## The European Industrial Policy\*

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#### **ABSTRACT**

The European Union's (EU) strategies and policies to strengthen its industrial sectors will be examined in our study. The European Industrial Policy is a comprehensive framework that aims to achieve the EU's economic development, competitiveness and sustainability goals. This study analyzes the main components of the European Industrial Policy and evaluates the impact and success of the policy on the EU industries. The first part of the study examines the history and development of the European Industrial Policy. The reasons for the emergence of politics, its key actors and its evolutionary processes are discussed. Then, the main objectives and strategies of the policy, such as increasing industrial competitiveness, adopting the principle of sustainability, promoting innovation and accelerating digital transformation, are explained in detail. The next part of the study examines the consequences and effects of the implementation of the European Industrial Policy. The performance of the EU countries in their industrial sectors is evaluated by critical indicators used to measure the success of the policy. It also focuses on how the policy impacts areas such as environmental sustainability, innovation, digitalization and employment. The last part of the study discusses the future of the European Industrial Policy. Policy challenges, potential future developments, and suggested improvements are discussed. Suggestions are made on what strategies the EU should adopt to further strengthen its industrial sectors and stand out in the global competition. This article examines in depth the impact of the European Industrial Policy on the EU economy, to understand the future role of the policy and contribute to the creation of a more sustainable, and competitive industrial base.

**Keywords:** Industry, European Industry, Industrial Policy

#### 1. Introduction

There are three communities within the European Union with common institutions. The first of these to be established was the European Coal and Steel Community (with the Treaty of

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Paris in 1951). Subsequently, the European Economic Community (with the Treaty of Rome in 1957) and the European Atomic Energy Community were established respectively. At the end of this process, the communities established a common market by eliminating all internal borders among the member states. With the Treaty on European Union signed at Maastrich in 1992, the European Union was established, moving towards an economic and monetary union, including intergovernmental cooperation in certain areas. Community action was initially limited to establishing a common market for coal and steel between the six founding members (Germany, Belgium, France, the Netherlands, Italy and Luxembourg). In 1957, these countries decided to establish an economic community based on the free movement of labor, goods and services. (Erdem, 2016) In 1972, the United Kingdom, Denmark and Ireland were admitted as members. The need for economic rapprochement and monetary union became clear when the United States suspended the convertibility of the dollar in the early 1970s. Greece joined the Community in 1981, while Spain and Portugal joined the Community in 1986. In 1995, Austria, Finland and Sweden joined. In 2004 Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, the Slovak Republic and Slovenia became members of the European Union. After Bulgaria and Romania joined in 2007, the number of member states increased to 27. Turkey and Croatia are candidate states. The European Union has a set of shared policies that apply across many sectors, including farming, manufacturing, business, and international commerce. This study attempts to broadly review the current industrial policy of the European Union. (Evangelista et al, 1998)

Industry, considered the most important driving force for the growth and development of countries, on the one hand contributes greatly to increasing the national income. On the other hand, it is a decisive factor in national and international competitiveness. Industrialization created a factory-based capitalist order, starting with the first industrial revolution in England in the 18th century. However, industry 4.0, that is, the industrial revolution in its fourth edition, presented at the Hannover Messe in 2011, included the use of cyber-physical systems as well as digitalization and completely new technologies; and new forms of production are created. To create a strong structure in industry, adopting appropriate industrial policies is extremely important. (Erdem, 2016) The industrial policies implemented by the European Union are defined as competition policies. Germany, the driving force of the European Union economy, is making great efforts to create added value in industry, in particular by investing in innovation and R&D, as part of its industrial vision 4.0. Since the Ottoman Era, Turkey has been able to carry out industrialization policies intermittently, sometimes due to internal and sometimes

external factors. Industrial policy is often identified with a competition policy and various forms of intervention undertaken by governments to promote sustainable development and increase the competitiveness of the industrial sector in the country concerned. Industrial policies vary depending on the goals to be achieved, the instruments used and the level of development of the country concerned. The policies implemented by the government can manifest themselves as horizontal interventions aimed to support businesses with different policies or can manifest themselves as vertical interventions aimed to support businesses with different policies (Midelfart et al, 2000).

Changing economic understanding according to the existing conditions throughout the historical process has caused different industrial policy approaches to prevail in different periods. In the years following the Second World War, state ownership and coordination played an important role in ensuring industrialization, which is the basic condition for development. Along with the neoliberal policies that have been effective since the 1980s, the commercial liberalization in world trade has brought about the necessity of minimum state intervention in industrial policies to ensure macroeconomic stability. The understanding that "all that is required for industrialization is the good functioning of the market mechanism," which has been dominant since the 1980s, has created flexibility in industrial policy applications due to the increasingly important innovation and technological progress in the 21st century and unsuccessful country experiences in industrial policy applications. Methods rather than justifications have become more important in industrial policies. (Evangelista et al, 1998). At this point, an industrial policy approach that attaches importance to the conditions and priorities of the relevant country is integrated with the outside world, and where the state operates the dialogue mechanism only to eliminate blockages at the necessary points has begun to operate. One of the main issues that gives rise to different opinions about industrial policy is the possibility that some forms of economic activity may be more important than others. In this context, the importance of manufacturing is emphasized in terms of increasing productivity, contributing to the diffusion of technology and determining wage levels throughout the economy. The manufacturing sector is also an important source of innovation that helps create and distribute wealth. (Midelfart et al, 2000).

Germany is a world leader in many industrial sectors, including the automotive industry. It cannot be denied that Germany has an extremely strong industry. The troubling question at this point is whether Germany has a strong industrial policy. Germany has not been as effective as Britain in formulating industrial policy, and the British have contributed more to the EU

industrial policies than the Germans, a natural consequence of the industrial revolution. Germany's role in industrial policies as a country with the strongest industry in the EU can be described as a strong sectoral specialization, with a strong focus on research-intensive industries and strong competitiveness of companies based in Germany. Germany intends to breathe new life into industrial policy through digitalization, which was tobe tested for the first time in 2011 at the Hannover Messe as part of industry 4.0. (Evangelista et al, 1998). In addition, green industrial policy, forward-looking environmental policy, strong education and training system and investment-friendly tax policy are other factors that increase the effectiveness of German industrial policy (Southard, 2000). The term industry 4.0 is a concept used to describe the fourth industrial revolution; This is a new level of production organization and control of the entire value chain throughout the product life cycle. The combination of people, things, and systems forms a value-creating network that optimizes cost, availability, and resource consumption. Germany aims to become a leading supplier of industry 4.0 technologies, aiming to develop an innovative and successful manufacturing sector internationally. By addressing industrial policy practices as well as environmental issues, Germany aims to reduce negative external environmental impacts through a variety of regulations, including eco-tax reform, along with other European Union practices. They want to maintain their economic competitiveness by using tools that promote jobs and innovation (de Jong, 2013).

### 2. LITERATURE REVIEW

# 2.1. Industrial Policy of the European Union

Before discussing the type of industrial policy followed by the European Union, we will look at the basic economic issues facing the Union. The main economic problems facing the European Union can be summarized as follows (Morgil, 2000).

• Rising unemployment rates in the European Union countries are the first economic problem. The unemployment rate was 4.5% in 1975, rising to about 8 to 9% in the 2000s, due to poor investment decisions made in the European Union in the past and the fierce competition created by the new government. In the global markets of industrialized countries, a significant amount of spare capacity has appeared in traditional industries (such as textiles, shipbuilding, and steel). Since the traditional industries of the European Union economy provide two-thirds of all industrial employment, they cannot be sacrificed.

- The European Union lags behind the United States and Japan in technological development. It can be said that the EU's current industrial policy, built taking into account these three fundamental issues, includes three basic elements:
- Developing new industries based on high technology and capable of creating large-scale jobs in the future;
- Support, protect and develop traditional industries;
- Reducing unemployment and popularize the business inspiration. Placing particular importance on SMEs, the European Union's industrial and SME policies have been developed as independent policies over many years. At the beginning of 2000, the Directorates responsible for these areas were grouped under the name Directorate General for Enterprise; and policies in this area began to be discussed together under the name of European Entrepreneurship Policy (Schmahl and Koch, 2001). Therefore, the goal is to create a more efficient structure. In the 1960s, the Community had no common industrial policy. Member states were free to follow their own industrial policies (Soyak, 2005). The EU industrial policy was first officially addressed by the memorandum "the EU Industrial Policy" in 1970. In 1973, the Council of Ministers adopted the first action program on industrial policy. The program includes measures such as reducing intra-community trade barriers, harmonization of company laws and purchasing regulations, as well as sectoral measures such as aviation, IT, shipbuilding and paper manufacturing industries (Schmahl and Koch, 2001).

During this period, the EU implemented measures to restrict foreign trade (such as quotas on steel, and restrictions on textile products) and also tried to refocus on industrial policy. During the 1980s, the European Commission attempted to address structural changes in regions through sectoral policies (e.g. textile, steel, automotive and shipbuilding sectors). On the other hand, attention starts to be paid to the measures needed to help European companies become internationally competitive because the US and Japan have already become rivals to the EU by quickly launching new technologies; and developing countries in the Southeast Asia have also become rivals to the EU by producing new industries and traditional industry at lower costs. In this context, emphasis is placed on perfecting the European single market, supporting industrial cooperation of European companies with companies from third countries and the importance of research and development (Schmahl and Koch, 2001).

Industrial competitiveness was included as one of the main objectives of the European Union in the 1992 Maastricht Treaty. Article 157 of the agreement states:

"The Community and the Member States will ensure that the necessary conditions are created so that Community industry can achieve competitiveness." This article places the focus on the EU and its member states to strengthen industry competitiveness. This article also argues that industrial policy practices should not lead to anti-competitive effects in the market (Schmahl and Koch, 2001).

The objectives of the EU industrial policy can be briefly summarized as follows:

- It would not be wrong to define the EU industrial policy as one aimed to increase the competitiveness of industry. With an increase in labor efficiency, markets open to international competition will gain competitive strength, the quality of life of individuals will increase, and natural resources will be used more efficiently through better use of competitive advantages.
- The EU industrial policy emphasizes the need to create a business-friendly environment and this approach is known as horizontal industrial policy. To ensure efficient use of resources, a horizontal approach is introduced to treat all sectors equally. The European Commission adopts an approach whereby the state is primarily responsible for creating and maintaining a suitable business environment, while the main initiative and responsibility for industrial competitiveness lies with the private sector.
- The main responsibility for adapting to economic changes lies with the real sector. But the state must also take measures to create favorable conditions and accelerate this adaptation process.

# 2.2. Tools of the EU Industrial Policy

### 2.2.1. The Customs Union and Free Movement of Goods

The Customs Union is a free trade area in which two or more countries jointly eliminate all tariffs and barriers imposed on goods at their borders and apply common tariffs to third countries. In the Customs Union, customs duties collected through common customs tariffs applicable to third countries are collected in a common fund and transferred to the union budget rather than transferred to the country where the border gate is located. This fund is used to cover the general expenses of the community (Çimen, 1996). The Customs Union and the EU law on the free movement of goods form the foundation of the European single market. The single

market has important economic impacts, such as creating new job opportunities, increasing output and reducing inflation. Since the Customs Union between the EU and east-side countries came into effect in 1996, the Turkish and European economies have benefited similarly. However, delays in implementing the EU legislation on the free movement of goods in Turkey have prevented the impact of the customs union from being fully realized.

## 2.2.2. Support for Research and Development

Most EU member states still lag behind the United States and Japan in the proportion of GDP allocated to corporate R&D spending. To improve the R&D efforts of European companies, the Commission proposed the following (Schmahl and Koch, 2001):

- Ensuring closer collaboration between industry, users and researchers across Europe, and supporting the use and dissemination of research results will enhance research effectiveness. Under the EU cooperation programme, a series of business cooperation programs have been developed to help small and medium-sized enterprises have access to international markets, increase their competitiveness, and also help them be resilient in the face of a crisis economy. Through the Business-to-Business (BRE) Hub program, it aims to enable SMEs to collaborate with companies from the 80 countries included in the program on technical issues, trade, finance and general investment. Following negotiations between the Ministry of Foreign Affairs and the European Commission, Turkey's participation was secured through an agreement signed between KOSGEB and the EU Enterprise Directorate in 1993.
- The 5th Community R&D Framework Program calls for directing venture capital funds to the first stages of innovation investment to help increase Europe's industrial competitiveness, create jobs, and improve the quality life for European citizens. The European Investment Fund actively supports innovation projects in the EU. The aim is to facilitate access to patent protection and innovate the functioning of the EU patent system.
- The experience of Ireland, which has developed very successfully after joining the EU, shows that it is smarter to provide state aid to intellectual fields such as education, internships, research and development as well as support for specific investment fields such as machinery and equipment. It is expected that the support provided will be sufficient to produce encouraging effects.

### 2.3. The Entrepreneurship Policy

The European Commission has determined its strategies on enterprise and entrepreneurship for a ten-year period, starting from 2001. The main purpose of the entrepreneurship policy is to encourage entrepreneurial spirit and risk taking among entrepreneurs. In this context, the General Directorate of Enterprises recommends various measures to encourage entrepreneurial activities in its report titled "Work Program for Entrepreneurship Policy 2000-2005". These measures can be summarized as follows (Güney and Akbay, 2008):

- Ensuring that entrepreneur candidates have the appropriate skills, education and motivation,
- Ensuring access to financing opportunities such as loans and guarantees, risk and startup capital,
- Developing policies that improve the business environment and provide a fair competition,
- Effective support service. The Enterprise Policy aims to further improve the functioning of the EU Internal Market and provide EU companies with easier access to world markets. Within the framework of the entrepreneurship policy, the Commission prepares comparison tables and audit reports through which member countries can share their experiences and practices with each other. The "benchmarking" technique is accepted as a new tool of coordination between European institutions. It is planned to be implemented as a method of identifying and changing successful experiences through seminars and conferences on the EU's research, education, environment, economy and entrepreneurship policies (Güney and Akbay, 2008).

## 2.4. Competition Policy of the European Union

### 2.4.1. Historical Development of the European Union's Competition Policy

The basis of the current European competition policy is the Treaty on the European Coal and Steel Community (ECSC). The agreement follows efforts to rebuild the economy of continental Europe after World War II. To facilitate restructuring, French Foreign Minister Robert Schuman proposed merging the French and German coal and steel industries in the Schuman Declaration on May 9, 1950. At that time, the mining sector was considered the most important industry in Germany and France. In 1951, the ECSC Treaty was signed by Germany,

France, Italy, and the Benelux countries and took effect from 1952 onwards. The Community's objective was to ensure economic growth, increased employment and improve living standards in the member states through a common market for coal and steel (Articles 1 and 2 of CECA). According to Article 4 of the ECSC Treaty, all member states were to protect their markets and prevent practices that distorted competition. More precisely, protecting competition would reduce monopoly and cartelization, and allow the public to consume products and services of a higher quantity and quality at a lower cost, This has led the ECSC issued regulations to prohibit market discrimination, cartels and mergers in Articles 60, 65, and 66. To oversee the application of the law, a High Authority was established; namely the Community's supreme national executive authority, and was supervised by the European Court of Justice and the Council of Europe (Francis and Tharakan, 2023).

In the early 1960s, the European competition policy was synonymous with restrictive practices (or cartels). At this stage, the role of the European Court of Justice (ECJ) was minimal. However, this would soon change as legal decisions began to "supplement" the law and contribute to the overall policy formation. The first significant developments in the EU competition policy began with the implementation of the single market program in the 1980s and 1990s. Once the designers of the single market realized that the competition policy would play a central role in establishing an effective competition policy, the view has been adopted to create a free and integrated European market. 'The White Paper on the Completion of the Internal Market,' published by the Commission in 1985, emphasized that the completion of a large common market by 1992 would create a more favorable environment for promoting competition and trade (Francis and Tharakan, 2023).

### 2.4.2. The Scope of the European Union's Competition Policy

In systems of liberal political economic governance, effective coordination of economic activities is based on a belief in the superior power of the market. Effective regulation of the economy requires the state to establish and protect free markets. The better this is done, the better the economy will perform. Competition policy is at the heart of such a regulatory system. Free and open competition is at the heart of effective functioning of a free market economy. This is why preventing anti-competitive agreements between private companies and limiting state intervention that favors certain activities or entities is of great importance. (Malico et al, 2019) The main objective of the EU competition policy is to protect market mechanisms from collapse. This protection is achieved by promoting competitive market structures and monitoring anti-competitive behavior. The EU competition policy has three important features

that cannot be found at any other level. The first characteristic is that the EU not only supports the competition process but also encourages and protects market integration among the EU member countries (de Jong, 2013).

The second feature is that the EU takes into account specific distortions of competition and distortions of market processes that occur in member states, especially through state aid. These two features stem from the third distinguishing feature of the EU competition policy; namely, that it has "scope within the multi-level political system," in the EU member states. The EU competition policy regulations have been centralized by the European Commission for many years. In May 2004, a decentralized system based on implementation and coordination between national competition authorities among member states came into force (Midelfart et al, 2000).

## 2.4.3. Goals of the European Union's Competition Policy

Based on the general principle that the central aim of the EU competition law is "to benefit consumers,", the EU competition policy has created a system aimed to protect competition, focusing on consumer benefits. This system requires that competition policy proposals aimed to improve consumer welfare and take into account, to some extent, how the type of intervention proposed will benefit consumers. any. The EU competition policy emerged as a technological initiative aimed to achieve the EU competition law enforcement objectives. Its direction has been shaped over time by interrelated fundamental, methodological and institutional aspects. At the highest level, the EU competition policy can be theorized as a policy field that seeks to reconcile individual and collective rationality. While this policy area aims to maximize profits for entrepreneurs, it also involves efforts to maximize the welfare of society. In this context, they can impose limits on behavior that may be considered socially unacceptable in relation to fair competition and certain standards of fairness expressed in the principles of fairness, and antitrust rules are applied through a series of legal tests and codes of practice. As part of the competitive industrial policy environment, states may impose restrictions on behavior which can be deemed socially unacceptable by providing subsidies to individual companies or sectors (Francis and Tharakan, 2023).

This can give them an edge over their competitors. The goal here is to protect key economic sectors. Industrial policy aimed to achieve or maintain a competitive political position. Although state intervention in competition policy is only necessary in cases where

competition is disrupted, there are cases where state aid is provided to achieve competition policy objectives.

### 2.5. The Future of the European Union Industrial Policy

The European Union (EU) has been an important actor of the world economy throughout history. However, in recent years, changes in global economic dynamics, technological advances and environmental concerns have revealed the need to rethink the EU's industrial policies. The European Union's industrial policy has been an important agenda item since the establishment of the European Economic Community (EEC). Initially, the focus was on creating the internal market and developing a competitive economy. But over time, the policy gained more goals and dimensions. Especially in the early 21st century, issues such as energy security, environmental sustainability and digital transformation came to the fore. The current situation and challenges are as follows (Hyman, 2018):

- a. Digital Transformation and Industry 4.0: The rapid development of digital technologies is radically changing industrial production processes and business models. The EU must capture this transformation and create a leading digital economy.
- b. Environmental Sustainability: Environmental issues such as climate change and depletion of natural resources encourage the EU to invest in sustainable production and green technologies.
- c. Global Competition: The EU has to compete with other major players in the global economy. Rising economies, especially China, pose a significant threat to competitiveness. The EU should lead an environmentally friendly industrial transformation by focusing on green technologies and sustainable production methods. This will strengthen the EU's global leadership role. (Hyman, 2018)

The EU can provide a competitive advantage by accelerating digital transformation and encouraging innovation. This can increase new business opportunities and employment. Promoting industrial cooperation and knowledge sharing between the EU countries can help

find common solutions. Investment should be made in education and skills development programs to prepare the industrial workforce of the future. As a result, the European Union Industrial Policy will remain an important element shaping the economic and social future of the EU. Future success will depend on steps taken in areas such as environmental sustainability, digitalization and innovation (Boix-Domenech and Köster, 2018). The EU can take a leading role in the global arena by making the industrial sector more competitive, environmentally friendly and innovation-based. However, cooperation, investment and policy reforms are inevitably necessary to achieve these goals (Southard, 2000).

#### 3. METHOD

### 3.1. Purpose of the Study

The purpose of this study is to provide a comprehensive analysis of the European Industrial Policy, with a focus on its objectives, implementation, and impact on the European Union (EU) and its member states. The European Industrial Policy, as a crucial component of the EU's economic strategy, plays a pivotal role in shaping the continent's industrial landscape. This study aims to achieve the following specific objectives:

Examine the Historical Evolution: To trace the historical development of the European Industrial Policy, identifying key milestones, policy shifts, and the driving factors that have shaped its trajectory. Understanding its evolution will provide insights into the policy's historical context and its relevance in contemporary Europe.

Assess Policy Objectives: To analyze the core objectives of European Industrial Policy, investigating how they have evolved over time and how they align with current economic, environmental, and technological challenges. This assessment will help in understanding the policy's adaptability to changing circumstances.

Evaluate Implementation Mechanisms: To explore the mechanisms through which European Industrial Policy is implemented at both the EU and member state levels. This involves assessing the roles of various stakeholders, regulatory frameworks, and financial instruments used to promote industrial growth and competitiveness.

*Examine Sectoral Focus:* To investigate whether the policy demonstrates a sectoral focus and if it prioritizes specific industries or technologies to enhance competitiveness and innovation.

Understanding sectoral preferences is essential to gauge the policy's alignment with future industrial trends.

Assess Economic and Social Impact: To evaluate the economic and social impact of the European Industrial Policy on the EU as a whole and its individual member states. This includes examining indicators such as GDP growth, employment rates, innovation metrics, and environmental sustainability.

*Identify Challenges and Opportunities:* To identify the challenges and opportunities that the European Industrial Policy faces in a rapidly changing global economic landscape. This analysis will consider factors like global competition, digitalization, sustainability imperatives, and the potential implications of geopolitical developments.

Offer Policy Recommendations: Based on the findings and insights that derived from the study, these aim to provide informed policy recommendations for enhancing the effectiveness and relevance of European Industrial Policy. These recommendations will be designed to support the EU in achieving its economic, environmental, and innovation goals.

By addressing these objectives, this study aims to contribute to the academic discourse on the European Industrial Policy while offering practical insights that can inform policymakers, industrial stakeholders, and researchers interested in the future of European industrial development.

### 3.2. Population and Sample of the Study

The population of this study encompasses the European Union (EU) as a whole, as well as its individual member states. The European Industrial Policy operates at both the EU level, with overarching strategies and directives, and at the national level, where specific measures are implemented to achieve the broader policy objectives. Therefore, the study's population comprises the 27 EU member states collectively and each member state individually.

Given the vastness and complexity of the European Industrial Policy landscape, a carefully designed sampling strategy is essential to conduct meaningful research. The study employs a multilevel sampling approach, considering both the EU-level and national-level perspectives.

#### 3.3.Data Analysis

The data analysis for this study on the European Industrial Policy involves a multi-faceted approach, considering both qualitative and quantitative data sources. The analysis aims to provide a comprehensive understanding of the policy's objectives, implementation, and impact at both the European Union (EU) and national levels. In this article on the European Industrial Policy, the data analysis primarily draws upon a comprehensive review of existing literature, policy documents, academic studies, and reports related to the subject. The analysis aims to synthesize and critically evaluate the key themes, trends, and findings present in the existing body of knowledge concerning the European Industrial Policy. The following steps outline the data analysis methodology:

- **1. Data Collection:** Data for this analysis is obtained from a wide range of scholarly articles, policy reports, official EU documents, and academic publications. These sources have been systematically selected based on their relevance to the topic of the European Industrial Policy.
- **2.** Literature Review and Synthesis: A systematic literature review has been conducted to identify and collect relevant studies and publications. This review involves the identification of key themes, objectives, challenges, and policy instruments discussed in the literature.
- **3. Thematic Analysis:** A thematic analysis approach has been applied to the collected literature. Key themes and sub-themes, such as policy objectives (e.g., competitiveness, sustainability, innovation), challenges (e.g., globalization, digitalization), and implementation mechanisms (e.g., regulations, funding programs) have been identified and categorized.
- **4. Synthesis of Findings:** Findings from the literature have been synthesized to provide a comprehensive overview of the current state of the European Industrial Policy. This synthesis involves summarizing key policy objectives and assessing the effectiveness of the policy in achieving these objectives.
- **5.** Comparative Analysis: Comparative analysis has been conducted to examine variations in the implementation and impact of industrial policies across different European Union member states. This analysis sheds light on regional disparities and the role of national-level policies.
- **6. Identification of Challenges and Opportunities:** The literature review has enabled the identification of common challenges and opportunities faced by the European Industrial Policy. These findings are presented to provide insights into areas where policy improvements may be necessary.

- **7. Policy Recommendations:** Based on the synthesized findings and identified challenges, this analysis offers policy recommendations and suggestions for enhancing the effectiveness and relevance of the European Industrial Policy. These recommendations are grounded in the insights deriving from the literature review.
- **8. Reporting:** The results of the data analysis are presented in a structured and organized manner within this article. Findings, key themes, and policy recommendations are presented clearly to facilitate understanding and accessibility.
- **9. Limitations and Future Research:** The data analysis also acknowledges the limitations of the study, including the inherent biases in the selected literature and the potential for gaps in the existing knowledge base. Future research directions and areas requiring further investigation are also identified.

In conclusion, the data analysis for this article relies on an extensive review of literature and existing research to provide a comprehensive understanding of the European Industrial Policy. By synthesizing key themes, challenges, and policy recommendations from the literature, this analysis contributes to the ongoing discourse on the effectiveness and future directions of European Industrial Policy.

### 4. RESULTS

In this article, a review of the evolutionary process, main objectives, implementation mechanisms and effects of the European Industrial Policy is presented. Findings from the literature highlight the complexity and importance of the European Union's industrial policy. This concluding chapter summarizes the key points of this study while also considering various ways of thinking about future research and policy development.

**Main Findings**: The European Industrial Policy is at the heart of the EU's efforts to achieve its goals of economic growth, sustainability and competitiveness. This policy historically started with the aim of creating the internal market and increasing competitiveness, but has gained more dimensions over time. The main findings reveal the following:

*Environmental Sustainability:* The European Industrial Policy has highlighted environmental sustainability. By focusing on green technologies and sustainable production processes, the EU has taken important steps to meet its environmental targets and provide international leadership.

Digitalization and Innovation: The EU has taken important steps to accelerate digital transformation and encourage innovation. This has the potential to increase competitiveness and create new business opportunities.

*Industrial Cooperation:* Promoting industrial cooperation among the EU countries can be an important step in finding common solutions. Joint projects and knowledge sharing can contribute to strengthening industries.

*Challenges:* The study shows that the European Industrial Policy still faces a number of challenges. Factors such as global competition, economic fluctuations and technological change pose significant obstacles to the success of the policy.

This article also raises some important considerations for future work and policy development:

*Emphasis on Environmental Targets:* The Future European Industrial Policy is expected to emphasize environmental sustainability more. Investments in green technologies and carbon reduction targets should feature more prominently among policy priorities.

Accelerating Digital Transformation: Investments in areas such as digitalization and artificial intelligence are important to increase the EU's competitiveness. In this context, it is necessary to develop digital skills and promote the digital economy.

Global Cooperation: The EU should cooperate with other major economies to become a more effective player in the global economy. Trade agreements and the establishment of international standards can increase the competitiveness of the EU industry in the global market.

*Employment and Social Inequality:* Policy should pursue the aim of protecting employment and strengthening workers' rights. The role of industrial policies in reducing social inequality may become even more important in the future.

As a result, the European Industrial Policy plays a critical role in achieving the EU's economic and environmental objectives. Future policy reforms and strategies should support the EU's goal of having a sustainable, innovative and competitive industry in the international arena. To this end, policymakers, industry leaders and researchers need to develop a common vision of collaboration, innovation and sustainability.

#### REFERENCES

- Boix-Domènech, R., & Rausell-Köster, P. (2018). The economic impact of the creative industry in the European Union. *Drones and the creative industry: Innovative strategies for European SMEs*, 19-36.
- Çimen, A. (1996), Gümrük Birliği ve Avrupa Topluluğu Türkiye İlişkileri, Merkez Bankası Yayınları, Ankara.
- De Jong, H. W. (2013). *The structure of European industry*. Springer Science & Business Media.
- Erdem, E. (2016). Sanayi devriminin ardından Osmanlı sanayileşme hamleleri: Sanayi politikalarının dinamikleri ve zaafiyetleri. *Erciyes Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, (48), 17-44.
- Evangelista, R., Sandven, T., Sirilli, G., & Smith, K. (1998). Measuring innovation in European industry. *International Journal of the Economics of Business*, *5*(3), 311-333.
- Francis, A., & Tharakan, M. (Eds.). (2023). *The competitiveness of European industry*. Taylor & Francis.
- Güney, P. Ö., & Akbay, O. S. (2008). Avrupa Birliği'nin Sanayi Politikası ve Türk Sanayisine Etkileri. *Uluslararası Yönetim İktisat ve İşletme Dergisi*, *4*(7), 145-160.
- Hyman, R. (2018). What future for industrial relations in Europe?. *Employee Relations*, 40(4), 569-579.
- Malico, I., Pereira, R. N., Gonçalves, A. C., & Sousa, A. M. (2019). Current status and future perspectives for energy production from solid biomass in the European industry. *Renewable and Sustainable Energy Reviews*, 112, 960-977.

- Midelfart-Knarvik, K. H., Overman, H. G., Redding, S. J., & Venables, A. J. (2000). *The location of European industry*.
- Morgil, O. (2001). The Turkish-German Economic Relations and the EU. *Akdeniz İİBF Dergisi*, *I*(2), 147-153.
- Morgil, O. (2000), "Avrupa Birliği'nde Sanayi Politikası ve KOBİ'ler", H.Ü. İktisadi ve İdari Bilimler Fakültesi Dergisi, Cilt 18, Sayı 1, ss. 245-256.
- Schmahl, M., & Koch, M. (2001). Avrupa Birliği'nin Girişimcilik Politikası ve Türkiye'nin Uyumu: Sanayi Politikası ve KOBİ'ler. İktisadi Kalkınma Vakfı Yayınları, İstanbul.
- Southard, F. A. (2000). American industry in Europe (Vol. 6). Taylor & Francis.
- Soyak, A. (2005). Avrupa Birliği Sürecinde Türkiye Sanayi Politikası Üzerine Eleştirel Bir Yaklaşım. *TMMOB Ölçü Dergisi*, 61-69.