

# Uncompetitive French manufacturing -- take Valeo as an example

Yueying Hao

Jilin Foreign Studies University, Changchun 130117, China

**Abstract:** This paper comprehensively discusses the historical development, current status and future challenges of French manufacturing industry, taking Valeo Company as a case for in-depth analysis. First, the paper reviews the rise and heyday of the French manufacturing industry, focusing on the transformation and challenges faced in recent decades, including factors such as increased global competition, technological change, socio-economic and policy environment. Secondly, the thesis analyzes the development of Valeo, its position and competitiveness in the global market, as well as the main challenges it faces and the strategies to cope with them. Finally, the paper discusses the future prospects and transformation strategies of the French manufacturing industry, including innovation to adapt to the global market, the shift to service - and technology-driven manufacturing, and the role of the government and enterprises in this process.

**Key words:** French manufacturing industry; Global competition; Technological innovation; Valeo Corporation; Industrial transformation; Social challenges; Manufacturing future outlook; Industrial competition between China and Europe

## I. History and development of French manufacturing industry

### 1. The rise and heyday of French manufacturing

(1) Early development (late 18th to early 20th centuries) French manufacturing originated in the Industrial Revolution at the end of the 18th century, marking the transition from an agricultural to an industrial society. Initially, France's industrial development was mainly focused on textile industry and railway construction, and gradually expanded to metal processing and machinery manufacturing. Although influenced by the British Industrial Revolution, France lagged behind other great powers in industrial development due to centralization and historical factors such as the American Revolution and the French Revolution. In the 19th century, France's manufacturing industry developed rapidly. During this period, French manufacturing gained an international reputation for innovation and quality, for example, in the French luxury and fashion industries. In the 20th century, French manufacturing continued to expand, particularly in the automotive, aviation and chemical industries. (2) Rise and heyday (1950s-1970s) After the 1950s, the French government strongly supported the country's reconstruction and industrial modernization, and the manufacturing industry ushered in a golden age (Trente Glorieuses). During this period, France's manufacturing industry, especially the automobile, aviation, electronics and chemical industries, developed rapidly, becoming the main driving force of the country's economic growth. Several large French manufacturing companies, such as Renault, Peugeot, Airbus and Alstom, have achieved a prominent position in the international market.

### 2. The transformation and challenges of the French manufacturing industry in recent decades

The French manufacturing industry has begun to face fierce competition from Asia and other developing countries, which have attracted a large amount of manufacturing investment with low-cost labor. In order to improve their competitiveness, most manufacturing companies in France have also moved their production lines to countries with lower costs. As a result, production machinery and capacity are all located in Asia. The ability of French companies to supply goods could be wiped out in an instant if international shipping went wrong.

(1) Potential risks in the supply chain. (2) Digitalization is the future direction of industry. (3) Changes in industry structure. As a result, most French companies have experienced a shift in focus from simply producing products to providing integrated solutions and services.

### 3. Conclusion

Although France still has advantages in advanced fields such as aerospace, high-speed rail, medicine and pharmaceuticals, and materials, France, like other European countries, faces the reality of a gradual decline in manufacturing. Further EU integration is a potential solution, though. But, given their historical, cultural and political interests, it is unlikely that European countries will be able to pull together in the short term. French manufacturing needs innovation, waiting for new technological progress and opportunities.

## II. Case study of Valeo Company

### 1. The development process of Valeo

Valeo was originally founded in 1923 under the name Societe Anonyme Francaise du Ferodo, focusing on the manufacture of brake liners. The company then moved into other automotive components such as automotive lighting and electrical systems. In 1980, the company officially changed its name to the Valeo Group, symbolizing its transformation into an international group. In the 1990s, Valeo continued its global expansion, entering markets in Asia and Latin America and strengthening research and development in the areas of electronics and thermal systems. In the early 2000s, Valeo began to focus on innovation in energy efficient and environmentally friendly technologies, investing in electric vehicles and autonomous driving technologies. The company strengthened its cooperation with global automobile manufacturers and became a key supplier to a number of leading brands.

### 2. Valeo's position and competitiveness in the global market

Like many French manufacturing companies, Valeo has encountered many problems such as those mentioned above in recent years. Production and supply chain disruptions have caused significant operational difficulties for Valeo. Most of Valeo's suppliers are based in China, where costs are high for European and American suppliers, and where Indian and Southeast Asian suppliers have problems such as

quality and efficiency. In the short term, Valeo will find it hard to shake off its dependence on China.

Valeo has become an important player in the global automotive supply chain, particularly in the areas of electric cars and autonomous driving. The company’s products and technologies enjoy a high reputation in many markets around the world, especially in the European and North American markets. Valeo’s core competence lies in its ability to innovate, especially in the field of automotive electronics and drivetrains. The company is committed to developing efficient and environmentally friendly automotive technologies to meet increasingly stringent environmental standards and market demands.

2023	2022	Logo	Name	Country	2023	2022	2023	2022
1	1		Denso		\$4,469M	\$4,235M	AA	A+
2 =	2		HYUNDAI MOBIS		\$3,631M	\$3,724M	A+	AA
3	6		Toyota Industries		\$2,749M	\$2,216M	A	A
4,	3		Magna	H	\$2,585M	\$2,827M	A+	A+
5 =	5		Valeo		\$2,298M	\$2,285M	AA	AA
6	4		Sumitomo Electric Industries		\$2,120M	\$2,429M	A	A
7	9		Lear Corp		\$1,994M	\$1,971M	A+	A+
8			Weichai		\$1,879M		A	
9 +	7		Aisin		\$1,832M	\$2,117M	A	A
10 =	10		Hasco		\$1,647M	\$1,754M	A	A

Figure 1: World ranking of auto parts manufacturers. Source: <https://brandirectory.com/rankings/auto-components/>

### 3. Response measures

Valeo believes that since it is impossible to completely get rid of the dependence of the Asian supply chain, the best solution should be to integrate it. Valeo, like many other French companies, has taken its French identity very seriously. But a truly global company is an economic organisation that transcends the state. So Valeo has become more integrated into the Chinese supply chain as it has grown. It has not only put into operation factories such as Changshu and Wenling, but also set up R&D centers and offices in Shanghai and other places. Now its Chinese factory is basically the production base with the highest output of each series of products. This allows the company to significantly reduce costs and risks. It also provides direct proximity to China, one of the world’s top three auto markets. The cost of this move is also significant, as its production capacity in Europe continues to diminish. But it has also helped the company meet its environmental targets within the European Union. Overall, the benefits outweigh the costs.

Under the impact of measures to integrate into its supply chain, Valeo announced in 2008 that it was laying off more than 5,000 employees worldwide. 1,600 of the eliminated jobs were in France. As Valeo acquired companies such as Siemens Automotive Systems, its production processes became increasingly automated. This has significantly reduced labor costs. But because of worker protections in European Union countries, it has become increasingly expensive to fire workers. At the same time, corporate image is becoming more and more important to the development of enterprises. In this context, Valeo has made a decision not to fire employees but to expand production capacity as much as possible to gain more profits. The expected gains depend on the recovery of the world economy and on when downstream carmakers can fully restore their manufacturing capacity.

Thanks to its vast former colonies, France can still absorb large numbers of foreign workers each year. At the same time, due to its long industrial development history, its scientific and technological patents and technical base still have significant advantages over China and other latecomers. At present, Valeo is a leader in the field of powertrain electrification, and ranks second in thermal management systems, which are crucial for the performance and range of electric vehicles. With the integration of Valeo Siemens eAutomotive, Valeo’s capabilities in the field of low and high voltage technologies have been strengthened, making it a frontrunner in the field of electric mobility. ADAS: A global leader in driver assistance, Valeo equips one in three new vehicles worldwide. Its technological prowess in ADAS includes sensors, software and data fusion, enabling it to produce efficient solutions at optimal cost. Valeo has sold more than 1.5 billion ADAS sensors over the past 30 years and plans to sell more than 3 billion sensors in the next five years.

By setting up research and development centers in the United States as well as in countries where capital is active, such as China, Valeo plans to successfully transform itself into a thoroughly international company. In this way, the French and European restrictions on technological development will not affect Valeo itself. However, this is a big challenge for the old company’s organizational structure and the re-division of internal BG.

## III. The key factors affecting the competitiveness of French manufacturing industry

Through the case of Valeo and the situation of similar industrial manufacturing companies in France, we can analyze the following key factors affecting the competitiveness of French manufacturing industry.

#### 1. Economic factors: cost, efficiency and investment

Rising production costs for enterprises: increases in labor, raw material and energy costs have compressed profit margins and affected price competitiveness. Productivity issues: Although the enforcement of strict labor laws is beneficial to workers, it has a certain negative impact on the development of enterprises. In some areas, France is less productive than manufacturing in Asia and other regions, which limits its competitiveness in the global market. Under-investment: Under-investment in key technologies and facilities has led to the French manufacturing sector falling behind in innovation and technological upgrading. Although France has frequently hosted summits in recent years to attract investment (such as Tesla CEO Elon Musk's Choose France Summit in 2023), the country's overall ability to attract foreign investment is low.

#### 2. Restrictive trade policies

Protectionism and tariff barriers may have limited the export capacity of French manufacturers. The zero-tariff integrated trade policy within the EU has facilitated French companies' access to the European market. But it has also made some French companies lose their initiative. In the face of certain trade restrictions in the national market response is insufficient.

#### 3. Strict environmental laws and regulations

While environmental regulations have their positive effects, they can also lead to higher production costs, especially for energy-intensive industries. The tertiary and advanced industries have higher added value. However, the origin of raw materials and raw material processing enterprises are all located outside the country, which significantly increases the difficulty and risk of enterprise operation.

#### 4. Innovation capacity and automation level

Lack of innovation ability: Compared with the world's leading manufacturers, such as Valeo in the case, the main EV customers are new car companies such as Tesla and BYD. France's own electric vehicles such as Renault ZOE, Citroen electric models are mostly only sold in France and some European countries. The country's overall lack of technological innovation is partly responsible for the poor performance of French companies.

### IV. French manufacturing industry in the global market

#### 1. The positioning of French manufacturing industry in the international division of labor

Over the past few decades, France has experienced a phenomenon of deindustrialization, which has led to a reduction in industrial employment and the number of industrial companies, and the share of industrial manufacturing in the gross domestic product (GDP) has fallen to only about 10%. This trend has led to a growing trade deficit, reflecting problems with competitiveness and attractiveness. In recent years, the French government has tried to reverse this trend with laws and investment programs, such as the "France 2030" investment plan. In addition to France's own reasons, the total volume of international trade is increasing.

#### 2. Roles and challenges in global supply chains

The administrative and regulatory obstacles facing France pose serious problems for industrial investors. It typically takes twice as long to obtain an industrial license as it does in Germany. The change is likely to remain relatively limited, requiring better coordination across sectors and new incentives. Labour market challenges include skilled Labour shortages and declining educational standards, particularly a sharp decline in mathematical abilities, which are essential for re-industrialisation and innovative development.

Overall, the French manufacturing sector faces major challenges in the global market that need to be overcome through integrated strategies and long-term investments to improve the competitiveness of French manufacturing in the global market.

### V. Conclusions

The future of French manufacturing depends on its adaptability in the face of globalization and its ability to invest in and apply emerging technologies. Through cooperation between the government and businesses, especially in terms of policy support, technological innovation and market diversification, the French manufacturing sector is expected to overcome current challenges and thus maintain or enhance its competitive position in the global market. Although this study provides an in-depth analysis of the Valeo case and its impact on the French manufacturing sector, it is limited to specific cases and time periods and specific industries, and may not be able to make a precise analysis and judgment on the French manufacturing sector. Studies of the same kind can explore the broader field of manufacturing in the future, including the strategies of different industries and companies, and how they respond to globalization challenges and market changes.

### References:

- [1] Houshuang Wang, Xinyu Sheng. China's high-end equipment manufacturing industry international competitiveness comparative study [J]. Journal of dalian university of technology, social science edition, 2020, 41 (1) : 11. DOI: 10.19525 / j.i ssn1008-407 - x. 2020.01.002.
- [2] Editorial Department of This Journal, Chengying Li. French Craft Revelation -- Maker of French Spirit [J]. Chinese Handicrafts, 2018(1):6.