

INSTITUTO UNIVERSITÁRIO DE LISBOA

Business Competitiveness in Portugal

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Master's in Management

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1. Abstract

The recent pandemic crisis deteriorated the position of the Portuguese economy, which was

already far behind the European standards, since it was highly dependent on one of the most

affected sectors: Tourism. The present study aims to conduct a pertinent assessment on the

concept of Business Competitiveness and on how Portugal can progress in that field, for the

sake of becoming a more sustainable and wealth-creator economy. That evaluation was

performed with the help of 65 mediatic people from the Portuguese business ecosystem, who

were asked to reflect on the state of the economy. The outputs of those interviews were then

interpreted with the help of a Qualitative Data Statistical Analysis software, reaching the

conclusion that there is much margin for improvement in almost all areas of activity, especially

by promoting an innovative, value-adding and exporter private sector, and a "lighter" and more

efficient public sector.

Keywords: Competitiveness, Portuguese Economy, Private Sector, Public Sector

JEL Classification: F21, F23

2. Introduction

In the aftermath of the big pandemic crisis, it becomes even more interesting to revaluate the

Portuguese economy and how it dealt with such unexpected restrictions.

The subject of business competitiveness has already some literature under its name, which

gives sustainability to a more detailed analysis for the Portuguese scenario, either from a

company perspective or from a country-wide perspective. Vinhas da Silva (2018) "Model of

National Competitiveness" identifies the gap between external factors and domestic factors as

the constraint of a more competitive, value creator, and attractive for FDI economy. That gap

can be improved through effective economic policies, meaning that the research problem is

how to achieve that effectiveness given Portugal's intrinsic characteristics.

It is relevant to understand how companies are performing and what may limit their growth, as

their individual competitiveness contributes to the aggregated competitiveness of the country,

which is determinant for achieving a stable economic growth.

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The document is structured by chapters and sub-chapters. The Literature Review comprehends over two dozens of scientific papers from recent years, which are organized into four sub-chapters according to their context within the broader subject of Business Competitiveness. Then, the Methodology identifies the Objectives of the present study and formulates Research Questions that, when answered with the help of data collection, will contribute to achieve those objectives. The following chapter dissects six methods of Qualitative Data Statistical Analysis, performed in software KH Coder, that allows the interpretation of the information collected in the Interviews process. The Discussion and Findings chapter introduces the answers to the research questions which are then all summarized and synthetized in the Conclusions.

3. Literature Review

3.1. Defining Business Competitiveness

Even tough Business Competitiveness is a subjective concept, Liana-Eugenia et al. (2014) tries to define it as a function of factors such as efficiency, productivity, success, adaptability, product quality and optimum costs. Generically, competitiveness can be seen as a dependent variable of those factors for a specific business or for a national economy and translate into how that company/country is able to deal with current or potential competition.

Looking at it from a business perspective, to reach that supremacy over competitors Porter (1987) believed that cost reduction (cost leadership) or product differentiation were the two sources for competitive advantage. Theory from David Ricardo says that countries must privilege economic activities where they have the best comparative advantages in production.

For a more macroeconomic level analysis, factors such as production costs, availability of labour force, quality of education, infrastructures or political stability are examples of some indicators that the World Economic Forum (WEF) includes in its worldwide comparison published under its *Global Competitiveness Report*. The productivity of a countries' economy can be seen, simplistically, by its outputs/inputs ratio. Countries that lead the WEF ranking (Switzerland, for example) are known for paying comparatively high wages, which increases the denominator of the equation, meaning that they must be more productive in order to generate more outputs.

There are some authors who also made an effort to quantify competitiveness. Foltýn (2000) used three indicators to numerical evaluate businesses competitiveness and categorize them into four groups: 1) profitable and solvent, 2) not profitable as they could but still adequately solvent, 3) limited profitability but with adequate solvency, 4) no prospect at all of profitability or solvency. His methodology was based around the three following indicators:

Indicator 1: Fast Solvency = Current Capital / Short-Term Liabilities

Indicator 2: Sales / Costs

Indicator 3: Gross Income / Short-Term Liabilities

Stewart (1991) did a similar intent and developed his EVA method, "a financial performance metric which is most directly linked to the creation of shareholder value, over time":

EVA = NOPAT – WACC * IC, with NOPAT, WACC and IC standing for net operating profit after taxes, weighted average cost of capital and invested capital, respectively.

Horvathova et al. (2016) concludes that both Foltýn and Stewart methodologies are appropriate evaluations of competitiveness and that businesses that want to improve their market position should assess "its current situation in terms of its financial health and performance" and focus on developing "internal processes and increasing of business potential, efficiency and performance"

Another relevant concept that can be brought to the discussion is Globalization. Our economy has become completely global, in the sense that trade barriers have fallen, and countries are closer together due to the development of transports.

This has obvious consequences in competitiveness. Foreign companies can now compete in domestic markets, widening the number of competitors and forcing domestic firms to lower its production costs or increase its value production. In these circumstances, Badrinath et al. (2004) defends that it is only possible for smaller companies to compete in a global market if they're properly supported by the government. He also suggests that a "close and active partnership" between companies within the same business sector can be highly beneficial.

But there are also not so obvious consequences of globalization. For developing economies it meant that its growth prospects are bigger the ever, due to an increased "access to new technologies, skills, markets and financial sources" (Badrinath et al., 2004). For the world as a whole, it brought new environmental challenges, because nowadays economic growth highly

contributes to environmental degradation. It is very important that business competitiveness practices take sustainability into account. Freer Spreckly (1981) and John Elkington (1998) famously developed that balance between competitiveness and sustainability through the concepts of "triple bottom line" and "three P's", respectively. The first included social, economic and environmental factors whilst the second was a more simplistic version of it, with the three P's standing for people, profit and planet. Fahmi (2012) adds some examples to the argument, with the Enron and Lehman Brothers scandals representing situations where the strategy was uniquely profit-driven and factors related to People (poverty, poor labour conditions, low productivity) and Planet (pollution, loss of biodiversity, climate change) were ignored.

3.2. How a company competitiveness relates to other business indicators

The well-known Resource Based View (RBV) Framework (Barney, 1994) is a good starting point on how to achieve a sustained competitive advantage from a company perspective. For the author, resources are all factors such as "assets, capabilities, organizational processes, firm attributes, information or knowledge" that can be inductors of a sustained edge over competitors, which they are especially when they are Valuable, Rare, Inimitable, and exploited by the Organization (VRIO framework). This is especially relevant if we want to dive into the Portuguese reality, where most of the companies are SMEs which have an "reduced access to relevant resources that limits their capacity to adopt competitive-enhancing strategies" (Man et al, 2002).

The size of the company has been proven to moderate the relationship between its competitive pillars (strengths and weaknesses) and its efficiency (Lafuente et al, 2018). The fact that a smaller-sized company has less resources enhances the relevance of internal analysis for strategy makers, who should be perfectly aware of their business characteristics to conduct effective strategic changes to its competitiveness level.

But not only size determines the competitiveness of a company. Other attributes such as quality of strategic management, education or networking can shift a smaller company to a higher-level playing field. Regarding strategic management, Hiercu (2015) defends that companies nowadays have a new model of organization that requires a perfect balance between "stability and change, revolutionary and evolutionary change, adaptability and alignment, exploratory

and exploitative innovation" to achieve competitiveness. Education is an important matter in all areas of science, and in management and entrepreneurship it should be no different. Frolova (2021) argues that there is a lack of research on how important it is for managers that they studied thoroughly "creativity in entrepreneurial and business-related disciplines through knowledge management tools and practices" and tried to fill that gap. He concluded that the future of entrepreneurship lays around managers who studied with motivation, through practical lessons and business cases, and that benefited from knowledge management instruments to solve real business problems (Frolova et al, 2021). As for networking, there's a significant number of empirical researches that backup its beneficial effects on performance and competitiveness, as they can help reduce transactional uncertainty and diminish the risk of opportunistic behaviour by networking partners (Uzzi 1996). Arsezen-Otamis et al (2016) went further and attempted to validate the empirical research that says that strategic governance connects international competitiveness and networking, through a quantitative analysis.

Another key skill that managers should have, is the ability to predict and forecast economic variables of their businesses, so they can mitigate risks, reduce uncertainty and be more competitive in the long run. Kolkova (2020) developed statistical models (exponential smoothing, ARIMA, BATS and artificial neural network) to measure how relevant sales forecasts could be to increase competitiveness. Results showed that only 2 sectors out of 32 (food and beverage service activities and real estate activities) had ambiguous revenue forecasts, due to their current "state of stagnating demand". For these two stagnated sectors there is an "opportunity to revive the market with a new service offered, or a new addition to an existing service" that could lead to a competitive advantage.

Similarly to the Global Competitive Index from the World Economic Forum (WEF), that measures competitiveness across countries and ranks them, Voulgaris et al (2014) tried to replicate that attempt to company level. Through econometric modelling, the researchers constructed "a composite index that reflects firm level competitiveness" that allowed an effective comparison and identification of the critical factors that determine that competitiveness. The index was made of a sample of 980 Greek firms (which have similarities to Portuguese ones) and four financial variables: market share, market share growth, gross profit margin and gross profit margin growth. Results showed that the Greek reality includes "almost 80% of the firms within the medium and low competitiveness classifications" and that factors such as "efficient use of resources, effective control of labour and production costs, management of inventories, adequate liquidity, application of new technologies, innovation

through R&D, debt financing, and exports" (Voulgaris et al, 2014) are the biggest determinants of competitiveness, whilst the economic crisis negatively impacted firms generally.

3.3. How a country competitiveness relates to other business indicators

The most common resource for business competitiveness analysis at country level is the World Economic Forum and its Global Competitiveness Index. Comparisons can also be made around qualitative factors like endowment with production factors, domestic demand, related and supporting industries and corporate strategy structure and rivalry, the 4 pillars of Porter's diamond, a model that tries to justify competitiveness edges across countries. (Porter 1990).

In order to compute the Global Competitiveness Index the following factors are considered: institutions, infrastructure, macroeconomic environment, primary education and health, higher education and training, goods market efficiency, labour market efficiency, financial market development, technology readiness, market size, business complexity, and innovation. Rostami et al (2019) examined the relevance of this factors by analysing how much they correlate to the three types of economies: factor-driven, efficiency-driven, and innovation-driven. The results are synthetised in the following table:

Factors	Factor-driven	Efficiency-driven	Innovation-driven
Institutions	+	++	++
Infrastructure	++	++	++
Macroeconomic environment	++	++	
Primary education and health	++		
Higher education and training		+	+
Goods market efficiency			++
Labour market efficiency		++	++
Financial market	+		++
development			
Technology readiness	++	++	
Market size	+	++	
Business complexity	+		++
Innovation	++	++	++

Table 1: Positive (+) and Positive and Significant (++) correlations (Rostami et al, 2019)

With Portugal being an innovation-driven country, we can assume that the factors that would have a bigger impact on the country's competitiveness are the ones that turned out to have a strong and positive correlation (++), especially since the author believes that his "findings are consistent with received economic theory on how national context affects entrepreneurial activity" (Rostami et al, 2019). Additionally, Vinhas da Silva et al (2021) claimed that there is a relationship between a country's competitiveness, its exports, its foreign direct investment and its domestic market competitiveness intensity, since "competitive economies export more (in quantity but mostly in value) and attract more FDI (mostly in capital-intensive projetcs, that are innovative and driven by technology, knowledge and creativity).

Zagorseková et al (2017) measured the correlation between economic growth and competitiveness for countries in the European Union. The correlation didn't turn out to be significant, possibly because of "the faster growth of less developed economies within the EU", which "are still in the process of redeploying more developed economies, but still do not achieve their competitiveness". Besides that, they reached other interesting conclusions: most of the time the "competitiveness of the economy is defined by the environment created by the state for businesses"; the weakest topic for the EU competitiveness is still the innovation; the EU is still lagging behind the US and Japan in terms of competitiveness; there are still significant differences within the EU, mainly between the founder countries and the 2004 onwards new joiners.

Another way to compute a numerical assessment of a firms' competitiveness is through the "benefit-of-the-doubt" (BOD) method, which "was designed for determining strategic priorities among a set of units of analysis" (Cherchye et al., 2007). This process generates, for each business, the weight of its competitive pillars that maximize its Competitiveness Index. Lafuente used this model to evaluate distinct business ecosystems (France, Spain, Costa Rica, Hungary) using the pillars human capital, markets, innovation and strategy. Results showed that the quality of the ecosystem is related to business competitiveness because "businesses operating in more consolidated ecosystems are better able to fully realize the positive effects of strategic choices that seek to prioritize and exploit key resources and capabilities." (Lafuente et al, 2021).

Even though Portugal isn't at Greece's level of both competitiveness and corruption, a study by Rontos et al (2020) that examines the impact of corruption and how national governmental policies can reduce that effect, might be interesting to review. Corruption, much like

competitiveness, doesn't have a world widely accepted definition, but "the abuse of public office for private gain" (World Bank 1997) under the forms of "bribery, embezzlement, fraud, extortion and nepotism" (Amundsen 1999) is solid enough. Since "increased levels of corruption are closely related to the lack of competitiveness" (Lambsdorff 1999), Rontos examined the Greek scenario and compared it to Switzerland, the benchmark of competitiveness according to the World Economic Forum ranking. The outcome of this study was that the competitiveness gap between Greece and Europe's top performers in this matter might have come from the lack of "effective policy strategies for abating corruption" and more frequent or fast-moving "reforms linked to structural competitiveness".

3.4. Overview of the Portuguese reality

As stated in literature already mentioned, Portugal fits in the group of countries for which Innovation is one of the most, or even the most, important competitive pillar in terms of its weight in promoting business competitiveness.

Rolling back the years to the peak of Portugal's economic recession, Gibson et al (2011) questioned whether "investing in, innovation, technology transfer knowledge and know-how" was a worthwhile investment at the time, especially for a country that was struggling financially. Even though it was a period of huge economic uncertainty, the authors were already optimistic regarding the impact of innovation. In accordance with that expectation, more recent research dived into Portugal's current entrepreneurship, innovation, and competitiveness levels. Mota Veiga et al (2020) measured the quality of Portugal's public institutions, both economic and political, trough components such as Property Rights (PR), Government Integrity (GI), Tax Burden (TB), Business Freedom (BF), Investment Freedom (IF), Trade Freedom (TF), Electoral Process (EP), Political Pluralism and Participation (PPP), Functioning of Government (FG), Freedom of Expression and Belief (FEB), Associational and Organizational Rights (AOR), Rule of Law (RL) and Personal Autonomy and Individual Rights (PA), respectively. All three hypothesis were proven right: the quality of public institutions holds a positive influence on entrepreneurship, innovation, and competitiveness, which highlights "the importance of the quality of public institutions and their contributions towards economic development" and the need "towards public institutions rethinking their management models and fully grasping the extent to which quality in the provision of public services may contribute towards the improvement of the societies" (Mota Veiga et al, 2020). These results

are coherent with Pinheiro Alves et al (2019) perspective about Portuguese economic policy, who recognizes that a small open economy is bound to struggle in terms of competitiveness in a globalized world. Due to these limitations, the author suggests policies that would encourage human capital in order to reduce income inequality and poverty and simultaneously increase the Foreign Direct Investment, because these factors are proven to be negatively correlated.

The fact that the Portuguese business structure is predominant of micro companies with low productivity affects the countries aggregated productivity, and consequently lowers its status in the European context of competitiveness. Rocha (2019) claims that the Portuguese economy "affects too many resources to small sized companies" and that factors like "size-dependent regulations and policies, poor efficiency of the judicial system, and low levels of managerial human capital" disincentivise firm growth. For some companies it might be preferable not to grow as it would represent a loss of subsidies and tax benefits and more interaction with the legal system and its inherent costs.

An inevitable analysis at this time concerns the consequences of the COVID-19 pandemic in Portugal's economy as a whole, and specifically in its companies' competitiveness. Tomé (2020) evaluated the current macroeconomic state of the country and went in-depth for the sectors of tourism, education, public and industrial. The consequences were significant and unprecedented in all four sectors, but the author believes that the crisis might have been an inductor for future and structural changes for the country's economy, as it was put to the test like never before. Firfiray et al (2021) had a different approach to the issue, by dissecting the effects of the pandemic for family businesses. There isn't an accurate percentage of Portuguese firms that are family-owned, but empirical estimations tend to believe that they represent a significant share. "The uniqueness of family firms is often attributed to socioemotional wealth (SEW) which refers to the non-economic and affect-laden value that a family derives from a firm" (Berrone et al., 2012). The pandemic created new challenges for all firms, but for family ones it also tested its most distinctive factor, the SEW. Finally, the health sector is an interesting point of discussion in current times, and studies from Player (2021) regarding the UK NHS might be useful to evaluate and translate to the Portuguese reality, to support the private versus public health system debate.

Looking forward, Vinhas da Silva et al (2021) pointed out that factors such as "the decrease in the WEF competitiveness ranking, the worsening of the public debt / GDP ratio, the excessive private debt, the lack of resources for productive investment, and the historical lack of strategic

sense" are hostile to the future of the Portuguese economy. It is key that families and the government are able to spend within their economic constraints. His Model of National Competitiveness states the key domestic factors that should be improved to converge with foreign competitors, so that Foreign Direct Investment is attracted and Value Aggregation to Exports is increased.

Literature Review Metho					
Author	Title	Year	Main Issues	Research Context	
Vinhas da	Porque não cresce a	2018	The model of national	Overall	
Silva	economia		competitiveness. Portuguese	perspective on the	
	portuguesa?		competitiveness overview	business	
			and the factors that limit that	competitiveness	
			competitiveness	subject, for both	
				nations and	
				Portugal	
				specifically.	
Liana-Eugenia	Competitiveness	2014	Defining the concept of	Definition of the	
et al	and supporting the		business competitiveness	concept of	
	business			business	
	competitiveness			competitiveness,	
Horvathova et	Business	2016	Measure and numerically	understanding its	
al	Competitiveness, its		quantify the Business	impact and	
	Financial and Competitivenes		Competitiveness	measuring it.	
Economic					
	Parameters				
Badrinath et al	Building Business	2004	How to promote Business		
	Competitiveness		Competitiveness		
Fahmi	Sustainable	2012	How to achieve		
	Business		competitiveness while being		
	Competitiveness:		sustainable		
translating concept					
	into practice				
Man et al	n et al A system dynamics 2002 How to achieve		How to achieve	Some micro and	
	approach for		competitiveness for a small-	macro economic	

	assessing SMEs'		sized limited-resources	indictors that relate	
	competitiveness		business	and influence the	
Y C 1		2010	D 61 12 6.1 22	competitiveness of	
Lafuente et al	A non-parametric	2018	Definition of the competitive	companies and	
	analysis of		pillars and relevance of size,	countries.	
	competitiveness		strengths and weaknesses		
	efficiency: The				
	relevance of firm				
	size and the				
	configuration of				
	competitive pillars				
Hiercu	Challenges for	2015	Impact of management in		
	Business		the business competitiveness		
	Competitiveness				
	from managerial				
	and knowledge				
	economy				
	perspectives				
Frolova et al	Knowledge	2021	Impact of knowledge		
	Management in		management in the business		
	Entrepreneurship		competitiveness		
	Education as the				
	Basis for Creative				
	Business				
	Development				
Arsezen-	Relationship	2016	A model that relates		
Otamis et al	between Strategic		Business competitiveness		
	Governance,		with both Strategic		
	Business		Governance and Networking		
	Competitiveness				
	and Networking				
Kolkova	The application of	2020	Impact of forecasting in the		
	forecasting sales of		business competitiveness		
	services to increase				
	Business				
	Competitiveness				

Voulgaris et al	Creating a Business	2014	Index that allows	
	Competitiveness		competitiveness	
	Index: An		measurements and	
	Application to		comparisons	
	Greek			
	Manufacturing			
	Firms			
Rostami et al	Competitiveness,	2019	Quantitative analysis of the	
	Entrepreneurship,		relationship between	
	and Economic		competitiveness and	
	Performance:		entrepreneurship levels	
	evidence from			
	Factor, Efficiency			
	and Innovation-			
	Driven countries.			
Zagorseková	Competitiveness	2017	Impact of competitiveness	
et al	and Economic		on the economic growth	
	Growth in the			
	European Union			
Lafuente et al	Strategic priorities	2021	Relationship between	
	and competitiveness		businesses ecosystems and	
	of businesses		firms' competitiveness	
	operating in			
	different			
	entrepreneurial			
	ecosystems: A			
	benefit of the doubt			
	(BOD) analysis			
Rontos et al	Corruption and	2020	Impact of corruption on	
	economic		competitiveness and	
	competitiveness:		economic policies to	
	What Greece can		mitigate that impact	
	tell us			
Gibson et al	Investing in	2011	Innovation as an inductor for	Understanding
	innovation to enable		Portugal's competitiveness	business indicators
	global			that are

	competitiveness:			intrinsically linked
	The case of			with the
	Portugal			Portuguese reality:
Mota Veiga et	Entrepreneurship,	2020	Entrepreneurship, innovation	innovation,
al	innovation and		and competitiveness for	entrepreneurship,
	competitiveness: A		Portuguese public	small-sized
	public institution		companies	companies, family
	love triangle			companies.
Pinheiro	Special issue on	2019	Portuguese economic	The impact of the
Alves et al	economic policy in		policies to increase	pandemic on the
	Portugal:		innovation, competitiveness,	economy
	innovation,		and internationalisation	
	competitiveness,			
	and			
	internationalisation			
Rocha	Baixa	2019	Portuguese business	
	produtividade:		structure: predominance of	
	afetação de recursos		small-sized low-productivity	
	e obstáculos ao		companies	
crescimento das				
empresas na				
economia				
	portuguesa			
Tomé	Did the Bubble	2020	General analysis of the	
	Burst? The		Portuguese economy after	
	Portuguese		the pandemic	
	Economy During			
	COVID-19			
Firfiray et al	Can family firms	2021	Impact of the pandemic in	
	nurture		family businesses	
	socioemotional			
	wealth in the			
	aftermath of Covid-			
	19?			
	Implications for			

	research and practice		
Player	Taking Care of	2021	Evaluation of the British
	Business:		NHS during the pandemic
	Privileging Private		and private versus public
	Sector Hospitals		health systems discussion
	During the COVID		
	Crisis		

Table 2: Literature Review Summary

4. Methodology

The previous table integrates the main issues from the literature review with the research context that would be included in the methodology.

Having in mind all the information gathered in the Literature Review chapter, the research objectives of the present study are the following:

- Objective 1: Correlate the empirical evidence obtained with the beliefs of the 50+ respected names in the Portuguese business mediatic scene that were interviewed.
- Objective 2: Describe the world's top performers in terms of economic growth, especially by considering factors such as innovation, entrepreneurship, and competitiveness.
- Objective 3: Analyse the gap between Portugal and the top performers mentioned in the previous objective and evaluate the potential convergence of Portugal by discussing the factors that would contribute to that gap reduction.
- Objective 4: Synthetise the state of the Portuguese economy, by reflecting on the impacts of the pandemic

Even though these objectives are inherently related to each other, the Research Questions ahead and the Data Analysis will be segmented by objective, for organization purposes.

The Research Questions that will address the 1st Objective are:

• Key Research Question: what is the perception of the interviewees over relevant concepts that affect the Competitiveness of a company/country?

- Awareness over the methods of measuring Competitiveness: Global Competitiveness Index (World Economic Forum) and the 4 Pillars of Porter Diamond Model (Q13)
 - Relevant factors that compute the GCI for Innovation Driven countries
 (Q14 Rostami)
 - Exports, Foreign Direct Investment and Domestic Competitiveness as well as the factors of the Model of National Competitiveness that contribute to them (Q15 e Q24 – Vinhas da Silva)
- Awareness over other factors that can contribute to Competitiveness: Strategic Management, Education, Networking (Q10), Corruption and Anti-Corruption Measures (Q17), and Environmental Sustainability (Q8)

The Research Questions that will address the 2nd Objective are:

• Key Research Question: who are the top performing nations in Competitiveness and which factors make them thrive in this matter? (Q1)

The Research Questions that will address the 3rd Objective are:

- Key Research Question: can Portugal increase its Competitiveness levels in order to converge with the top performers?
 - Is it possible to achieve a sustained competitiveness advantage, according to
 Porter, through Cost Leadership or Differentiation? (Q2)
 - In which economic sectors should Portugal focus to answer to David Ricardo's theory of Competitive Advantage in international trade? (Q3)
 - Where do Portuguese companies stand in terms of the Foltyn's methodology indicators? (Q5)
 - Does that convergence comprehend a sustained increase of the wage levels?
 (Q4)
 - Evaluation of the contribution of the Portuguese government: helping domestic companies so they compete in a globalized market (Q6+7); the quality of public institutions (Q18); the weight of public policies in reducing inequalities and

promoting FDI (Q19); discussing whether there is an incentive to company growth or to stagnation/survival (Q21).

The Research Questions that will address the 4th Objective are:

- Key Research Question: how can we generally evaluate the Portuguese economy?
 - What type of companies are predominant in the Portuguese business structure, in terms of Competitiveness (Q12) and in terms of access to key resources according to the Resource Based View (Q9)
 - Test the conclusions of Kolkova's statistical model, especially regarding the economic sectors that he evaluated as stagnated (Q11)
 - Sum up the impacts of the pandemic in Portugal's economy, especially in health, education, public and industrial sectors (Q22+23)

The research technique chosen was In-Depth Interviews. The aim was to collect information through the opinions of 50+ Portuguese personalities that represented different areas such as business, politics, arts, in order to obtain multidisciplinary perspectives over the country's competitiveness scenario.

The following chapter will include the Analysis of all the Data gathered through this process of interviews, which was performed with the help of a Text Mining and Content Analysis tool. It is expected that the opinions of the interviewees, after careful analysis, may contribute to answering the research questions, achieving the research objectives, and contributing to this subject by corroborating or contradicting the current literature. The table below summarizes the content of the 65 interviews, by Subject and Author(s).

Index	Subject	Author
1	Preface	Ana Maria Simões, Rui Vinhas da
		Silva and José Crespo de Carvalho
2	The Uncertain Challenge	Adriano Moreira
3	It Is Necessary to Risk, To Ambition, To Scrutinize	Afonso Fuzeta Eça
4	The Best She Has Is the End	Afonso Reis Cabral
5	State Of Emergency	Albano Homem de Melo

6	Enterprises, Competitiveness and Exports. Key	Alexandre Relvas
	Words of Economic Policy	
7	Leadership, Brands and Education: Pillars to	Ana Côrte-Real
	Overcome the Crisis	
8	Tourism: A National Goal	Ana Isabel Rebelo and Paulo
		Barradas Rebelo
9	How To Reborn Portugal	André Leonardo
10	Let's Get the Dream Back First	Anna Westerlund
11	Learning From the Crisis to Win In The Post-	António Amorim
	Pandemic World	
12	Valuing Large Companies	António Gomes Mota
13	Let's make Portugal a Startup Nation	António Lucena de Faria
14	The Road to Pre-Covid Ambition	Bruno Mota
15	A Challenge for Everyone	Carla Rocha
16	10 Challenges for Portugal Post-Covid	Carlos Brito
17	Brands For Portugal	Carlos Coelho
18	Clothing Industry: The Challenges of a Twin Crisis	César Araújo
19	The Great Pause, or the Jay on The Other Side Of My	Cristina Brito
	Window	
20	For Sustainable Economic Growth	Dulce Mota
21	Access Time	Fernando Nunes da Silva
22	The Economic and Social Council and The Post-	Francisco Assis
	Pandemic Time	
23	Accessibility To Education and Housing in Portugal	Gonçalo Nascimento Rodrigues
24	Map For a Rebirth	Guy Villax
25	The Fight Against Poverty Requires a National	Isabel Jonet
	Strategy	
26	Investing In Mothers	Isabel Stilwell
27	Let Us Work for The Common Good	João Correia Botelho
28	Which Portugal for The Future?	João Duque
29	Reinvent To Survive and Grow	João Esteves
30	We Need Planning, Organization and Execution	José Avillez
31	This Is How Portugal Goes.It'S Ok! As Long As No	José Dionísio
	One Bothers	
32	By The Way	José Graça Medeiros

33	This Will Only Go There with A "Generational	José Manuel Fernandes
	Shock"	
34	The Role of The Portuguese Banking System in	Licínio Pina
	Economic Recovery	
35	A Portuguese Crisis - Some Principles for A Clean	Luís Barreto Xavier
	Way Out	
36	The Economic Outlook for Portugal Post-Covid	Luís Mira Amaral
37	After Tomorrow	Luís Onofre
38	Investment, Diplomacy, Education and Lots of	Luís Pedro Duarte
	Technology	
39	Portugal: Economic Enrichment After Scientific	Luís Portela
	Enrichment	
40	The Importance of Wealth Creation in Portugal	Luís Silva Pinto
41	Reindustrialization And Business Innovation - The	Luís Todo Bom
	Key to Economic Growth	
42	Developing Resilience and Restoring Portugal	Manuel Rodrigues
43	Green Is Not Just Green	Marco Galinha
44	Made In Portugal with Sustainability	Mariana Delgado and Rita Soares
45	The Recovery and Resilience Plan: A Challenge for	Nazaré da Costa Cabral
	The Portuguese Economy In The Post-Covid-19	
	Period	
46	Portugal, Which Future?	Nuno Carvalho
47	First of all, We Must Relativise This Crisis	Paulo Ossião
48	Online Culture: At the Border of Two Eras	Pedro Abrunhosa
49	Tourism Limits Portugal's Potential	Pedro Andrade
50	The Imperative of Requalification	Pedro Brinca
51	Accelerating The Transformation of The Economy	Pedro Castro e Almeida
52	A Clear Vision and Inspiring Leadership	Pedro Dionísio
53	The Whole World as A Potential Customer	Pedro Lima
54	For A More Competitive, Prosperous and	Pedro Rocha e Melo
	Sustainable Portugal	
55	From Systemic Crisis to Post-Pandemic	Raquel Varela
56	Health Threats: Prevent, Detect and Respond	Ricardo Mexia
57	Sport Has To Be a Priority	Ricardo Monteiro "Tarantini"
58	The Show Must Go On	Ricardo Parreira
59	The Post-Pandemic and The Economic Recovery	Rui Leão Martinho

60	Innovation as a Growth Strategy	Rui Miguel Nabeiro
61	Recovering Portugal	Sandra Isabel Correia
62	No Matter How Much Everything Changes	Sara do Ó
63	The Future Has a Name: It Is Called Social Economy	Simon Oom
64	A Country Without Blockades	Tiago Mayan Gonçalves
65	Posfácio	Maria de Lurdes Rodrigues

Table 3: Index of Interviews

5. Data Analysis

The text document that resulted from the in-depth interviews comprehends 65 interviews, 1939 paragraphs and 4821 sentences. The qualitative analysis of this data will be described in the sub-chapters that follow, which divide the types of analysis which were performed.

5.1. Term Frequency

The first analysis was to identify the most relevant words across all interviews, to gather a general understanding of the subject and the most common thoughts mentioned by the interviewees.

Words	POS	Term	Words	POS	Interview
		Frequency			Frequency
country	Noun	502	Portugal	ProperNoun	61
Portugal	ProperNoun	489	make	Verb	61
company	Noun	401	new	Adj	61
sector	Noun	387	country	Noun	60
economy	Noun	293	way	Noun	58
new	Adj	279	time	Noun	57
economic	Adj	273	economy	Noun	56
make	Verb	259	sector	Noun	56
time	Noun	241	company	Noun	55
crisis	Noun	240	need	Verb	55
create	Verb	234	pandemic	Noun	55
business	Noun	221	year	Noun	55

people	Noun	218	create	Verb	53
public	Adj	218	economic	Adj	53
pandemic	Noun	210	portuguese	Adj	53
portuguese	Adj	209	people	Noun	52
market	Noun	207	business	Noun	51
year	Noun	206	know	Verb	50
growth	Noun	197	necessary	Adj	50
investment	Noun	195	continue	Verb	49
need	Verb	194	crisis	Noun	49
way	Noun	191	world	Noun	48
social	Adj	185	allow	Verb	47
world	Noun	181	development	Noun	47
value	Noun	162	future	Noun	47
state	Noun	160	important	Adj	46
service	Noun	152	public	Adj	46
development	Noun	149	condition	Noun	45
innovation	Noun	146	term	Noun	45
process	Noun	137	investment	Noun	44

Table 4: Term Frequency Analysis Output

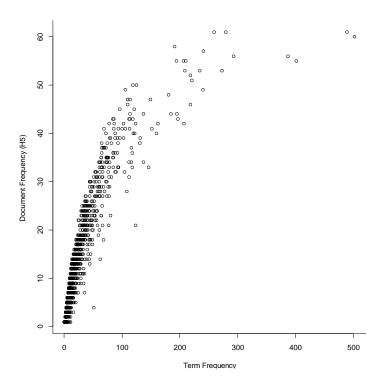
Additionally, a broad overview of the terms used can be obtained using Descriptive Statistics. The Term Frequency Distribution identifies how many types of words were examined, the Mean TF of those words, and the Minimum TF of words that should be included in the scope of the analysis. This analysis can be done separately for all the interviews (Term Frequency) or for each individually (Document Frequency).

Frequency	Term	%	Cumulative	Cumulative	Document	%	Cumulative	Cumulative
	Frequency		Frequency	%	Frequency		Frequency	%
1	3052	44.70	3052	44.70	3412	49.97	3412	49.97
2	1071	15.69	4123	60.38	1042	15.26	4454	65.23
3	521	7.63	4644	68.01	516	7.56	4970	72.79
4	334	4.89	4978	72.91	325	4.76	5295	77.55
5	253	3.71	5231	76.61	229	3.35	5524	80.90
6	191	2.80	5422	79.41	179	2.62	5703	83.52
7	155	2.27	5577	81.68	147	2.15	5850	85.68
8	125	1.83	5702	83.51	131	1.92	5981	87.60

9	103	1.51	5805	85.02	89	1.30	6070	88.90
10	83	1.22	5888	86.23	78	1.14	6148	90.04
11	66	0.97	5954	87.20	68	1.00	6216	91.04
12	67	0.98	6021	88.18	47	0.69	6263	91.73
13	53	0.78	6074	88.96	52	0.76	6315	92.49
14	50	0.73	6124	89.69	44	0.64	6359	93.13
15	41	0.60	6165	90.29	42	0.62	6401	93.75
16	35	0.51	6200	90.80	23	0.34	6424	94.08
17	34	0.50	6234	91.30	33	0.48	6457	94.57
18	31	0.45	6265	91.75	44	0.64	6501	95.21
19	30	0.44	6295	92.19	25	0.37	6526	95.58
20	18	0.26	6313	92.46	12	0.18	6538	95.75
21	23	0.34	6336	92.79	25	0.37	6563	96.12
22	21	0.31	6357	93.10	17	0.25	6580	96.37
23	17	0.25	6374	93.35	21	0.31	6601	96.68

Table 5: Term Frequency Distribution Analysis Output

It is possible to evaluate the applicability of the selection of words to choose for further statistical analysis, either by Terms or Document frequency, by generating the correlation between them. The correlation matrix below proves the expected positive correlation between them, as it makes sense that a term that appears commonly across all interviews also appears in most of them.



Graph 1: Correlation between Term and Document Frequency Words

5.2. Key Words in Context Concordance and Word Association

This analysis allows the extraction of Key Words across the interviews. Searching Key Words returns the context (sentence, paragraph, interview) where that word was mentioned, which turns out to be really useful when the intention is to obtain deeper research to that term.

For example, the results of Table 4 showed that the term "Crisis" was used frequently, in 49 of the 65 interviews and 240 times across all interviews. The definition of "Crisis" as a search key word, given its frequency and the research context of this study, returns all contexts where that word was mentioned. The context can be set as broader (full interview) or narrower (sentence or paragraph), depending on the depth of the analysis to perform.

Additionally, the introduction of Concordance requirements may enrich the analysis. For the same example, it may be interesting to investigate the context in which "Health", another term with relevance to the study and that appeared frequently (112 times across 34 interviews), is mentioned close to our main key word "Crisis". The results show the situations where "Health" and "Crisis" appeared close together and can be specified given the intentions of the analysis: either from contexts where these words were immediately next to each other ("Health Crisis") or where they were at most at five words "of distance". The table below represents the output of this Example Analysis.

Interview	Left	Key	Right
Index		Word	
9	are facing a deep health	crisis	that is generating an
			unprecedented
14	a global health and economic	crisis	that puts all countries side
16	world is experiencing a health	crisis	that, little more than
16	we knew before the health	crisis	. How we respond to
16	sphere. Once the health	crisis	is over, it is
27	The consequences of this health	crisis	in human beings are yet
30	This global public health	crisis	has caused abrupt, violent
30	this economic and public health	crisis	and keeping pace with the
34	mentioned above, this health	crisis	should not turn into a
42	first impact of the health	crisis	, support for the economy
42	health, social and economic	crisis	. The global response to
42	first impact of the health	crisis	, support to the economy

48	is health. From every	crisis	there fatally emerges a universe
48	me that the present health	crisis	marks the end of an
54	other hand, the health	crisis	we experienced in the context
65	to cope with public health	crises	in any country in the

Table 6: KWIC Analysis Output

To get another vision of which words may make sense to analyse in association with the Key Word "Crisis", it is possible to obtain the Collocation Map of related words. This assessment is useful to understand the main terms that relate to the Key Word, eventually to then analyse them in Concordance.

The results below show the words that appeared at a five-word distance to the key word "Crisis", at least ten times. The previous analysis was corroborated, since "health" was the third word most commonly mentioned close to "crisis", but the other relevant words induct that a Concordance analysis to a pandemic/economic/current crisis may also make sense.

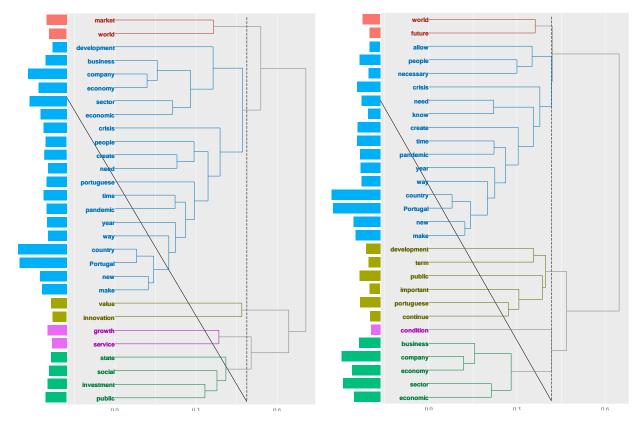
Word	Part of Speech	Total Matches	Left Matches	Right Matches
"pandemic"	Noun	31	22	9
"economic"	Adjective	18	15	3
"health"	Noun	16	16	0
"current"	Adjective	12	12	0

Table 7: Collocation Analysis Output

5.3. Hierarchical Cluster

This analysis segments top frequency words into clusters, which group them according to their similar appearance patterns. The resulting output is given under the form of a Dendrogram, with a vertical cut that represents the number of clusters, which are identified with different

colours. The two graphs below show the Clusters for the 29 most frequent words across all interviews (Term Frequency) or for each individually (Document Frequency).



Graph 2: Hierarchical Cluster by Term Frequency

Graph 3: Hierarchical Cluster by Document Frequency

5.4. Co-occurrence Network

This analysis shows the words with similar appearance patterns, by connecting them through lines in a Network Diagram, which allows the identification of words with high degrees of co-occurrence and is visually easier to observe. This association can be done either between words or between words and interviews.

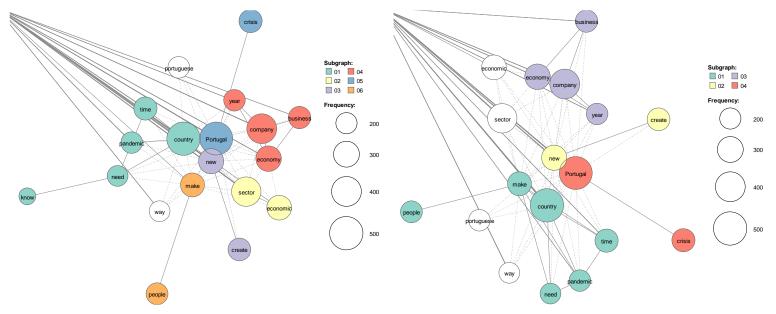


Image 1: Term Frequency Words

Image 2: Document Frequency Words

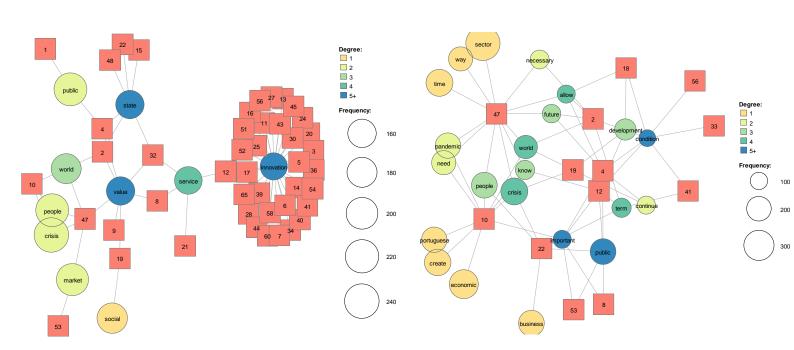


Image 3: Term Frequency Words, by Interview

Image 4: Document Frequency Words, by Interview

5.5. Self-Organizing Map

This analysis consists in a map that visually organizes the words into clusters, given their association and proximity across interviews.

The map below was generated for the 29 most frequent words across all interviews, which have been mentioned at least 140 times. These words were segmented into 5 different clusters, which can be seen by their different colours.

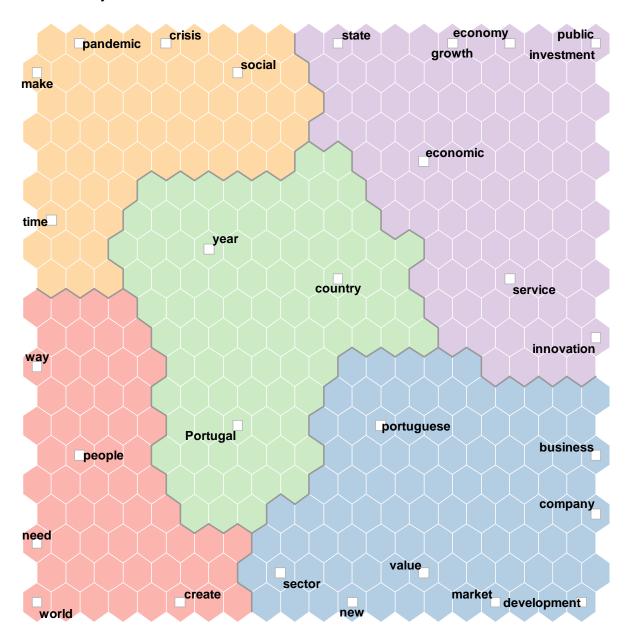


Image 5: Self-Organizing Map

5.6. Distinctive Words

The last analysis consisted of the identification of the top 10 Distinctive Words of each interview. This analysis contributes positively to the research because it identifies the terms which are characteristic to each interview and may lead to a more in-depth analysis of a specific interview if it includes a term that is relevant. The output of this analysis is what follows:

1	2	3	4	5
voice	CPLP	capital	book	state
reconstruction	intervention	rent	catharsis	agent
rebuild	circumstance	cronyism	literature	want
Professor	past	institution	read	lot
Executive	language	factor	urgency	let
idea	prevent	individual	consequence	really
deliver	attack	labour	Culture	poor
delivery	colonial	resign	blame	utopia
question	inventory	trajectory	cafe	big
close	concept	(c)	etecetera	urgency
6	7	8	9	10
competitiveness	leader	welcome	Fajãzinha	identity
export	employee	English	island	creativity
policy	leadership	innately	Lisbon	self-love
account	consumer	portuguese	attitude	white
productivity	brand	countryside	teach	label
decision	acceptable	Tourism	fibre	tradition
increase	behaviour	hotel	forgive	dream
strengthen	survey	motivate	waterfall	realize
EU	understand	route	big	special
average	expectation	adequate	reborn	win
11	12	13	14	15
transition	SME	goal	machinery	precarious
abroad	staff	software	right	combate
forest	assert	entrepreneurship	away	mental
R&D	unit	hardware	relevant	accentuate

circular	control	recommend	ally	actively
emergency	fabric	Startup	cutting-edge	involvement
internationalisation	internationalised	emergence	pre-pandemic	combat
fabric	qualified	suitable	storage	perception
promote	internationally	propose	evolve	deny
competitiveness	medium-sized	schooling	equip	issue
16	17	18	19	20
challenge	brand	fashion	ecological	post-pandemic
university	identity	clothing	human	banking
valorisation	history	non-eu	Earth	axis
skill	intrinsic	reciprocity	animal	unacceptable
knowledge	Portuguese	partly	Anthropocene	level
address	world	trigger	non-human	scale
scientific	quality	industrial	existence	condition
context	value	govern	natural	desirable
post-covid	mission	actor	species	internationalization
combine	Portugal	rule	human	relaunch
21	22	23	24	25
urban	woman	residential	reinvent	poverty
transport	OECD	rent	boldly	dependence
mode	inequality	market	constantly	freedom
mobility	savings	rental	wealth	fifth
accessibility	indebtedness	accessible	competitive	impoverish
travel	priority	measure	GDP	regain
use	demography	housing	able	response
face-to-face	man	long	employment	individual
access	Japan	owner	produce	reproductive
stratum	insufficient	type	advantage	deprive
26	27	28	29	30
watch	professional	politician	manufacturer	forward
mother	driver	pension	ethical	wayside
daughter	rebuild	appointment	expert	capability
girl	support	change	factory	violent
ready	axis	framework	footwear	dependent
suspect	consequently	population	differentiated	distinguish

Harvard	dimension	leadership	Society	slow
humility	let	means	force	scenario
King	social	manner	fashion	efficient
discovery	service	outside	integration	job
31	32	33	34	35
virus	Reason	shock	bank	accountability
citizen	unifying	age	banking	culture
inertia	legacy	money	robust	rethink
decide	purpose	anaemia	alleviate	clientelistic
general	encouragement	destabilize	household	evidently
month	song	load	perform	friendship
offer	clone	abundance	moratorium	justice
minimum	Vision	younger	guarantee	bond
temporary	common	look	credit	predominant
ago	proud	ask	mission	subject
36	37	38	39	40
goods	footwear	citizen	research	Ireland
tradable	Footwear	bank	indicator	post-pandemic
GDP	renew	branch	operator	operation
Commission	APICCAPS	note	traditional	reduce
reindustrialisation	craftsman	relevant	pharmaceutical	Denmark
production	inherit	intensify	centre	expensive
process	reference	Banking	scientific	interesting
ECB	piece	geographical	1920	soon
finances	raw	quickly	pro-university	sme
strong	material	position	Ministry	follow
41	42	43	44	45
matrix	import	green	textile	RRP
industrial	external	awareness	brand	resilience
program	net	awake	image	plan
programme	debt	coming	increasingly	figure
innovation	systemic	counteract	consumer	dimension
technological	vulnerability	frame	gain	component
process	finances	gloomy	notoriety	fund
Creation	demand	irremediably	build	total

technology	monetary	mire	foreign	transition
reindustrialisation	trade	pollute	demonstrate	billion/year
46	47	48	49	50
view	Art	cultural	investor	worker
opportunity	closer	Culture	product	estimate
tourism	feeling	artistic	tourist	occupation
world	image	music	day	task
foreign	screen	paradigm	completely	democracy
manager	subway	artist	sun	perform
industry	pass	reveal	price	workforce
unique	station	modernity	compete	bring
country	rhythm	platform	talk	ecosystem
Europe	simply	remuneration	abroad	labour
51	52	53	54	55
transformation	advantage	ideal	Energy	bourgeoisie
leverage	facilitator	remove	ageing	man
deepen	link	ambitious	National	wages
process	prepare	aspire	climate	wage
progressive	Marketing	aspiration	condition	PS
channel	sectorial	position	lever	semi-peripheral
allow	restrict	potentially	transition	shortest
focus	general	goal	prosperous	military
component	ISCTE	advanced	average	salary
quickly	combination	objective	Health	capitalism
56	57	58	59	60
threat	sport	software	investment	innovation
detection	Sport	baton	diversify	organization
surely	football	sceptical	digitalisation	challenging
aspect	funding	upturn	necessary	tool
chaff	federation	right	accord	innovative
Prevention	Football	debate	high	governmental
Wheat	professional	dictate	entrepreneurship	believe
Ignore	Sports	incredible	competitiveness	organizational
response	season	indifferent	depend	essentially
Robust	source	mentality	qualification	constant
	1	_L	1	1

61	62	63	64	65
interior	reaction	housing	court	body
entrepreneur	cooperation	house	tax	science
mentor	suddenly	person	point	institution
community	vital	exclusion	state	reveal
Sell	reassess	isolation	include	multidisciplinary
Create	monitor	home	hope	skill
Guide	entrepreneur	solve	destructive	disseminate
concerted	Change	poverty	proceedings	training
Pool	timely	association	regulation	stimulate
Huge	willing	basic	exceptional	information

Table 8: Distinctive Words Analysis by Interview Output

Looking at the output table of this analysis, it is possible to identify key subjects of each interview, which may lead to further analysis. For example, to obtain detailed feedback on the Recovery and Resilience Plan (RRP), in the context of the post-pandemic consequences to the Portuguese economy, this analysis inducts that the 45th interview, to Nazaré da Costa Cabral, might be a valuable asset, since it contains "RRP" as its most distinctive term.

6. Discussion and Findings

The aim of this chapter is to answer the Research Questions, given the Data Analysis methods explained above.

6.1. Objective 1

The first objective is to correlate the empirical evidence obtained in the Literature Review with the beliefs of the interviewees, concerning the most significant concepts and factors around the subject of Competitiveness.

The World Economic Forum, which is responsible for producing the Global Competitiveness Index, was mentioned twice across all interviews. Alexandre Relvas (6) said that "blockages and challenges are identified in multiple reports", giving credibility to the WEF diagnosis of Portugal's competitiveness, whilst Rui Leão Martinho (59) used this same source to support

his opinion that "the training of human resources is a preponderant factor for economic growth". Porter's economic theory that evaluates international trade competitiveness based on four pillars (endowment with production factors, domestic demand, related and supporting industries and corporate strategy structure and rivalry) was mentioned by Luís Mira Amaral (36) who classified Portugal as a "country in an intermediate state of development", with an "industry is stuck in the middle" between less developed countries, "whose competitiveness is based on low wages" and "developed countries, linked to the knowledge-based economy". He also states that the Portugal maintains an economic model "in which GDP still has significant dependence on the tourism, trade and services sectors with low added value" and that it would be important to "change this model through a process of reindustrialisation (...) with the incorporation of value-added services, innovation and technology".

Previous literature from Rostami (2019) evaluated the 12 factors that contribute to compute the WEFs' Global Competitiveness Index and determined that the ones with a strong and positive correlation to Innovation-Driven countries are: Institutions, Infrastructure, Goods market efficiency, Labour market efficiency, Financial market development, Business complexity, Innovation. The most frequent one was Innovation, which was responsible for 110 out of the 134 matches, which implies the relevance of this factor. Additionally, Table 8 highlights Innovation as the most distinctive word to Rui Miguel Nabeiro's interview (60). His opinion is that "disruptive innovation is paramount and inevitable" to both companies and countries, so they can "remain relevant and sustainable". Other pertinent considerations of the CEO of Delta Cafés include:

- "Rapid, constant and disruptive changes are the norm and I believe that the next five years will bring more changes than the last twenty"
- "Strengthening and investing in innovation will be the path to ensure the sustainability of companies and contribute to the recovery of the country"
- "The introduction of new processes, significantly improved methods and intangible organisational innovations, is one of the possible solutions to boost economic growth and productivity"
- "There is now greater political awareness and recognition of innovation as a key factor for economic growth"
- "We could develop our capacity to innovate would be through the construction of an innovation ecosystem capable of uniting companies, startups, government, schools, universities, private or governmental, social, cultural and any other organizations"

- "Innovation is one of the main drivers of technological development and economic growth"
- "The current crisis has resulted in several innovations, now we have to take advantage of the push and not lose momentum"

Another source of economic literature is Vinhas da Silva's Model of National Competitiveness, in which he states that the path to competitiveness is the increase Foreign Direct Investment, Value Aggregation and Exports, via the improvement on key domestic factors and the consequent reduction of the gap between those domestic and external factors.

The opinion of Luís Mira Amaral (36) corroborates this model, as he sums up his expectations of a post-pandemic crisis recovery around the "production of goods and services for the global economy", "increasing competitiveness (size and development of our companies), "productive investment", "attracting structural FDI for our reindustrialization process" and "business innovation as a source of value creation".

Dulce Mota (20) believes that Foreign Direct Investment is crucial to economic growth, especially in sectors where Portugal "already has an important ecosystem, such as the automotive and aeronautics industries, pharmaceuticals, wineries and high value-added textiles and footwear" and Rui Leão Martinho (59) recommends that the attraction of FDI should be "based on competitive conditions and tax benefits", in order to respond to our highly indebted economy and equity-lacking companies. Manuel Rodrigues (42) sees "trade agreements and a strengthened incentive plan" as the trigger to that increase, such as the ones signed by China with the EU and with 15 other Asia-Pacific nations, in January 2021 and November 2020, respectively.

Finally, there were other factors that are believed to condition competitiveness according to the literature, for instance: Strategic Management, Education, Networking (Hiercu, Frolova, and Uzzi), Corruption and Anti-Corruption Measures (Rontos), and Environmental Sustainability (Spreckly and Elkington).

Sandra Isabel Correia (61) mentioned all first three factors in her interview, where she focused on Education as the key to economic recovery. She defends a reform of the current educational system, which "uses archaic methods and methodologies that are obsolete", whereas on her view for the future it should be "based on the talents of each student and potentiate their best" and "directed towards the individual and his/her personal development". Additionally, she also mentioned Strategic Management in the sense that it was a requirement for "Entrepreneurs who

have suffered from the pandemic" to get through that economic phase and Networking as an output of a mentoring culture that lacks in Portugal but that she believes that should be part of the future of entrepreneurship.

Nepotism and Corruption were identified by Francisco Assis (22) as factors that highly contribute to Portugal's lack of productivity (low GDP per hour worked), which is a theme that should "require priority intervention in the coming years". Luís Barreto Xavier (35) proposed an institutional reform that ended the "major problems" of the Portuguese "public culture", that still reflects a dynamic of "clientelistic networks, on bonds of personal, family, political or associative friendship". The above-mentioned reform should be promoted to "towards establishing transparency, simplification and accountability". Nazaré da Costa Cabral (45) showed the same worry regarding transparency, in the context of the Recovery and Resilience Plan. Portugal must comply with the principle of budgetary transparency "to ensure the correct and appropriate application of the funds under consideration, preventing poor implementation, inefficiencies, fraud and even corruption".

Environmental Sustainability was a common concern across the interviews, being directly addressed by 5 authors. António Amorim (11) classified it as "the great challenge of our time and the most decisive factor of socioeconomic development for the future of the country" and alleged that companies should look at that commitment to the environment as "a social responsibility, but also a factor of productivity and profitability", since the "circular economy makes it possible to improve efficiency, reduce costs, eliminate waste, rationalise resources and add value to products". Both Bruno Mota (14) and Carlos Brito (16) agree that it is a great challenge for the future and that it should be taken into consideration side-by-side with economic growth. The solutions to reducing our carbon footprint vary, with Manuel Rodrigues (42) arguing in favour of "shorten logistics chains, bring the producer closer to the consumer and focus on a more sustainable use of resources", whilst Pedro Rocha e Melo (54) suggested the investment in Green Hydrogen, which is simultaneously "a powerful instrument in the process of industrial decarbonisation" and a potential "new business opportunity for Portugal and for Portuguese companies to take advantage of favourable conditions in the production of renewable electricity".

6.2. Objective 2

The second objective is to identify the world's top performers in terms of competitiveness and benchmark the factors in which Portugal and Portuguese companies should focus on pursuance of that standard.

The Global Competitiveness Report of 2022, by the World Economic Forum, computed its index which determined the top 10 most competitive countries:

Rank	Country	Score
1.	Denmark	100.00
2.	Switzerland	98.92
3.	Singapore	98.11
4.	Sweden	97.71
5.	Hong Kong	94.89
6.	Netherlands	94.29
7.	Taiwan	93.13
8.	Finland	93.04
9.	Norway	92.96
10.	United States	89.88

Table 9: Top 10 most competitive countries (WEF, 2022)

From this group of countries, only Taiwan and Norway were not mentioned across all interviews. The main results from the evaluation of this group of countries are:

- Denmark and the Netherlands are the benchmark for the ratio of exports to GDP, around 85% (Alexandre Relvas, 6)
- The USA is a market "with great potential and still with little Portuguese presence" (António Amorim, 11)
- Portugal should aim to the business ecosystem of the USA, which comprehends an increase of relevant investments, both private and from funds (Bruno Mota, 14)

- Sweden, Denmark, and Switzerland have global brands that boost their economy, which Portugal does not have (IKEA, Lego, Nestlé). The solution would be to have a tax and judicial reform that benefited the growth of Portuguese countries and boosted the economy (Dulce Mota, 20).
- Finland shares the Portuguese demographic issue, with an increasing aged population.

 This has consequences on the welfare state, which may become unsustainable (Francisco Assis, 22)
- Denmark stands out for two factors: low rate of unemployment, due to policies that
 protect companies and encourage job creation; a tax system that is heavy on individuals
 but that benefits the companies, leading to interesting growth rates, wealth, higher
 wages (Luís Silva Pinto, 40)
- Portugal has a service-based economy, whilst Switzerland or Sweden compete on value and export worldwide (Pedro Andrade, 49)
- Finland and Switzerland successfully invested on innovation, which led them to a higher level of productivity, technological development, and economic growth (Rui Miguel Nabeiro, 60)

6.3. Objective 3

Now that the "best practices" across the world are identified, it is imperative to discuss the factors that are limiting Portugal to achieve a similar status to those countries, while promoting solutions to reduce the gap to them.

As stated previously, Porters' theory identifies two distinct sources of competitive advantage: either Cost Leadership or Differentiation. Portugal seems to have difficulties in achieving that advantage because it is in between those positions. Some authors addressed this issue and agreed that the country's economy should progress to a position of Differentiation. Carlos Brito (16) argued that the big challenge for the Portuguese economy is to shift from is foundations from "low costs, namely wages, but rather on knowledge as a source of differentiation of products, processes and business models". This position is shared by Carlos Coelho (17), who showed concerns with the "doing more, selling more cheaply, making compromises and putting the country on sales" mentality. The Portuguese politician suggest the opposite: "introduce the principle of differentiation, enhancement, innovation; of a certain obsession for difference", so

that we can become more profitable and then to "create more value, more wealth, to distribute it fairly".

Another perspective is to bet on the sectors in which the country has the biggest comparative competitive advantage. Naturally, the most focused sector was tourism, because it has been "the largest contributor to national wealth" but also the most penalised by the pandemic crisis. The undoubtable natural conditions that Portugal has, give the country a great competitive advantage, but it was also consensual that this sector is indeed vulnerable, volatile, labour-intensive, and of low added value. The solutions to improve the competitiveness in this service exports were recognized: focusing "on the quality of experiences provided to tourists and less on the quantity of visitors" (António Lucena de Faria, 13) and shift our supply "towards less mass-market and higher quality/niche segments" (Dulce Mota, 20).

Other key sectors comprise the ones that produce tradable goods, both traditional and emerging. The challenge is to progress in the "Industry 4.0" for the traditional (textiles, footwear, metallurgy, moulds, agriculture, forestry, the automotive industry) and on the Digital Economy for the emerging (information and communication technologies, energy and environment, transport, health and well-being), by creating "conditions to capitalise and strengthen the productivity and competitiveness of companies in these sectors, as well as support the opening of new companies with the profile described or modernise existing companies" (António Amorim, 11).

Investing in more value adding sectors and shifting tourism in that same "direction" is expected to increase wage levels, which at the moment are far behind the European standards. João Duque (28) claims that the discussion should be on "how we guarantee that we will produce and sell goods or services that maintain health, pensions, wages" instead of the minimum wage. The solution lays around the increase in wealth creation by companies, so they can sustainably pay higher salaries and "reinvest in the company itself, recapitalise it, increase its productivity, competitiveness and innovative capacity" (Luís Silva Pinto, 40). Besides that wage increase concern, Francisco Assis and Sandra Isabel Correia still mentioned gender inequality in pay as a need to improvement.

In terms of evaluating the Portuguese government contribution to promoting competitiveness, Guy Villax was the most incisive. He blames its shortage of strategies for the lack of growth of Portugal's GDP in comparison to Ireland, which has a similar peripheral economy. The reliance of the population in the state and in the public sector has led to an "anaemic economic

growth, high tax burden and low average wages". The solution is "a 180 degree change": "a small and efficient public sector", a population less dependent on the state, "school education must evolve", "more ambition and a clear vision of the future", "more and bigger companies", "the will to build has to take the place of pettiness, leaning and dependence" and "taxation cannot continue to castrate some and motivate others to leave the country and live abroad".

Furthermore, Luís Mira Amaral (36) believes that the application of the funds of the Recovery and Resilience Plan must be complemented with structural reforms, so that the positive effect of that money injection will not be simply in the short-term. For that, the state must intervene and promote a reform that overturns the current "poor allocation of resources and the absence of the right economic incentives for wealth creation". Tiago Mayan (64) has a similar position and defends the application of the RRP funds to business recovery and investment, the transparent allocation of funds to enterprises, and the general reduction of the weight of public institutions.

6.4. Objective 4

In order to characterize the Portuguese economy, it is relevant to identify its business structure. Guy Villax (25) spoke about the predominance of Small and Medium Enterprises (SMEs), which employed 2,6 million people in 2018 (77 % of jobs in our country) and "produced goods or services valued at \$ 22,900 per year, below GDP per capita at \$ 23,400 - an indicator that helps explain the low wages and precariousness in Portugal". Bigger companies that are customers to SMEs also play a role, as they should "promote a more demanding environment for their SME suppliers, in terms of quality and efficiency standards, good management practices and adequate labour conduct", which would lead to a general improvement of the business ecosystem (António Gomes da Mota, 12).

On the positive side, SMEs were responsible for "pushing" Portugal forward in the European Innovation Scoreboard, from a "moderate innovator" to a "strong innovator", due to "the growth of their investments and activities in the area of Research and Development (R&D + i)" (António Amorim, 11).

To keep this rate of progression in SMEs and to recover from the pandemic crisis, Luís Silva Pinto (40) points out the following factors: the government should channel European funds to support the companies, make them more profitable and competitive, and promote the creation

of new ones (and of jobs, consequently); recapitalize companies, so they can act more proactively and less reactively; create new tools for the recovery of viable projects (venture capital funds, investment funds, banks that support SMEs, recovery and revitalisation plans); reduce bureaucracy and have competent and effective teams in public services; reduction of the tax burden for companies, by reducing the TSU and abolishing other autonomous taxations and fees.

As seen in the literature, a study from Kolkova classified the food and beverage service activities and real estate activities sectors as stagnated, as a consequence of the pandemic. For those sectors there was a huge margin to increase competitiveness. The food and beverage services are intrinsically related to tourism, so the solutions presented previously will also apply to this sector. Gonçalo Nascimento Rodrigues (23) addressed the issues in housing in Portugal and defended that the government should provide "measures that encourage the entry of larger players" such as: i) reducing the current aggressive taxation in all stages of the product (acquisition, construction, ownership, sale); ii) creating investment vehicles (legislation) that "attract investors with dimension and experience in the market, fix companies, foster employment in the area and make fiscally transparent vehicles available".

The last reflection must be on the overall impact of the pandemic, especially in sectors other than tourism (which was already approached), such as health, education, public and industrial.

The health sector was, obviously, very targeted by the pandemic, which led to the realisation of the key importance of this sector. Portuguese demographics consist of an aged population, with tendency to increase, which is expected to concur to an increasing demand of health services. The quality of this sector also promotes the export of services in others, like tourism, real estate, and well-being for elderly newcomers. Investing in quality and innovation will attract "senior population from developed countries" (Bruno Mota, 14). In terms of goods exports, "we have some companies that have shown the capacity to invest appropriately in research and development and to internationalise", especially in the pharmaceutical sector which still has great potential for development.

Internally, the health sector "creates skilled jobs, promotes research and development, and has great potential in the areas of technology and digital transformation, constituting a lever to enhance the growth and consolidation of other economic and social areas" (Pedro Rocha e Melo, 54).

The education sector was also forced to change duo to the pandemic, with online teaching becoming a reality. It required an investment in technological resources and teacher training but led to the conclusion that "hybrid" methods of teaching are possible. Bruno Mota (14) agrees with that possibility, but suggests a revamp of the education system, "especially primary education, which today is, in many cases, outdated and needs to be adapted, not only in terms of content, but also with regard to teaching professionals. In many cases, they too need specialised training programmes, especially in terms of digital literacy".

The public sector was bound to receive 67% of the European funds from the Recovery and Resilience Plan. Most interviewees agreed that the weight of this sector is excessive and that it has much to improve, in terms of digitalization and efficiency of public entities and services. This development may contribute to the attraction of foreign investment motivated by the agility and simplicity of the sector.

Finally, the Industrial sector and its areas with bigger relevance in Portugal such as metalworking, moulds, pharmaceutical industry, or the aeronautics sector. These are the areas in which there should be the continuity of the development in the recent years before the pandemic. To do so, there should be a dynamic of "synergies in the most representative sectors, in particular benefiting from the relationship with higher education and research institutions, which has already contributed to strengthening the associated development and service component" (Pedro Castro e Almeida, 51).

7. Conclusion

The interviews showed concordance with the existing literature on the subject of Competitiveness. The Global Competitiveness Index, produced by the World Economic Source, is a respected tool for measuring Competitiveness and comparing nations worldwide. In-between the factors that compute that Index, innovation was consensually the most relevant for the Portuguese reality. Investing in innovation will contribute to shifting the economy to a more value-adding provider of goods and services one, and to reduce the current dependence on low-value tourism.

Another key factor for Portugal is the attraction of Foreign Direct Investment. The government has responsibilities in this matter as it should promote competitive conditions and tax benefits for companies, as well as working on international trade agreements and incentive plans.

The comparison between Portugal and the world top performers in terms of competitiveness led to the following conclusions: i) having a high ratio of exports to GDP is key; ii) Portugal does not have global brands that contribute to those exports; iii) a lighter tax burden on companies would promote economy growth, wealth and job creation, and a sustained increase in wage levels; iv) benchmark countries compete on value and export value-added goods and services, whilst Portugal relies on a low value service-based economy.

Famous economic theory from both Porter and David Ricardo can be used to explain the path to follow in becoming a more competitive country. As for Porter's theory of sources of competitive advantage, Portugal seems to be in an intermediate position between Cost Leadership, which historically has been the mentality of our economy, and Differentiation, which is the way to progress into a more sustained position. David Ricardo's theory defends the investment in specific sectors in which there is the biggest compared competitive advantage. Tourism is undoubtedly one of them, due to the intrinsic natural conditions of the country, even though it should also become more value adding. Other sectors that produce tradable goods and services should also be invested on, in order to increase wealth creation by companies, that will progressively become sustainable and able to increase wage levels.

The intervention of the State is also key, not only in the application of the funds from the Recovery and Resilience Plan but also in the creation of strategies that promote competitiveness and economic growth. Most arguments include the reduction of the weight of the public sector, which should be smaller and more efficient, and a tax reform that benefits company creation and development.

The business structure of Portugal is predominantly constituted by Small and Medium Enterprises. Given their representativity, the success of SMEs is important for the economy, so the government should support them. The support is not necessarily financial, because reducing bureaucracy, having competent and effective teams in public services, or reducing the tax burden for companies, would already contribute to a better business environment.

On the other hand, the government must also intervene in sectors where there are issues, such as real estate activities. Accommodation in the big cities, namely Lisboa and Porto, has become unsustainable for the common Portuguese citizen, which could be solved with measures that attracted big companies in this market and having transparent investment legislations.

Overviewing the impacts of the pandemic, the conclusion is that most sectors were affected. After the tourism sector, the health sector was the one with most implications, but that still has big growth opportunities. Internally, it is responsible for job creation and promotion of R&D, whilst it can also look to its demand abroad, of both goods (pharmaceutical sector) and services (tourism, health, and well-being services for senior population).

The Education, Public, and Industrial sectors are also crucial for the economy and have margin to improve their competitiveness, after they suffered changes in the pandemic crisis. Those sectors must be considered when discussing the increase of the level of competitiveness of Portugal.

The main limitation of this study was the lack of previous research studies on the subject of Business Competitiveness, especially after the pandemic, given the fact that this crisis is still ongoing.

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