

The Theoretical Foundations and Antecedents of The Sector Approach

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THE SECTOR CONCEPT: BETWEEN AMBIGUITY AND RENEWED INTEREST

The concept of sector is a very old concept which goes back etymologically to the 1380s and designated "an instrument intended to stretch threads". The founding works of the notion of supply chain date back to between the two world wars (Mason, 1939). Later, in the early sixties, J. Le Bihan, L. Malassis and M. Bourgon carried out the first work on the upstream and downstream relationships of agriculture.

The concept of agri-food chain emerged following the work of Davis, Goldberg and Leontief (1957) during the era of industrialization. Goldberg (1968) thus completed this macroeconomic analysis with a microeconomic analysis by studying the wheat, soybean and citrus sectors, hence the birth of the sector approach. There are many definitions of the concept of sector. they tell us about the extent of its field of application and the ambiguity of this concept.

- For Ludovic Temple (2011) the sector is an alternative and complementary economic category to the notion of branch or sector.
- Tolédano (1978) defines the sector as being "a set of branches which maintain more intense exchanges with each other than with the others, it is in fact an articulated set of integrated economic activities".
- JC Montigaut defined the sector as being: "all closely intertwined activities, vertically linked by belonging to the same product (or very similar products) and whose purpose is to satisfy the consumer. (Montigaut, 1992). It is also defined according to Helfer (1996) as "the sequence of transformation stages undergone by a product from the production of the raw material to the sale to the consumer".
- For Malassis (1995), "the supply chain refers to the itinerary followed by a product (or a group of products) within the agri-food system; it concerns all the agents (companies and administration) and operations (production, distribution, financing) which contribute to the formation and transfer of the product until its final stage of use, as well as the mechanisms of 'adjustment of the flows of factors and products, along the value chain and at its final stage'.

Michel Labonne specifies that contrary to the traditional approaches unable to apprehend the complexity of the agro-alimentary field "The sector approach has an operational range because it leads to consider the problems of organization and regulation by including the activities of production, transformation and distribution of agro-food products",

The supply chain approach has also given rise to several criticisms. Theoretically, the notion of sector concerns a very similar product or category of products, whereas in reality, companies are more and more diversified and therefore operate simultaneously in several sectors, moreover this notion of sector does not have a theoretical status defines.

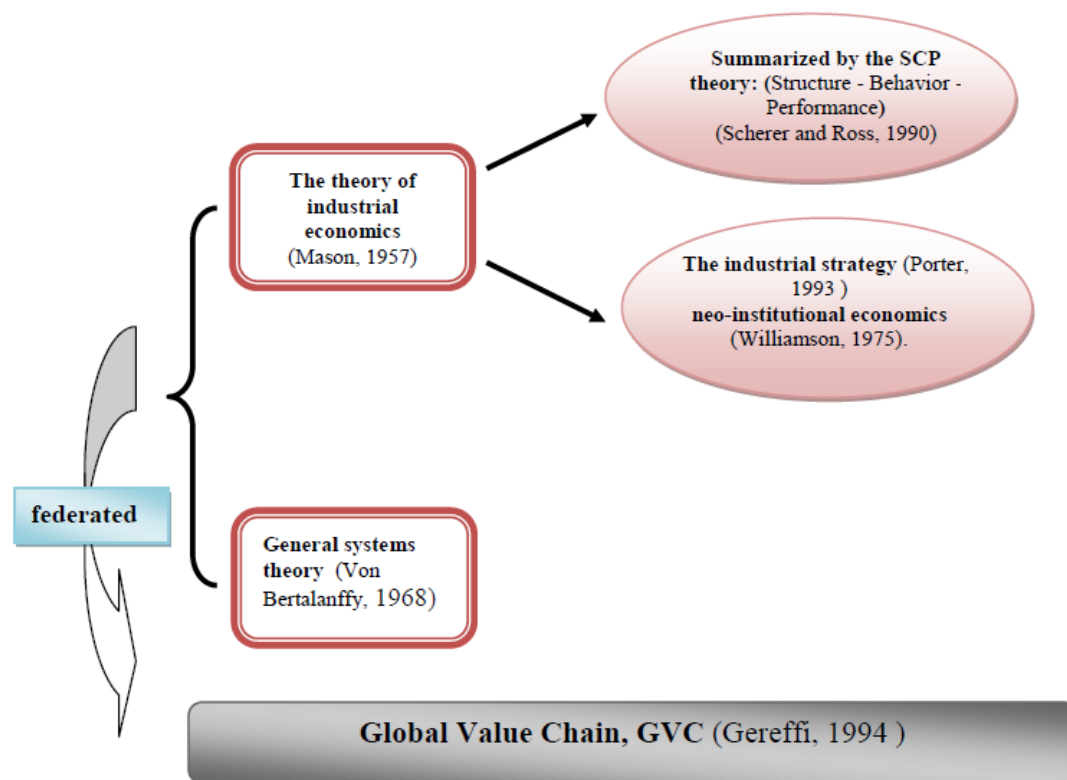
Michel Labonne (2008) also criticizes the supply chain approach for being "a concept widely used to deal with various issues from very different methodologies to the point that there is today confusion as to the exact perception of the concept".

Beyond these criticisms and reluctance, the notion of supply chain regained interest during the 1990s, According to Bencharif and Padilla (2001) for developing countries following the liberalization of their economies, for developing countries developed thanks to new trends in food product traceability requirements and the scattering of business activities on an international scale, particularly through multinational firms.

in the following party of this article, we try to propose a reading of the theoretical foundations and antecedents of the sector approach inspired by affiliation proposed by Rastoin (2006) which illustrates the diversity of the concepts linked to this approach. We focus on the complementarity between these different approaches and their contributions in the sector analysis.

THE THEORETICAL FOUNDATIONS AND ANTECEDENTS OF THE SECTOR APPROACH

These different foundations can be summarized by the following diagram:



According to Mason (1939), the founding work of the chain concept dates back to between the two world wars. They gave birth to a branch of economics called: industrial economy (Industrial organization) whose approach is summarized by the SCP theory (Structure - Behavior - Performance) of Scherer and Ross, 1990 and has been the subject of development within of 2 theoretical currents:

- industrial strategy (Julien and Marchesnay, 1997) whose best-known representative is Mr. Porter (Porter, 1993)

- neo-institutional economics (whose main currents are those of transaction costs (Williamson, 1975) and the economics of conventions (Boltanski and Thévenot, 1987, Eymard-Duvernay, 1989). It is also known by the sociology of organizations.

The general theory of systems first imagined by biologists (von Bertalanffy, 1968) and subsequently transposed to the field of economics and management (Lemoigne, 1977) also represents one of the theoretical foundations of the supply chain approach.

These different approaches to sector analysis are complementary, the approach of the Global Value Chain, CGV (Gereffi, 1994) represented a unifying framework that unified these different approaches (Rastoin and Bencharif, 2007).

The Industrial Economy (IE) Approach: Functional or Sectoral Analysis

The analysis of the first industrial systems dates back to 1819 thanks to the work of Jean Baptiste Say, however IE was not recognized as an independent field of investigation until 1930 thanks to the work of Chamberlin, Mason and Bain.

According to Angelier (1993), industrial economics is in fact the part of economics that studies the functioning of industries and companies taking into account the phenomena of imperfect information, uncertainties, transaction costs, entry barriers, etc.

The theory of industrial economics has been summarized by the SCP theory. In industrial economics, there is a unidirectional causal relationship linking the structure of the market (number of service providers, respective market shares and level of competition) to the behavior of the firms involved (price competitiveness, price-quality balance) and to economic performance. This SCP (structure-behaviour-performance) paradigm was devised by Mason (1939) and later refined by Bain (1968)

The SCP Theory (Structure - Behavior - Performance):

According to Bain (1951) the fundamental idea of the SCP approach is that the structures of an industry determine behavior and influence performance in that industry. Firms' performance is therefore determined by market structures.

The SCP approach is of great interest for the sector analysis due to the fact that thanks to the causal relationship between the three poles: structure - behavior - performance, we can study the need or not for a public intervention policy in the level of a sector at the level of the different links: agro-supplies, agriculture, food industry, distribution and consumption

The SCP approach was strongly criticized from the 1980s by the industrial strategy whose best known representative is M. Porter proposing new perspectives.

Industrial Strategy: Mr. Porter's Model of Competitive Advantage:

The best-known representative of the strategic approach or industrial strategy is Mr. Porter (Porter, 1993). The central idea of this theory is that structures and behaviors interact in two directions

This model is based on five forces:

- competitive intensity: rivalry between companies in the same sector,

- the bargaining power of customers,
- the bargaining power of suppliers,
- the threat of new entrants, and
- the threat of substitute products

The company's activity is part of a larger flow of activities that Porter (1993) describes as a "value system" and which "includes suppliers who provide the means of production (raw materials, components, tools, external services) to the firm's value chain" and the successive distributors up to the final buyer.

This value system therefore corresponds to a combination of value chains and which represents, to our knowledge, the first theoretical antecedent of the idea of global value chain, CGV developed by Geréfi (1994).

Porter reformed the perfect competition model of SCP theory and retained the imperfection hypothesis. Moreover, in his theory, Porter did not emphasize the importance of the intervention of institutions as key actors controlling competition in a sector. Something that has been strongly criticized by the theory of neo-institutional economics, particularly for agri-food sectors experiencing significant institutional interventionism in their operation. The founder of this theory is Coase (1937).

Neo-Institutional Economics:

The main theories of neo-institutionalist are those of the economics of conventions (Boltanski and Thévenot, 1987, Eymard-Duvernay, 1989) and the theory of transaction costs (Williamson, 1975).

The important intervention of institutions in the functioning of agri-food chains gives crucial importance to this theory, the founder of which is Coase (1937). have been taken up by economic historians (North, 1981), legal and economic scholars (Posner, 1981), game theorists (Schotter, 1981) and organizational economists (Alchian and Demsetz, 1972; Nelson and Winter, 1982; Grossman and Hart, 1987).

The main currents of neo-institutionalist theories are:

- The theory of transaction costs (Williamson, 1975) with a large place given to institutions. Initially, transaction costs were equated only with the costs of using the market (Coase, 1937). Later the concept was extended to the costs of the various control and supervision systems relating to contract problems (Williamson 1990). Transaction costs are the "costs of operating the economic system" (Arrow, 1969). They are described as including all the costs of "governance", of regulation generated either by a bureaucratic industrialist, or by a market system composed of independent producers coordinated by a price mechanism (Neimark and Tinker 1987).
- The theory of the economy of conventions which minimizes the role of the market as the only means of regulation and orientation (Boltanski and Thévenot, 1987, Eymard-Duvernay, 1989). It is close to the sociology of organizations.

The central hypothesis of the economy of conventions consists in arguing that "the agreement between individuals, even when it is limited to the contract of a commercial exchange, is not possible without a common framework, without a constitutive convention (H. Simon, 1961) thus,

unlike a contract, where every detail must be explained, when there is an agreement, "the expected behaviors do not need to be known in advance, written then ordered in order to be obtained". (André Orléan, 1997). We are thus in the domain of compromise.

Furthermore, transaction costs remain difficult to measure. Moreover, according to Rastoin (2010) both neo-institutional economic approaches and IS approaches were static. They make it possible to deal in depth with certain problems of organization and coordination of actors in the sectors, but they are little interested in the overall economic characteristics and the performance of the sectors very influenced by the environment which surrounds them.

The use of the systemic approach, the founder of which is L. Von. Bertalanffy (1971) could constitute a solution of the fact that this approach is a model of thought which considers that the behavior of an individual is comprehensible only if we take into account the context which surrounds it

Systemic Approach

The concept of system was introduced for the first time by the Austrian biologist Ludwig Von Bertalanffy in the 1950s considering that to understand sets, it is necessary to know not only the elements but also their relations and their interactions with the environment. This lends itself perfectly to the sector analysis.

According to Bertalanffy (1971) The goal of "general systems theory" is to formulate valid principles for any system regardless of the nature of the elements that compose it and the relationships that connect it.

According to De Rosnay, a system is "a set of elements in dynamic interaction, organized according to a goal". According to Goldberg (1968).

According to Rastoin (1995), we can represent a sector by a systemic model which takes into account the interactions between actors.

At the end of the analysis of these different approaches to sector analysis (the SCP approach, Porter's theory of competitive advantage, the neo-institutionalist approach, the systemic approach). These different sector analysis approaches seem complementary, in particular because the sector is a complex object that requires a multidisciplinary analysis.

The following table explains how each of the above approaches complements the other and how it contributes to value chain analysis.

Complementarity between the different approaches and their contributions to sector analysis

Approach		Contribution compared to other value chain analysis approaches.	Contribution to the sector analysis
EI	SCP	It made it possible to summarize the IS chain of reasoning	It has made it possible to go beyond micro and macro-economic analyzes and it makes it possible to study the need or not for a public policy.
	Industrial strategy	Clarifies that structures and behaviors interact in both directions	Associates the sector with a combination of value chain: necessary solidarity between the links of the chain to achieve competitiveness.
	Neo-institutional economics	took institutions into account in the economic analysis	Allows you to choose the mode of governance that results in the lowest transaction costs.
Systemic approach		A global vision that focuses on the global economic characteristics and the performance of the sectors.	Associates the sector with a system that takes into account the interactions between the different actors.

Source : personal elaboration.

These complementary approaches still lack the unifying framework whose production was stimulated by the phenomenon of globalization according to Gereffi and Korzeniewicz (1994). This unifying framework is according to Rastoin and Bencharif (2007): the methodological framework called Global Value Chain, one of the promoters of which is G. Gereffi. This approach takes up the notion of value chain already developed by Porter to give new impetus to the notion of value creation in a context of globalization of the economy in general and of the FAA in particular. This approach deepens the notion of governance already developed by the theory of neo-institutional economics.

The Global Value Chain (GVC) Approach: The Notion of Value Regains its Importance

During a conference bringing together researchers working on globalized sectors or industries, and who noted the diversity of approaches and designations on this theme (Bair, 2005; Gereffi et al., 2001), the concept of Global Value Chain (GVC) was born.

A CGV is an inter-organizational network built around a product, which connects households, companies and States within the world economy (Palpacuer, 2000). A CGV can be described through 4 elements :

- a sequence of activities from design to completion (structure and input/output flows);
- a geographic and economic space, estimated through the location and concentration of activities (market share) and international trade;
- an institutional context (public policies, regulations, conventions and public or private standards);
- a system of governance (power relations that determine the allocation of human, financial and material resources in the CGV)

Value has been a central theme of reflection in economic thought and management science, from Marx and the neo-classics to the present day. The CGV approach seems to be the approach that has insisted the most on this notion of value. Research on the concept of CGV is more a matter of

strategy and has the study population of Multinational Firms which, for reasons of more favorable production costs, tend towards setting up in developing countries and are turning towards coordination. activities with the various stakeholders in a logic of capturing value throughout these chains. The concept of GVC also stands out for its proposal of a "contextualized" vision of the notion of governance. As underlined by Gereffi (2005), the variety of governance possibilities offered to multinational firms takes into account the context of the country of establishment, the nature of the product and its degree of complexity, in order to better capture value and take advantage of it. of the globalization of the chain.

Ludovic et al (2011) confirm that sector analysis finds new vigor in management sciences through the global value chain approach, positioned at the border of economic sociology and business practices. They specify that the analysis of the contemporary sector offers an updated vision of many questions raised by the transformation of world agriculture.

Thus, in terms of these theoretical foundations and antecedents of the value chain approach, it will be useful for us to mention the importance that the notion of value creation has gained through the last unifying approach of all its previous ones. The CGV approach is the approach that allows us to better understand the formation of value along the stages of the development of the agro-food product, that is to say throughout the chain. The global economic crises and the difficulties faced by the agri-food industries due to the health crisis of COVID 19, the increase in oil prices and recently the war of Russia and Ukraine give more and more importance and the legitimacy of the in-depth study of the creation of value throughout the links of the sector and through the various elements of the CGV.

In addition, the sector approach recently deepened and federated by the CGV approach continues to take on and regain importance thanks to the growing need for knowledge of the traceability of food products in order to gain more and more consumer confidence in worldwide.

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