) |
| 722990 | Wire of alloy steel other than stainless, in coils (excl. bars and rods and wire of silico-manganese steel) |
| 731519 | Parts of articulated link chain, of iron or steel |
| 741012 | Copper alloy foil, not backed, of a thickness of <= 0,15 mm (excl. stamping foils of heading 3212, metal yarns and metallised yarns and foil made up as christmas tree decorating material) |
| 750400 | Powders and flakes, of nickel (excl. nickel oxide sinters) |
| 780191 | Unwrought lead, containing by weight antimony as the principal other element |
| 810490 | Articles of magnesium, n.e.s. |
| ***Mechanical appliances; electrical equipment*** | |
| 840710 | Spark-ignition reciprocating or rotary internal combustion piston engine, for aircraft |
| 841090 | Parts of hydraulic turbines and water wheels incl. regulators |
| 841112 | Turbojets of a thrust > 25 kN |
| 841121 | Turbopropellers of a power <= 1.100 kW |
| 841181 | Gas turbines of a power <= 5.000 kW (excl. turbojets and turbopropellers) |
| 841182 | Gas turbines of a power > 5.000 kW (excl. turbojets and turbopropellers) |
| 842930 | Self-propelled scrapers |
| 845522 | Cold-rolling mills for metal (excl. tube mills) |
| 845819 | Horizontal lathes, incl. turning centres, for removing metal, not numerically controlled |
| 846120 | Shaping or slotting machines, for working metals, metal carbides or cermets |
| 847050 | Cash registers incorporating a calculating device |
| 847432 | Machines for mixing mineral substances with bitumen |
| 847730 | Blow-moulding machines for working rubber or plastics |
| 848299 | Parts of ball or roller bearings (excl. balls, needles and rollers), n.e.s. |
| 848620 | Machines and apparatus for the manufacture of semiconductor devices or of electronic integrated circuits |
| 850120 | Universal AC-DC motors of an output > 37,5 W |
| 851420 | Furnaces and ovens functioning by induction or dielectric loss |
| 853120 | Indicator panels with liquid crystal devices "LCD" or light emitting diodes "LED" (excl. those for cycles, motor vehicles and traffic signalling) |
| 853529 | Automatic circuit breakers for a voltage >= 72,5 kV |
| 854071 | Magnetrons |
| 854140 | Photosensitive semiconductor devices, incl. photovoltaic cells whether or not assembled in modules or made up into panels; light emitting diodes (excl. photovoltaic generators) |
| ***Transport equipment*** | |
| 870240 | Motor vehicles for the transport of >= 10 persons, incl. driver, with only electric motor for propulsion |
| 870370 | Motor cars and other motor vehicles principally designed for the transport of <10 persons, incl. station wagons and racing cars, with both diesel engine and electric motor as motors for propulsion, capable of being charged by plugging to external source of electric power (excl. vehicles for travelling on snow and other specially designed vehicles of subheading 8703.10) |
| 871491 | Frames and forks, and parts thereof, for cycles, n.e.s. (excl. for motorcycles) |
| 880230 | Aeroplanes and other powered aircraft of an unladen weight > 2.000 kg but <= 15.000 kg (excl. helicopters and dirigibles) |
| 890690 | Vessels, incl. lifeboats (excl. warships, rowing boats and other vessels of heading 8901 to 8905 and vessels for breaking up) |
| ***Precision & medical instruments*** | |
| 900219 | Objective lenses (excl. for cameras, projectors or photographic enlargers or reducers) |
| 900590 | Parts and accessories, incl. mountings, for binoculars, monoculars, astronomical and other optical telescopes, and other astronomical instruments, n.e.s. |
| 900651 | Cameras with a through-the-lens viewfinder [single lens reflex "SLR"] for roll film of a width of <= 35 mm (excl. instant print cameras and special camereas of subheading 9006.10 or 9006.30) |
| 901290 | Parts and accessories for electron microscopes, proton microscopes and diffraction apparatus, n.e.s. |
| 910819 | Watch movements, complete and assembled, electrically operated, with combined opto-electronic and mechanical display, whether or not with dial and hands |
| 911290 | Parts of clock and watch cases, n.e.s. (excl. for wrist-watches, pocket-watches and other watches of heading 9101 or 9102) |
| 911430 | Dials for clocks or watches |
| 911440 | Plates and bridges for clocks or watches |
| ***Miscellaneous manufactured articles*** | |
| 950612 | Ski bindings |
| ***Works of art*** | |
| 970190 | Collages and similar decorative plaques |

*Source:* Own elaboration *based on International Trade data from Statistics Portugal*

## Annex V

## Portugal's "stable" foreign dependencies (2019-2021), that match 2019 EU's strategic dependencies

| HS 6-Digit Code | HS Description |
|---|---|
| ***Live animals & animal products*** | |
| 030323 | Frozen tilapia "Oreochromis spp." |
| 030462 | Frozen fillets of catfish "Pangasius spp., Silurus spp., Clarias spp., Ictalurus spp." |
| 030475 | Frozen fillets of Alaska pollack "Theragra chalcogramma" |
| 030483 | Frozen fillets of flat fish "Pleuronectidae, Bothidae, Cynoglossidae, Soleidae, Scophthalmidae and Citharidae" |
| 030559 | Fish, dried, even salted but not smoked, n.e.s. (excl. fillets and offal) |
| ***Vegetable products*** | |
| 071231 | Dried mushrooms of the genus "Agaricus", whole, cut, sliced, broken or in powder, but not further prepared |
| 071360 | Dried, shelled pigeon peas "Cajanus cajan", whether or not skinned or split |
| 071410 | Fresh, chilled, frozen or dried roots and tubers of manioc "cassava", whether or not sliced or in the form of pellets |
| 071440 | Taro "Colocasia spp.", fresh, chilled, frozen or dried, whether or not sliced or in the form of pellets |
| 080430 | Fresh or dried pineapples |
| 080720 | Fresh pawpaws "papayas" |
| 100830 | Canary seed |
| 110814 | Manioc starch |
| 121294 | Chicory roots, fresh, chilled, frozen or dried, whether or not ground |
| 130190 | Lac; natural gums, resins, gum-resins, balsams and other natural oleoresins (excl. gum Arabic) |
| ***Food & Beverages*** | |
| 160556 | Clams, cockles and arkshells, prepared or preserved (excl. smoked) |
| 180310 | Cocoa paste (excl. defatted) |
| 200591 | Bamboo shoots, prepared or preserved otherwise than by vinegar or acetic acid (excl. frozen) |
| 230320 | Beet-pulp, bagasse and other waste of sugar manufacture |
| 230330 | Brewing or distilling dregs and waste |
| ***Mineral products*** | |
| 250620 | Quartzite, merely cut, by sawing or otherwise, in blocks or slabs of a square or rectangular shape |
| 252010 | Gypsum; anhydrite |
| 252930 | Leucite, nepheline and nepheline syenite |
| 270799 | Oils and other products of the distillation of high temperature coal tars; similar products in which the weight of the aromatic constituents exceeds that of the non-aromatic constituents (excl. chemically-defined compounds, benzol "benzene", toluol "toluene", xylol "xylenes", naphthalene, aromatic hydrocarbon mixtures of subheading 2707.50, and creosote oils) |
| 271112 | Propane, liquefied |
| ***Products of the chemical or allied industries*** | |
| 280920 | Phosphoric acid; polyphosphoric acids, whether or not chemically defined |
| 281610 | Hydroxide and peroxide of magnesium |
| 284590 | Non-radioactive isotopes; inorganic or organic compounds of such isotopes, whether or not chemically defined (excl. heavy water "deuterium oxide") |
| 290511 | Methanol "methyl alcohol" |
| 290930 | Aromatic ethers and their halogenated, sulphonated, nitrated or nitrosated derivatives |
| 291816 | Gluconic acid, its salts and esters |
| 292151 | o-Phenylenediamine, m-phenylenediamine, p-phenylenediamine or diaminotoluenes and their derivatives; salts thereof |
| 310530 | Diammonium hydrogenorthophosphate "diammonium phosphate" (excl. that in tablets or similar forms, or in packages with a gross weight of <= 10 kg) |
| 320120 | Wattle extract |
| ***Plastics & rubber articles*** | |
| 400260 | Isoprene rubber "IR", in primary forms or in plates, sheets or strip |
| ***Wood products*** | |
| 440122 | Wood in chips or particles (excl. those of a kind used principally for dying or tanning purposes, and coniferous wood) |
| 440793 | Maple "Acer spp.", sawn or chipped lengthwise, sliced or peeled, whether or not planed, sanded or end-jointed, of a thickness of > 6 mm |
| ***Textiles*** | |
| 520513 | Single cotton yarn, of uncombed fibres, containing >= 85% cotton by weight and with a linear density of 192,31 decitex to < 232,56 decitex "> MN 43 to MN 52" (excl. sewing thread and yarn put up for retail sale) |
| 520532 | Multiple "folded" or cabled cotton yarn, of uncombed fibres, containing >= 85% cotton by weight and with a linear density of 232,56 decitex to < 714,29 decitex "> MN 14 to MN 43" per single yarn (excl. sewing thread and yarn put up for retail sale) |
| 520533 | Multiple "folded" or cabled cotton yarn, of uncombed fibres, containing >= 85% cotton by weight and with a linear density of 192,31 decitex to < 232,56 decitex "> MN 43 to MN 52" per single yarn (excl. sewing thread and yarn put up for retail sale) |
| 520534 | Multiple "folded" or cabled cotton yarn, of uncombed fibres, containing >= 85% cotton by weight and with a linear density of 125 decitex to < 192,31 decitex "> MN 52 to MN 80" per single yarn (excl. sewing thread and yarn put up for retail sale) |
| 520544 | Multiple "folded" or cabled cotton yarn, of combed fibres, containing >= 85% cotton by weight and with a linear density of 125 decitex to < 192,31 decitex "> MN 52 to MN 80" per single yarn (excl. sewing thread and yarn put up for retail sale) |
| 520812 | Plain woven fabrics of cotton, containing >= 85% cotton by weight and weighing > 100 g to 200 g/m², unbleached |
| 520813 | Woven fabrics of cotton, containing >= 85% cotton by weight and weighing <= 200 g/m², in three-thread or four-thread twill, incl. cross twill, unbleached |
| 520819 | Woven fabrics of cotton, containing >= 85% cotton by weight and weighing <= 200 g/m², unbleached (excl. those in three-thread or four-thread twill, incl. cross twill, and plain woven fabrics) |
| 521019 | Woven fabrics of cotton, containing predominantly, but < 85% cotton by weight, mixed principally or solely with man-made fibres and weighing <= 200 g/m², unbleached (excl. plain woven fabrics) |
| 530610 | Single flax yarn |
| 530820 | Hemp yarn |
| 540781 | Woven fabrics of yarn containing predominantly, but < 85% synthetic filament by weight, incl. monofilament of >= 67 decitex and a maximum diameter of <= 1 mm, mixed principally or solely with cotton, unbleached or bleached |
| 550992 | Yarn containing predominantly, but < 85% synthetic staple fibres by weight, mixed principally or solely with cotton (excl. sewing thread, yarn put up for retail sale and yarn of polyester, acrylic or modacrylic staple fibres) |
| 551311 | Plain woven fabrics containing predominantly, but < 85% polyester staple fibres by weight, mixed principally or solely with cotton and weighing <= 170 g/m², unbleached or bleached |
| 551319 | Woven fabrics containing predominantly, but < 85% synthetic staple fibres by weight, mixed principally or solely with cotton and weighing <= 170 g/m², unbleached or bleached (excl. those of polyester staple fibres) |
| 611692 | Gloves, mittens and mitts, of cotton, knitted or crocheted (excl. impregnated, coated or covered with plastics or rubber, and for babies) |
| ***Mechanical appliances; electrical equipment*** | |
| 841181 | Gas turbines of a power <= 5.000 kW (excl. turbojets and turbopropellers) |
| ***Precision & medical instruments*** | |
| 911430 | Dials for clocks or watches |

*Source:* Own elaboration *based on International Trade data from Statistics Portugal*

## Temas Económicos

1: Relacionamento económico com Angola
Walter Anatole Marques

2: Relacionamento económico com Moçambique
Walter Anatole Marques

3: Relacionamento económico com a Federação Russa
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4: Evolução da taxa de crescimento das saídas de mercadorias portuguesas face à receptividade dos mercados - Janeiro a Setembro de 2007 e 2008
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5: Comércio Internacional de Mercadorias - Séries Anuais 2008-2017
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6: Exportações portuguesas de veículos automóveis e suas partes e acessórios
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7: Trocas comerciais entre Portugal e a União Europeia na óptica de Portugal e na dos países comunitários 2005-2008 (mirror statistics)
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8: Expedições portuguesas de Têxteis e de Vestuário para a União Europeia
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9: Portugal no mundo do calçado
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10: Entrepreneurship performance indicators for active employer enterprises in Portugal
Elsa de Morais Sarmento | Alcina Nunes

11: Business creation in Portugal: comparison between the World Bank data and Quadros de Pessoal
Elsa de Morais Sarmento| Alcina Nunes

12: Criação de empresas em Portugal e Espanha: Análise comparativa com base nos dados do Banco Mundial
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13: Comércio Internacional no âmbito da Comunidade dos Países de Língua Portuguesa (CPLP)
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14: Evolução das exportações de mercadorias para Angola entre 2007 e 2009: Portugal face aos principais fornecedores
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15: Análise comparada dos procedimentos, custos e demora burocrática em Portugal, com base no "Doing Business 2011" do Banco Mundial
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16: Exportações portuguesas para Angola face aos principais competidores
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17: Internacionalização no Sector da Construção
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18: Mercado de Trabalho em Portugal desde 2000
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19: Comércio Internacional de mercadorias no âmbito da CPLP
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20: Exportações nacionais – principais mercados e produtos (1990-2011)
Eduardo Guimarães

21: Formação Contínua nas empresas em 2010 e 2011
Anabela Antunes | Paulo Dias | Elisabete Nobre Pereira | Ricardo Pinheiro Alves | Cristina Saraiva

22: Portugal: Uma síntese estatística regional até ao nível de município
Elsa Oliveira

23: Comércio internacional de mercadorias com Espanha em 2013
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24: Comércio Internacional de Mercadorias Séries Anuais 2008-2013
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25: Comércio Internacional de Mercadorias - Importações da China - Janeiro-Dezembro de 2011 a 2013
Walter Anatole Marques

26: Evolução das quotas de mercado de Portugal nas importações de mercadorias na UE-27 - Janeiro-Dezembro de 2007 a 2013
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27: Comércio Internacional de Mercadorias da Guiné-Equatorial face ao mundo e no contexto da CPLP (2009 a 2013)
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28: Comércio Internacional de mercadorias da Índia face ao mundo e a Portugal
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29: Comércio Internacional de Mercadorias no contexto da União Europeia 2009 a 2013
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30: Comércio bilateral entre os membros do Fórum Macau de 2003 a 2013
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31: Exportações portuguesas de produtos industriais transformados por nível de intensidade tecnológica - Mercados de destino (2009 a 2013 e Jan-Out 2014)
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32: Evolução do comércio internacional de mercadorias com Angola - 2010 a 2014
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33: Exportações nacionais – principais mercados extracomunitários e produtos (1990-2013)
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34: Evolução do comércio internacional português da pesca - 2013 e 2014
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35: Comércio Internacional de Mercadorias - Séries Anuais 2008-2014
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36: Evolução do Comércio Internacional português da pesca e outros produtos do mar (1º Semestre de 2014 e 2015)
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37: Desafios e oportunidades para a Ilha Terceira. Estudo sobre o impacto da redução de efetivos na Base das Lajes
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38: Análise Comparativa de Indicadores da Dinâmica Regional na Região do Algarve e Continente
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39: Comércio internacional de mercadorias - Taxas de variação anual homóloga em valor, volume e preço por grupos e subgrupos de produtos
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40: Análise Descritiva das Remunerações dos Trabalhadores por Conta de Outrem: 2010-2012
Elsa Oliveira

41: Comércio Internacional de Mercadorias - Séries Anuais (2008 a 2015)
Walter Anatole Marques

42: A indexação da idade normal de acesso à pensão de velhice à esperança média de vida: análise da medida à luz do modelo das etapas
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43: Balança Comercial de Bens e Serviços - Componentes dos Serviços - 2012 a 2015 e Janeiro-Abril de 2014 a 2016
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44: Comércio internacional de mercadorias entre Portugal e o Reino Unido
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45: Comércio Internacional de mercadorias Contributos para o 'crescimento' das exportações por grupos de produtos e destinos (Janeiro a Agosto de 2016)
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46: A atividade de Shipping em Portugal
Ricardo Pinheiro Alves | Vanda Dores

47: Comércio Internacional de mercadorias no âmbito da CPLP - 2008 a 2015
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48: Digitalização da Economia e da Sociedade Portuguesa - Diagnóstico Indústria 4.0
Céu Andrade | Vanda Dores | Miguel Matos

49: A participação Portuguesa nas cadeias de valor globais
Guida Nogueira | Paulo Inácio

50: Contributos dos grupos de produtos e principais mercados de destino para a evolução das exportações de mercadorias - Janeiro a Março de 2017
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51: Comércio internacional de mercadorias: Portugal no âmbito da CPLP - 2012 a 2016
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52: Administração Portuária – Empresas e sistemas tarifários
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53: Comércio Internacional de Mercadorias - Séries Anuais 2008-2017
Walter Anatole Marques

54: A Economia da Cibersegurança
Gabriel Osório de Barros

55: Contributo de produtos e mercados para o 'crescimento' das exportações de bens
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56: A Cibersegurança em Portugal
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57: Comércio internacional de mercadorias Portugal - China
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58: Comércio internacional de mercadorias de Portugal com a Venezuela - 2013 a 2017 e 1º Semestre de 2018
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59: Balança Comercial de Bens e Serviços Componentes dos Serviços (2015-2017 e 1º Semestre 2015-2018)
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60: O Comércio a Retalho em Portugal e uma Perspetiva do Comércio Local e de Proximidade
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61: A Indústria Automóvel na Economia Portuguesa
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62: Impacto Económico da Web Summit 2016-2028
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63: Comércio Internacional de Mercadorias - Séries Anuais (2008-2018)
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64: A Tarifa Social de Energia
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65: Evolução recente do comércio internacional no 'Ramo automóvel' (2017-2018)
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69: Perspetivas de investimento das empresas
Ana Martins | Rita Tavares da Silva

70: Comércio internacional de mercadorias de Portugal - Ficha anual Portugal-PALOP (2014-2018)
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71: O SME Instrument e as PME Portuguesas
Eugénia Pereira da Costa | Paulo Inácio

72: Comércio internacional de mercadorias de Portugal com a América Central (2014-2018)
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73: Comércio da China com os PALOP (2014-2018) e correspondentes exportações portuguesas (2017-2018)
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74: Comércio internacional de têxteis e vestuário (2008-2018)
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75: O setor TIC em Portugal (século XXI)
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76: Comércio Internacional de mercadorias de Portugal com a América do Sul (2014-2018)
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77: Empresas de Fabricação de Embalagens de Plástico
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78: Comércio internacional de mercadorias - Ficha Portugal-PALOP (2017-2018 e janeiro-agosto 2018-2019)
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79: Retrato do Sector do Calçado em Portugal
Catarina Nunes | Eduardo Guimarães | Florbela Almeida | Luís Campos | Ricardo Pinheiro Alves | Sílvia Santos | Vanda Dores

80: Comércio Internacional de Mercadorias Séries Anuais 2014-2019
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81: Canais de transmissão e sectores potencialmente mais afetados pelo COVID-19
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82: COVID-19 - Estratégia de Retoma da Economia Portuguesa
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83: Competitividade e cadeias de valor no sector agroalimentar e agroflorestal português
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84: Evolução do setor da construção em Portugal, 2008 a 2018
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85: Portugal no mundo do calçado Comércio Internacional (2017-2019 e Janeiro-Maio 2019-2020)
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86: COVID-19 – Oportunidades setoriais de exportação para a economia portuguesa por via de desvio de comércio
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87: Comércio internacional português do Vinho - 2017 a 2019 e período de Janeiro-Abril 2019-2020
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88: A importância Macroeconómica do Ramo Segurador em Portugal: Análise Input-Output
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89: Digitalisation, Skills and Cybersecurity in Portugal – Critical Factors in a Digital Economy driven by Covid-19
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90: Avaliação do Impacto da Web Summit
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93: Acesso ao financiamento das PME portuguesas desde a crise financeira global
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