

# **Deviations from the Traditional Co-operative Model: The Case of Greek Pharmaceutical Co-operatives**

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## **ABSTRACT**

Co-operative organization is characterized by its explicit dual nature: a business organization and at the same time an association of civil members. As any other business organization, co-operative organization experiences a heavy pressure for changes, particularly in the developed countries. A rapid organizational restructuring is observed. It is ascribed to an effort of adjustment to a hyper-complex and continuously transforming environment. Previous studies (mostly in agricultural or worker co-operatives) have identified changes that mark a transition from the traditional co-operative model to more entrepreneurial models. The aim of this study is to identify the types of change that pharmaceutical co-operatives experience in Greece, compare them with relevant studies and finally, create a typology of divergent co-operative models. Data gathered by multiple sources (questionnaire, meetings, interviews, observation, documents), indicate a pattern of changes which functions as point of departure from the traditional model. Typologies proposed by similar research in other industries and countries are affirmed to a great extent as well as the relative change trend from the traditional to entrepreneurial models. Moreover, emphatic evidence manifests the necessity for further enrichment of existing typologies. A novel, encompassing typology of non-traditional co-operative models is the final outcome of the research.

**Keywords:** Co-operatives, Change, Pharmaceutical Sector, Greece

**JEL classification codes:** L81, L31, M10, P13, I11

## 1. Introduction

Business organizations are working within a hyper-complex, continuously transforming environment which sometimes seems to operate at the edge of chaos. Especially, after the ignition of the globalization process, almost twenty-five years ago, the concept of change has become dominant in the discourse concerning the organizations. As a result of both growing external pressures and internal challenges, organizations are experiencing an unprecedented level of changes. A wave of organizational restructuring and business reengineering hits most of the organizations and institutions worldwide. The financial and debt crisis of 2008 seems to fuel the relative discourse and vests the demand of change with a veil of grave necessity.

Co-operative organization is a particular form of business organization. Its particularity lies in the fact that it is established voluntarily by persons who try to meet their common needs through a jointly-owned and democratically-controlled enterprise which operates on the basis of reciprocity (ICA, 1995). Hence, it is characterized by an inherent duality: a business organization and at the same time an association of civil members. Co-operatives could not escape the above-mentioned trend of alteration. They experience a heavy pressure for changes, particularly in the developed countries. A rapid organizational restructuring is observed which is ascribed to an effort of adjustment to a constantly shifting environment.

The discourse about change in co-operatives is closely linked to two strongly interconnected arguments concerning the co-operative organization per se; those of the *degeneration thesis* (Ben-Ner, 1984; Meister, 1984; Miyazaki, 1984; Potter, 1891; Webb & Webb, 1920) and of the *structural inefficiency* of the co-operative organizational form (Cook, 1995; Fulton, 1995; Porter & Scully, 1987; Vitaliano, 1983). Under the influence of these assumptions, change appears, to a greater or lesser extent, as a normal reaction of the organization in its struggle to survive by removing structural barriers and outdated features of its traditional form. Hence, it will inevitably lead the co-operatives to an organizational model closer to that of the investor-owned firm and consequently will distance them from the traditional model. It is actually a shift from a member-patron co-operative model to a member-investor model. In many relevant works, various typologies which mark this transition have been developed and the novel characteristics of the transitional models are described and explained (Chaddad & Cook, 2003, 2004; Nilsson, 1999; van Bekkum & van Dijk 1997).

Within the vast co-operative universe, little attention has been paid to the characteristics of change in non-agricultural co-operatives and especially the retailer-owned ones. This fact occurs despite their strong presence in certain retail sectors (e.g. pharmaceuticals, groceries) in many countries. In Greece, particularly, the research on retailer-owned co-operatives is inversely proportional to their size in some sectors (e.g. 50% of pharmaceutical wholesale trade); only rare and dispersed reports exist. The bulk of research refers to agricultural co-operatives (and much less to co-operative banks) while the new-established form of social co-operatives tends to attract the attention of researchers.

The present study is oriented to the study of change in co-operative organizations and especially to the less-explored field of retailer-owned co-operatives in a country of the European South, Greece. It is actually the preliminary phase of a large, ongoing investigation on a particular type of retailer-owned co-operative, the pharmaceutical one. The research project was initiated in 2011 and was updated and enriched twice until nowadays. The aim of the research was and remains, to identify the types of change that pharmaceutical co-operatives experience in Greece, to compare them with

the relevant development in co-operatives which work in same or other industries worldwide and finally to create a typology of non-traditional models in Greek pharmaceutical co-operatives. In a second stage, not referring to this announcement, to investigate how change unfolds in this type of co-operatives and re-examine the dominant assumptions about change process in co-operatives by observing it in a fundamental different way from the prevailing research patterns.

For the needs of the research a questionnaire was circulated among the pharmaceutical co-operatives and the major changes were identified. Then, the primary data were enriched with the analysis of semi-structured interviews conducted with top executives and members of the Board of Directors among the co-operatives which seem to experience a multiplicity of changes. Additional material (observation notes, corporate documents) was also used.

Data gathered by a wide range of actions indicate a pattern of changes which distance the co-operatives under study from the traditional co-operative model. The typologies proposed by scholars of change in co-operatives, which are mostly based on studies on agricultural co-operatives, are affirmed in a large degree as well as the relative change trend (from the traditional to the entrepreneurial model).

Nevertheless, emphatic evidence proved the necessity for further modification / enrichment of the existing typologies. Dimensions that had been neglected, ignored or not appeared in previous studies were traced in the investigation on Greek pharmaceutical co-operatives. Therefore, a novel, encompassing typology of co-operative models which depart from the traditional one has been introduced as the final outcome of the research.

## **2. Frame of concepts**

Change literature is enormous and extended in every aspect of organizational life and theory. Perhaps it is the organizational issue that has attracted the most attention from all the other organizational phenomena (Wetzel & van Gorp, 2014, p. 115). Especially in the last twenty years, the concept of “change” has become dominant in organizational studies -even a new doctrine for some of its critics as it is characterized by an uncritical pro-change bias (Sorge & van Witteloostuijn, 2004; Sturdy & Grey, 2003;).

The two most used definitions of change in organizational literature is: a) an observed difference over time in selected dimensions of an organizational entity, and b) a narrative describing a sequence of events on how development and change unfold (Poole et al., 2000). Burnes (1996) also introduces a definition of change as the understanding of alterations within an organization at all levels (individuals, groups, organization). However, in a meta-level analysis of term trends, By et al. (2014, p. 4) conclude that “organizational change” has become the generic term for all forms of change-related activity in organizational settings and it serves as an umbrella term for a variety of change programmes.

Magalhães and Sanchez (2009) identify a set of both external pressures (demand for Earth sustainability, new kinds of capitalism, real-time information, technical and social networking), and internal challenges (search for a new organizational paradigm, non-linearity and complexity acknowledgement, turn toward practice, transdisciplinarity and multidisciplinary, networking nature of organizing, integration of social and technological architectures) which will guide the organizational change process in the near future.

Industry boundaries become increasingly fluid as firms from different industries compete for the same niche. At the same time, organizational boundaries also become

vague and unclear due to the proliferation of mergers, acquisitions, joint ventures, and outsourcing arrangements (de Rond, 2002; Seppälä, 2003). Nowadays, a constantly increasing number of firms are operating in networks formed by prime contractors, subcontractors and material or service suppliers (Seppälä, 2003). It is widely acknowledged that the current competition form in many industries is “supply chain<sup>1</sup> versus supply chain” instead of the traditional “firm versus firm” (Ketchen & Hult, 2006). Thus, the notion of the supply chain management changes, from a function that support strategy to a key element of strategy, which consequently puts pro-change pressures to traditional organizational structures (Ketchen & Hult, 2006; Kim, 2006). One could argue that change affects all of the three factors which are crucial for the organizational design: environment, strategy and people (Cape, 2002). Change may be small or large, focused on the whole organization or on a part of it, be simple or complex, including a wide range of types of differentiate intervention in fields such as: structure, technology, personnel, culture, attitudes and behavior (Foreman, 2001). Consequently, none of the following Drucker’s (1974) different levels of work within every organization remain unaffected:

- The community or institutional level -concerned with the broad objectives and the work of the organization as a whole.
- The managerial or organizational level -concerned with the coordination and integration of work.
- The technical level -concerned with the delivery of technical functions and projects.

One of the greatest challenges that a researcher faces in the field of organizational change is the diversity of theoretical perspectives and frameworks (Palmer & Dunford, 2008). These perspectives often represent competing views on the nature of organizations. It is obvious that there can be no single theory of change since there is no single body of thought that would be accepted by all organizational theorists (Collins, 1998). As Kezar (2001, p. 25) explicitly argues: “*Choosing a model is not an arbitrary choice –it is an ideological one. The assumptions we make about change are also assumptions about the nature of reality and people*”. Taking into strong consideration the abovementioned reservation, from a large volume of typologies and classifications concerning organizational change which are based on rather simple dichotomies (reductionist/holistic, evolutionary/revolutionary, planned/emergent, episodic/continuous, adaptive/generative, proactive/reactive, subjective/objective, individualistic/contextualistic; to name only few), we shall reflect on the following Ackerman’s (1984) contribution<sup>2</sup> for the purpose of our research:

1. Developmental change. It occurs when the organization makes improvements of skills, processes and methods.
2. Transitional change. It replaces existing processes and methods with something completely new over a controlled period of time.
3. Transformational change. It is the emergence of a completely new state, unknown before.

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<sup>1</sup> We define ‘supply chain’ as the network of manufacturers, wholesalers, distributors, and retailers, who turn raw materials into finished goods and services and deliver them to consumers.

<sup>2</sup> Ackerman’s classification of organizational change is also very close to a few years earlier introduction of a similar classification (single-loop, double-loop, deutero-learning) in the field of organizational learning theory (Argyris and Schön, 1978).

According to the International Cooperative Alliance (ICA) statement of cooperative identity, the definition of a co-operative firm is:

*“A co-operative is an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly-owned and democratically-controlled enterprise”* (ICA, 1995).

ICA lists the following co-operative values:

*“...self-help, self-responsibility, democracy, equality, equity, and solidarity”* (ICA, 1995).

ICA also lists the co-operative members’ personal values that should govern their participation and attitude:

*“...honesty, openness, social responsibility, and caring for others”* (ICA, 1995).

There are seven ICA (1995) core principles by which co-operatives can apply the abovementioned values:

1. Voluntary and Open Membership
2. Democratic Member Control (one member-one vote)
3. Member Economic Participation (equal contribution of capital; profit distribution in proportion to the use)
4. Autonomy and Independence
5. Education, Training and Information
6. Co-operation Among Co-operatives
7. Concern for Community

It must be noted that these principles were established through repeated practice over time and mostly serve as a demarcation line from other business entities (de Drimer, 1997). One should define as *traditional* the co-operative organizational form which is based on the above principles. On the contrary, an *investor-owned firm* is controlled by its investors in proportion to their capital contribution; the distribution of profits is in proportion to investors’ capital contribution; the shares are tradable, appreciable, and non-redeemable.

One could argue that co-operatives are user-owned, user-controlled and user-benefited firms. That means that the co-operative is assigned to its users; the persons who ‘use’ the co-operative organization are the persons who own and finance it, who exercise control on it and the benefits of the firm are distributed to them on the basis of their use (Barton, 1989). Hansmann (1996) uses the term *patrons* to comprise all agents who transact with a firm either as purchasers of the firm’s products or as sellers of supplies, labor, or other factors of production. Depending on which class of the firm’s patron’s ownership is assigned, the most common types of co-operatives emerge: consumer, supply, workers, producer, credit co-operatives, etc.

Co-operative organizational form is characterized by an explicit dual nature: a business organization and at the same time an association of civil members (Michelsen, 1993; Nilsson & Hendrikse, 2011; Røkholt & Borgen, 2000). This inherent duality of the co-operative nature means that co-operatives come into being in order to serve their founders’ interests and at the same time they must cope with and survive in their environment by allocating the resources which are at their disposal (Stryjan, 1994). The business unit operates on given market conditions so it has to be as efficient as any other type of business firm, while the society unit involves humans, which means that it has social attributes (Nilsson & Hendrikse, 2011, p. 339). Therefore, co-operative organizations have been studied from several theoretical perspectives, both economic and sociological, depending on which side of their dual character the emphasis is been put.

From an economic perspective, the formation of co-operatives has generally been seen as a response to market failures (frequently accompanied by state's unwillingness or inability to intervene and regulate them). Such kind of market imperfections could be: simple market power, ex post market power ("lock in"), asymmetric information, risks of long-term contracting, strategic bargaining, communication of patron preferences, compromising among diverse patron preferences, alienation (Hansmann, 1996). Moreover, the establishment of a co-operative is often the outcome of their members' efforts to integrate either forwards or backwards in the processing/distribution chain, albeit jointly because each one is too small to accomplish the task separately and face market imperfections (Nilsson, 2001).

From a sociological oriented perspective, this formation could be also triggered by a collective sense of the need for changing the scope of an industry (or even society) on the basis of values and preferences (e.g. democracy, environmentalism, ethnic or social solidarity, etc.) or constraining the pursuit of the profit objective (Anheier & Ben-Ner, 1997; Michelsen, 1993). Co-operatives are often formed as a response to enduring, unequal power relationships in societal fields (Mooney & Grey, 2002), hence they are often linked to grass root political and social movements (Fulton, 1999). In a more excessive way, Røkholt (1999) argues that the core of the co-operative rationale and strategy is social identification and personal identity closely linked to the concept of 'membership'.

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The discourse about change in co-operatives is implicitly or explicitly fueled by two core assumptions: the *degeneration thesis* and the *structural inefficiency thesis*.

The *former* is rooted in a couple of British socialists' -Beatrice Potter and Sydney Webb- insights, dated back to the early 20<sup>th</sup> century. After an extensive investigation on numerous British worker co-operatives, the two authors stated that this particular kind of co-operative is doomed to either economic failure or degeneration to a typical capitalist firm in order to survive (Potter, 1891; Webb & Webb, 1920). This statement was developed and deepened in the following years by the empirical and historical studies of several authors (Bellas, 1975; Ben-Ner, 1984; Jones, 1979; Meister, 1984; Miyazaki, 1984). Ben-Ner (1984, pp. 247-248) summarizes existing literature at that time and presents the main reasons for the demise of worker co-operatives: shortsightedness, risk aversion, constant and unresolved personal disputes, lack of discipline, low motivation, excessive egalitarianism, lack of funds and difficulties in obtaining credit, etc. To avoid demise, co-operatives often employ a plurality of degeneration strategies: denial of membership status to peers in order to safeguard economic advantages to existing members (Storey et al., 2014); intensely expansive or outsourcing plans (Bakaikoa et al., 2004; Errasti et al., 2003, 2017); prioritization of profits or constant growth (*goal degeneration*); concentration of power or control to oligarchic elite or professional managers (*organizational degeneration*); and finally, conversion to investor-owned firms (*institutional degeneration*) (Cornforth et al., 1988). Degeneration thesis actually creates two intersecting lines of argumentation: Co-operatives are inefficient business organizations that will gradually convert to investor-owned firms to secure their existence. And, co-operatives cannot keep their unique democratic and mutual character on the long run because it will be proved unproductive and will employ a governance model close to the dominant business one. Although these insights derive from the study of worker co-operatives, one could plausibly argue that they hold true for every type of co-operative organization, given the fact that every co-operative strives to accomplish social purposes by means of a business organization. Therefore, every co-operative is potentially subject to degeneration tendencies.

The *latter* is based on the insights of economic-led approaches, mostly those of agency theory, incomplete contract theory and property rights theory, which mark the so called “structural inefficiencies” of the co-operative organizational form (Porter & Scully, 1987). Co-operatives are considered to be inefficient because of vaguely defined property rights (Cook, 1995) and high agency and collective decision-making costs. In fact, if no one clearly owns an asset and the property rights are not tradable and secure, then no one has the incentive to guard the value of the asset properly or invest great amounts in assets that may lose without compensation and the asset cannot be acquired by the people who can use it in the best way (Milgrom & Roberts, 1992). The principal-agent problem also becomes more severe in co-operatives and expands in a *many principals*-agent problem because of their unique ownership structure (Porter & Scully, 1987). In a recent study, Thompson (2015, p. 10) points out that the predominant economic theories of the firm – *contract-based theories*<sup>3</sup> and *competence-based theories*<sup>4</sup> – despite their intellectual rivalry, do share the common assumption that co-operative firms are generally inefficient. Contract-based theories consider co-operatives as incapable of achieving cooperation while competence-based theories imply that co-operatives are incapable of coordinating complex production processes. Many scholars of the above theoretical trend converge on a set of incentive problems embedded in the co-operative organization (Cook, 1995; Cook & Iliopoulos, 1999; Franken & Cook, 2015; Fulton, 1995; Harte, 1997; Nilsson, 2001; Porter & Scully, 1987; van Bekkum & van Dijk, 1997; Vitaliano, 1983). Depending on which theory’s assumptions are based, we can classify these incentive problems in two large categories: *Investment-related problems* (property rights theory), which contain the common property problem (or “free rider” problem), the horizon problem and the portfolio problem. And, *decision-related problems* (agency theory), which contain the decision-making problem, the follow-up problem and the influence cost problem.

The abovementioned problems result in inefficiency, delay on decision-making, poor implementation of business strategy, slowing down the adoption and implementation of new technologies (Bruque & Moyano, 2007), and high influence costs.

Degeneration thesis and structural inefficiency thesis, despite their different (even divergent) theoretical and historical backgrounds, share the same belief in the inefficiency of the co-operative organization. In the core of their argument rests the assumption that the majority of problems that the co-operatives face are rooted in the difficult and improbable way to unite the two different logics that characterize the co-operative organization: those of the business firm and the co-operative society (Nilsson and Hendrikse, 2009, p. 340).

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As we mentioned at the beginning of this announcement, modern organizations have been facing dramatic changes during the last twenty years due to a complex, rapidly transforming and even chaotic environment. Globalization, technological changes, increased and knowledge-based competition, uncertainties about the development in national and international level are the basic characteristics of the situation (March, 1995), which may be identified as the exogenous drivers of organizational change. Consequently, deep changes in peoples’ norms, values and attitudes should be added.

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<sup>3</sup> Contract-based theories argue that the purpose of the firm is to minimize the (in a narrow or broader sense) “transaction costs” of market exchange by achieving cooperation among instrumentally-motivated individuals with the rearrangement of opportunities and incentives that those individuals face (Thompson, 2015, pp.4-5).

<sup>4</sup> Competence-based theories contend that the purpose of the firm is to develop “dynamic capabilities” by achieving coordination with the combination of skills and resources (Thompson, 2015, p.4).

Thus, the last two decades a wave of organizational restructuring and business reengineering hits most of the organizations and institutions worldwide. The driving force for this movement is survival, based on the ability to handle uncertainty and competition (Tsekouras, et al., 2007).

Co-operatives are not the exception to this irrevocable trend. Moreover, due to the character of the changing business environment and their nature as user-owned, user-controlled and user-benefited firms, they often experience more radical changes than the investor-owned firms. These changes challenge the fundamental principles of the co-operatives and formulate three strategic choices; the option to exit the present organizational form (“*demutualization*”), or to continue with moderate changes to the organizational form, or to shift to a more radical form of organizational structure (emergence of non-traditional models, mergers, acquisitions) (Chaddad & Cook, 2004). All these options aim to handle with the previously mentioned problems, to improve the efficiency of the co-operatives and to increase their growth rates; hence, to increase their probability to survive.

The *restructuring trend* in co-operatives is considered as one-way shift, from the traditional model to different entrepreneurial models (Nilsson, 1999). Hence, it is a shift from a *member-patron* co-operative form to a *member-investor* form. Based on a study on agro-food industry co-operatives, conducted by van Bekkum and van Dijk (1997) and the further contribution of Nilsson (1999) as well as similar studies by Chaddad & Cook (2003, 2004), the following typology of various entrepreneurial organization models of cooperatives, in addition to the traditional, can be introduced:

- The *traditional co-operative model*. This is the best-known and wide-spread model based on the fundamental co-operative principles. Its main characteristics are: open membership; ownership rights restricted to members; equal contribution of capital; democratic control on “one member-one vote” basis; non-tradable, non-appreciable, and redeemable co-operative shares; profit distribution in proportion to the use.
- *Proportional investment co-operatives*. They are actually traditional co-operatives which have chosen to remain in this organizational form. They adopt capital acquisition policies such as base capital plans, narrow product scope, and capital acquisition on a business unit base, in order to align members’ equity capital contribution with their patronage.
- *Member-investor co-operatives*. The co-operative distributes profits in proportion to member shareholdings in addition to patronage. In order to do so, the co-operative adopts measures such as participation units, co-operative capital units, and redeemable preference shares.
- The *new generation co-operatives*. Membership is not open. It is restricted to the members who have bought delivery rights from the co-operative in proportion to the patronage such that usage and capital investment are proportionately aligned. The delivery rights are tradable among the member-patrons and appreciable. The voting power is usually equally distributed (one member-one vote principle) but differentiation according to the volume is possible. Due to the proportionality between deliveries and investments, typical profit sharing proportional to the patronage, is actually equal to profit sharing proportional to investments.
- The *subsidiary co-operative model*. Co-operatives establish subsidiaries to run a part of their business operations. The subsidiary may be owned 100% by a traditional co-operative or together with outside partners. In the latter form, the investors’ stock is individual property and appreciable. The external owners

have seats in the general assembly and the board however the co-operative holds the majority of the seats. The profits are divided in proportion to each partner's ownership.

- The *investor-share co-operative model*. Non-patrons may own shares in the co-operative. The shares are tradable and appreciable. The investors may have voting rights but the vast majority of the voting rights are definitely in the hands of the patrons. The investors get remuneration for the capital they provide, either at a fixed rate or according to the profits attained.
- The *Public Limited Companies co-operative model*. The entire co-operative is organized as a public limited company. Members-patrons become shareholders. Hence, voting power and profits sharing are according to investments.

Moreover, other scholars (Kyriakopoulos, Meulenberg and Nilsson, 2004; Kyriakopoulos & van Dijk, 1997) identify another major characteristic of the restructuring trend in co-operatives which is the transition from members' equal treatment regarding pricing or cost charging to a differential policy that involves discounts or/and premiums to members according to volume, quality, location and various others criteria. This is the so-called "*from equal to equitable*" trend (Kyriakopoulos & van Dijk, 1997) and aims to offer incentives to members in order to stay loyal to their co-operative amid changing market conditions. Close to this trend, are also alterations in a main feature of traditional co-operative model which is that its activities are organized closely to their users' needs and activities who are also the founders of the co-operative. This can be called *user principle*. Therefore, one could argue that any development of activities which are not directly linked with the users of the co-operative is also a deviation from its traditional form.

Finally, other studies (Lang & Welzel, 1999; Richards & Manfredo, 2003; Williamson, 1987) indicate a wave of *mergers* and *acquisitions* in co-operatives which operate in several industries -agriculture, banking, etc. The driving forces to this particular form of restructuring are either an effort to overcome capital constraints (Richards & Manfredo, 2003) or/and an attempt to increase the degree of market power and their competitiveness (Williamson, 1987).

Concluding, the common characteristic of all the above mentioned typologies and change identifications, which constitute the core of the co-operatives' restructuring trend, is the relaxation of the restrictions embedded in fundamental principles of traditional co-operative organizational model. It must be noted that with the term 'fundamental principles' we acknowledge not only the ones that are officially stated in the most recent ICA declaration in 1995, but also those that have been established through repeated practice over time and characterize the mode of operation of the vast majority of the co-operatives world-wide: ownership rights assigned only to members; one member-one vote; equal contribution of capital; profit distribution in proportion to patronage; members' equal treatment; non-tradable, non-appreciable, and redeemable shares; autonomy and independence, user principle.

To summarize the various contributions regarding change in co-operatives, we introduce the following table which includes non-traditional co-operative models along with the traditional principles that have been violated by each model:

<b>Co-operative Model</b>	<b>(violated) Traditional Principle</b>
Differential policy co-operatives	Members' equal treatment
Proportional investment co-operatives	Equal contribution of capital

Member-investor co-operatives	Equal contribution of capital; Profit distribution in proportion to the use
New generation co-operatives	Non-tradable, non-appreciable, and redeemable shares; Open membership; Equal contribution of capital; Profit distribution in proportion to the use
Co-operatives with Subsidiaries	Autonomy and independence; One member – one vote; User principle
Co-operatives undertaking mergers and acquisitions	Autonomy and independence; Co-operation among co-operatives
Investor-share co-operatives	Autonomy and independence; Equal contribution of capital; Profit distribution in proportion to the use; Non-tradable, non-appreciable, and redeemable shares; One member – one vote; User principle

Table 1: Typology of non-traditional co-operative models

### 3. Subject and area of the research

As it was stated in the introductory chapter, this announcement is a part a project that studies the phenomenon of change in retailer-owned co-operatives. A retailer-owned co-operative is created when a group of independent retailers (groceries, hardware stores, pharmacies, bakeries, etc.) band together and create a wholesale unit to benefit the group collectively by the achievement of economies of scale when they purchase from the manufacturers (Stoel, 2002). The formation of a retailer-owned co-operative is actually an act of *backward vertical integration*<sup>5</sup> in the supply chain (Nilsson, 2001) and it could be illustrated in the following way:

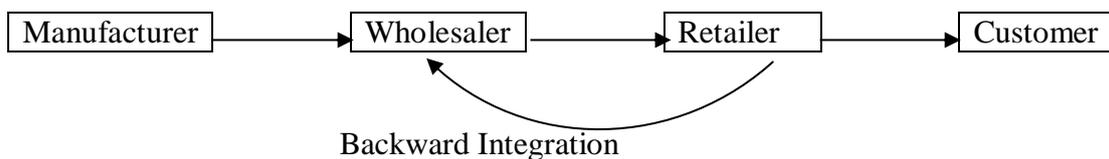


Figure 1: Backward integration in retailer-owned co-operatives

Market imperfections such as market power and “lock-in” are the main incentives for the formation of a supply co-operative from a group of retailers (Chillemi & Comino, 2003; Hansmann, 1996; Mikami, 2003). When, only few wholesalers serve the independent retailers in a given area, they have a degree of market power. Then, retailers have an incentive to avoid price exploitation or poor quality services by owing a wholesaler firm that will serve them. Although joint purchasing is the core business for retailer-owned co-operatives, they often develop some other common strategies: creation and use of trademarks, private brands, product promotion, store consultancy, merchandizing, and group-wide programs (insurance, security, training, pension plans) (Stoel, 2002). Retailer-owned co-operatives have a significant share in markets like

<sup>5</sup> Vertical integration is the fusion of entities which have complementary business interests (Kanavos et al., 2011, p.31). Backward vertical integration occurs when a firm purchases or controls its suppliers.

grocery, hardware, medicines, both in North America and Europe (Hansmann, 1996; Nilsson, 2001).

The pharmaceutical co-operative can be defined as a particular type of retailer-owned co-operative which is established by independent pharmacists-retailers who are at the same time the customers and the owners of a wholesale unit. Pharmaceutical co-operatives are an active part of pharmaceutical wholesaling in Europe. According to the statistics provided by Co-operatives Europe<sup>6</sup> (2009), there are pharmaceutical co-operatives in 12 European countries which serve almost 60,000 pharmacies, employ 23,000 people and result to an annual turnover of 18 billion euros.

The first pharmaceutical co-operative in Greece was founded by 15 pharmacists in 1932, in Thessaloniki and it still exists and flourishes. However, most of the pharmaceutical co-operatives which operate in Greek market have been established during '80s. In 2011, there were 27 co-operatives running 46 local wholesale facilities and 2 nation-wide distribution centers<sup>7</sup>. They employed almost 1,500 people and their total annual turnover was 2 billion euros as well as they distribute almost 52% percent of the items of pharmaceutical products in Greek market. Members and stakeholders of the co-operatives are almost 5,800 independent pharmacists – owners of a private pharmacy – that is, 56% of the total number of pharmacists running a retail business in Greek market (OSFE, 2012).

Pharmaceutical co-operatives are a part of the pharmaceutical wholesale sector. In Europe, in the vast majority of occasions, the flow of medicinal products follows the traditional channel (Walter et al., 2012):

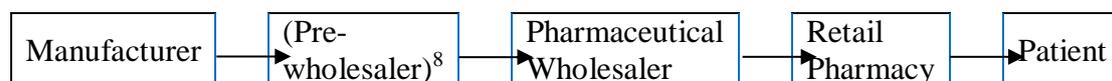


Figure 2: Supply chain in distribution of medicines

The pharmaceutical full-line wholesale sector accomplishes mostly the traditional logistics task of bridging time and space. Moreover, it also fulfills a quantity function by buying medicines of all manufacturers in bulk, keeping them in the appropriate safety stock and selling them in single units. Besides those primary functions, the sector also accomplishes some secondary tasks by securing the quality of the distributed medicinal products, managing the returns or recalls/withdrawals, securing the traceability of the products across the supply chain and improving the efficiency of pharmaceutical supply chain through cost digression (Clement et al., 2005; Walter et al., 2012).

The pharmaceutical wholesale sector has experienced radical changes in the last decade, in pan-European level, due to a combination of pressures arising from significant changes in European and national legislation, the constant demand of governments for reduction of prices and margins and the novel strategies introduced by the big multinational manufacturers (Clement et al., 2005; Walter et al., 2012).

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<sup>6</sup> Europe Region of the ICA.

<sup>7</sup> These distribution centers are joint ventures of the majority of the co-operatives and aim to pre-wholesale operations in the field of cosmetics/parapharmaceuticals, to the distribution of co-operative brand generic drugs and parapharmaceuticals as well as to third-party logistics services.

<sup>8</sup> Its existence in the supply chain is optional; it depends on the specific conditions of the pharmaceutical market in each country.

Full-line wholesalers are trying to cope with those changes adopting a variety of strategies: vertical and horizontal integration, regional expansion, expansion of adding-value services (Clement et al., 2005, pp. 54-56). The structural trends of the sector in Europe are illustrated in the following figure:

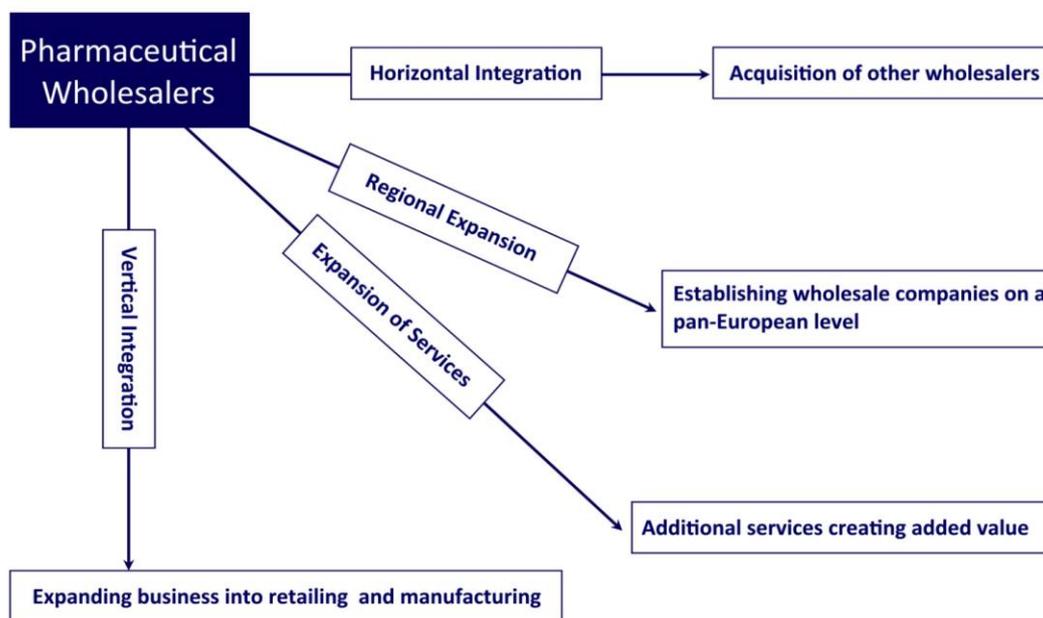


Figure 3: Structural trends in pharmaceutical wholesaling (adapted from Clement et al., 2005, p. 54; figure modified)

Greek pharmaceutical co-operatives hold a dominant position in the pharmaceutical supply chain and a significant share (almost 49%) in pharmaceutical wholesale trade in Greece. However, they share the same business environment and face the same challenges and threats with their privately-owned competitors. That environment is characterized by a tough state regulation regarding medicine prices and retail and wholesale profit margins as well as by a large number of pharmacies and a large number of wholesalers which result to the lowest inhabitants per pharmacy and inhabitants per wholesaler ratio in Europe. State-regulated wholesale margins have dropped almost 50% and sales volume almost 44% (ICAP, 2019) since the beginning of the austerity programme imposed by the ‘Troika’ (European Commission, European Central Bank and International Monetary Fund) in 2011. The particular characteristics of the Greek pharmaceutical market as well as the recent political and financial developments result to a fierce competition among full-line wholesalers, especially between co-operatives and private wholesalers. The already hard competition has also become more complex due to the recently introduced tactics by the pharmaceutical producers or representatives which involves Direct to Pharmacy sales, circumventing wholesalers<sup>9</sup>. Moreover, state-driven relaxation of the strict rules regarding the restriction of the ownership of a pharmacy to pharmacists solely and the subsequent inclusion of external

<sup>9</sup> Kanavos et al. (2011, p.32) estimate that more than 10% of the pharmacy sales originate directly from manufacturers.

investors seem to jeopardize the very basis of the cooperatives which is the independent pharmacy.

#### **4. Aims and objectives – Research assumptions and questions**

Considering the discussion regarding organizational change in the co-operative organization, which stems from the relevant literature review and taking also into account the scarcity of evidence from previous research in retailer-owned co-operatives, it can be stated that the main aim of the present research endeavor is: *to identify and describe the types of change that Greek pharmaceutical (retailer-owned) co-operatives have experienced the last twenty years by marking deviations from the traditional co-operative model.*

The main assumption, which our research begins from, is that: *Changes in Greek pharmaceutical co-operatives challenge the traditional co-operative model and they follow, more or less, patterns which have been traced out in co-operatives operating in other industries elsewhere.*

To operationalize the above assumption, we introduce the following research questions:

Q1: What types of change do the Greek pharmaceutical co-operatives experience?

Q2: Which are the main features of these alterations?

Q3: To what extent do these types share similarities with or differ from relevant trends elsewhere in the developed world?

#### **5. Research methodology**

Our research approach is specified by the following selections:

The primary research purpose is *exploratory* as we seek to investigate a less-examined topic which is organizational change in the co-operative organization (Hesse-Biber & Leavy, 2011). Comparing the volume of research in this topic with the total volume of research referring to organizational change in other - more conventional - forms of organization (investor-owned firms, public sector firms, etc.), the outcome is disappointing for co-operatives. Moreover, within this weak body of research literature, research referring to retailer-owned co-operatives is rare, while studies referring to pharmaceutical co-operatives, to the best of our knowledge, hardly exist.

Moreover, we chose a *qualitative* dimension in our research approach. The main objective of this type of research is the in-depth analysis of the social phenomena and the extract of meaning out of data. Qualitative research approaches are suitable for describing, understanding and explaining the complexity of the organizations (Delattre, et al., 2009; Gummesson, 2006). Moreover, they are applied in fields where the key concepts are less-established or not well or fully developed like the case of change in retailer-owned co-operatives.

The main methods that we followed for the data collection were: *questionnaire survey*, *multiple-cases study*, use of a *key-informant*, and *observation*. In a supplementary way, we also used corporate documents, public statements and notes from informal conversations. In each phase of the research, different methods were employed.

In the *preliminary phase*, in 2011, an exploratory survey was conducted in order to map the types of change within the body of the 27 co-operatives that used to operate in Greek pharmaceutical wholesale market as well as to select the sample of cases that would be thoroughly examined. A questionnaire, consistent to the types of change implied by the typology in Table 1, was distributed to all the co-operatives. In 14 cases at least one change which resembles to the ones in Table 1, was indicated. Suffice to say, the

questionnaire was distributed solely for identification purposes and not for quantification purposes.

In the *main phase*, in 2011 and 2012, from the 14 co-operatives that were initially indicated, 5 of them were pulled out for further investigation as they seemed to experience a plurality of change types (more than four non-traditional models of the Table 1). Finally, three of them were purposively studied because they were information-rich cases which manifest the phenomenon of interest intensely (Patton, 2002, p. 234). Multiple-cases study is used in order to investigate a larger phenomenon (i.e. change) from multiple cases of a larger population (i.e. co-operatives) (Hesse-Biber & Leavy, 2011, p. 258) and is justified by the provision of a stronger base for a more robust, generalizable and testable theory (Eisenhardt & Graebner, 2007; Yin, 1994). The primary data collection technique was *semi-structured interviews*. Interviews offer an efficient way to gather rich, empirical data in a flexible way (Eisenhardt & Graebner, 2007, p. 28) from relatively few participants and can lead to specific and productive suggestions. The selected interviewees were high-rank executives and members of the Board of each co-operative. They were chosen precisely because they had special qualifications such as particular status, unique access to organizational information or specialized knowledge about group or organizational properties or events and they were able and willing to communicate about them (Kumar, et al., 1993; Philips, 1981). In the same phase, we also interviewed a key-informant, a person who had played a pivotal role to the development of pharmaceutical co-operative movement for more than two decades and had witnessed the majority of changes in the sector.

In the *review phase*, from 2012 till 2018, the main method was *non-participant* observational activity. The aim was to observe and record, as objectively as possible, target events and occurrences in a micro-level direction (interaction processes, distributed documents, face to face interactions, etc.) (Brewerton & Millward, 2001, p. 97), in order to obtain rich data for the evaluation, enrichment and modification of previous research findings. The activity focused mostly on the three Annual Congresses of Greek Federation of pharmaceutical co-operatives (OSFE), in 2012, 2015, and 2018 which held in city of Drama, in city of Athens, and in Chalkidiki, respectively.

Data analysis was based on the *content analysis* and particularly on the qualitative content analysis of transcription data collected from the nine interviews as well as any other data that could be attributed in textual form (e.g. notes, corporate documents, public statements).

## **6. Findings**

At the earliest stage of the research, the answers of the co-operatives that responded to the questionnaire survey reveal a plurality of change types that have identified in non-traditional co-operative models: capital acquisition plans, use of optional shares, establishment of subsidiaries both for enhancing wholesale activities and rendering services, differentiation of commercial policy among members, merger and acquisitions (rare but existing phenomenon). The vast majority of these changes occurred in 00's while very few are traced back to 90's. Closed or restricted membership status and the use of investor shares have not been traced at that stage of the research. On the contrary, the use of optional shares, the establishment of subsidiaries and the differentiation of commercial policy appear as very common practices among the pharmaceutical co-operatives, especially in medium and large enterprises. From the non-traditional models shown in Table 1, all but the new generation cooperative and investor-share model are traced in our sample.

However, at the second stage and after the analysis of the interviews content, the analysis of the notes kept during the observation of annual meetings of the Co-operative Federation in 2012, 2015 and 2018 and the study of various corporate documents, the primary findings have significantly enriched. One could identify two novel and persistent features of the change process that curve the traditional co-operative model. First, almost all the respondents and informants acknowledge the need for orientation to value-added activities (services or products) which are different from the main scope of their co-operatives (e.g. wholesale activities) and certainly different from the main activity of their pharmacists-members. As one of the interviewees exaggeratedly states:

*“The co-operative’s strategy now is to expand to other sections too, that do not have any relation with the medicine.”*

Second, a common tendency appears towards an implicit engagement of co-operatives in the activities of pharmaceutical retail sector, either by establishing/participating in chains of independent pharmacies or by stating their aim to exercise stronger control over the management of their members’ pharmacies. A top co-operative executive argues for the developments in the near future:

*“they [co-operatives] will have a key role in changing and shaping the pharmaceutical retail business of tomorrow. That is, to take over the organizing of pharmacy chains during the transformation period.”*

There is a wide-spread belief that radical changes in the retail sector are shortly anticipated, which will lead to the transformation of both the independent pharmacies and their co-operatives. With the words of a pharmacist, Head of the Board of a large co-operative:

*“the co-operative could be perfectly transformed into a co-ordinating and logistics company serving these new entities [merged pharmacies or pharmacies belonging to a chain] that will be established in the [altered] market conditions; that is, to manage the operations of associated or corporate pharmacies.”*

What was a rather theoretical argument at the beginning of the research, i.e. the establishment of voluntarily (or nominal) chains of pharmacies<sup>10</sup> by the co-operatives, with only two timid attempts of no significant progress, soon dominated the public discourse among co-operative leaders and executives. After the deepening of the recession in 2012, the subsequent bankruptcy of three co-operative units (one small and one medium-sized cooperative and the latter’s linked subsidiary) and the financial problems that plenty others faced, a closer engagement to retail activities was upgraded to the status of optimum strategic solution for both the co-operatives and their pharmacists-members. Nowadays, more than seven chains of pharmacies operate in the pharmaceutical co-operative sector, either as subsidiaries of respective co-operatives or as independent divisions inside the organizational structure of a co-operative.

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<sup>10</sup> I term these chains of retailers as voluntarily (or nominal) because the actual ownership of each pharmacy remains in the hands of its proprietor who voluntarily assigns some operations of her/his firm to the management of the co-operative (mostly, collective bargaining, category management and training).

Last but not least, a previously latent expansionist logic of some co-operatives gradually surfaced during the recession. This tendency has been the outcome of three interconnected developments: the dramatic fall of the overall sales volume since 2011; the acknowledgement of the permanent failure of two ambitious, nation-wide joint co-operative projects<sup>11</sup>, especially since 2015; and, co-operatives federation's failure to establish a single, jointly-owned, voluntarily chain of pharmacies. Some co-operatives are now expanding their activities, through the establishment of new subsidiaries or the deployment of their sales force, both in regions where the local co-operatives went bankrupt and where viable co-operatives still operate successfully. Obviously, we are not far from anticipating a competition among co-operatives. This evolution had been implicitly foreseen by a respectful co-operative leader, whose co-operative focus on territorial expansion, in an interview in the fall of 2011:

*“So, in the phase of shrinkage we cannot [...] keep these firms as they are.”  
[...] “Whoever does not adapt to the speed [of changes] and the [need of] finding a new co-operation scheme that create new gains, will leave the game.”*

Another interesting finding, which did not initially appear in the data from survey questionnaire but reveals from informal conversations and the study of cooperatives' balance sheets, indicate an implicit condition of a quasi-closed membership in certain co-operatives. The value of their basic co-operative share remains so high that, in terms of the current economic situation in Greece, a new-comer hardly can afford entering the co-operative as a full member. Indeed, for some co-operatives there has been years since the last time a new pharmacy applied for membership.

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Finally, combining the outcome of the content analysis of interviews from the cases we thoroughly studied as well as from our informants, we identify emerged *categories* which are common for all the cases.

We term the first category *individuality and self-perception*. It describes various steps of a process which converge to the distinctiveness and the self-understanding of the co-operative, hence the largest part of its identity. The co-operative is been understood as an organization fully dedicated to its members and because of this, different from any conventional organizational form. This dedication to members' interests produces phrases that could validly serve as self-descriptions of the co-operative (“*steady island*”, “*wall*”, “*lifeboat*”, “*bulwark*”, etc.) It is not only an organization which is committed to the overall service and empowerment of its members-patrons but it also reproduces and enhances the difference between itself and the other business entities strictly through this relation with its members. As the Head of the Board of a co-operative states:

*“Pharmacy is the co-operative and the basic concept of the co-operative is pharmacy.”*

And another in the same vein:

*“What we care about is our pharmacies to exist.”*

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<sup>11</sup> These are two national distribution centers mentioned in Chapter 3.

However, despite the immanent self-description of a co-operative–servant of its members or within this self-description, one could find out explicit evidence which present an organization that was established by members–patrons but it exceeds itself beyond or outside them. Answers like the following are not rare in the interviews:

*“The members of the co-operative belong to the external environment so far.”*

Finally, co-operative organizations seem to be aware both of the importance of problematic situations in decision making which impose dangers for the reproduction of its existence and of the need for a constant change:

*“... There is one bad thing with the co-operatives. I am saying it for you to learn. They are slow. There is no speed of action, as a private [wholesaler] has, say.”*, according to a pharmacist, Head of a Board

The second category refers to the *construct of change*. That is, a concrete image of what is observed as being change in co-operatives. One could find contradicting views about the priority of environmental factors or inner dynamics and members’ demands in change process; about the sequential, linear and planned or the non-linear, non-comprehensively planned character of it; about a teleological or contingent trend of change. However, it is widely acknowledged that change efforts were successful though there were alternatives to the solutions finally given:

*“Yes, there were alternative choices.[...]”* but *“I think they were the best possible solutions at that time.”*, in a top-executive’s words.

These changes definitely led to a closer relation to demands coming from the environment, even to an evident similarity with other business entities distinct to the co-operative organization until now:

*“Sometimes I feel like going towards a direction closer to the private sector, regarding various policies, commercial ones, which we have chosen”* or

*“but, if you ask me whether we did steps towards private enterprise, then, yes, we really did!”* or

*“We are closer [to a private firm]... Yes. There are some criteria applying to a merely private enterprise. [...] Criteria of effectiveness in whatever is done.”*

However, a most interesting finding is that despite these organizational changes which lead the co-operative form closer to an investor-owned form, all the respondents are completely sure that the fundamental difference between the co-operative and a private firm remains active, even enhanced:

*“The models may have been in a state of convergence but the objective still remains as different as it was. Probably, the mechanism is closer to the private pharmaceutical wholesaler; Yet, I think the main goal still remains the same, the strategic aim. That is, we have a co-operative enterprise,*

*which exists in order to serve the development and sustainability of the pharmacy.*”, a top executive argues.

Our last category is the *perception of the environment*. It describes the way that the co-operative organization evaluates and store information about its environment. The responses indicate a certain ambiguity regarding the way the environment is perceived. When the first wave of changes occurred, the environment seemed to be rather positive, or indifferent or at least with easily manageable negative features towards the co-operatives. The last few years, due to the current economic disorder, it is considered very turbulent, fluid and risky; a state where dangers concerning the co-operatives are involved; and above all, and of a great concern of the respondents, dangers concerning the pharmacy-member which threaten its current form, its operation, even its existence. The factor ‘competition’, especially this which is related to the opponent organizational form, the investor or private owned wholesalers who are strictly focused on profitable activities, is underestimated (particularly comparing with competition threats coming from new competitors, e.g. the pharmaceutical industry itself). The co-operatives seem to be one step ahead the competition from private firms. As a well-known co-operative leader explicitly states:

*“I would not be frightened by any competition. At least, personally speaking, regarding the responsibility I have about the strategy in the country level or the responsibility I have in my own cooperative.”*

## **7. Discussion and conclusions**

To remind, the research focus on a particular type of co-operative, the pharmaceutical one, which is actually a retailer-owned co-operative established and controlled by numerous pharmacists who run their own independent retail stores (pharmacies). Data gathered by the various actions of the research (questionnaire dissemination, meetings with persons in charge, informal conversations, observation of national assembly meetings etc.) as well as data derived from the analysis of the interviews and the study of corporate documents and balance sheets, indicate a pattern of changes which distance a certain number of Greek pharmaceutical co-operatives from the traditional co-operative model, mostly the biggest and most powerful ones. The typologies proposed by scholars of change in co-operatives, which were presented in Chapter 2 and were finally synthesized in the typology shown in Table 1, are affirmed in a large degree as well as the relative change trend (from the traditional to the entrepreneurial model). Suffice to say, each co-operative which experiences deviations from the traditional model can meet the identification criteria of a plurality of non-traditional models. Those findings not only reaffirm existing works, which are mostly based on studies on agricultural co-operatives, but also affirm the transferability of change typology to other industries, but agriculture. Yet, certain types of non-traditional models do not appear in our sample. New-generation co-operatives and investor-share co-operatives have not been traced.

Nevertheless, change trend cannot be confined solely to the typology of Table 1. Emphatic evidence proves the necessity for further modification/enrichment of that typology. In more detail, the role of the development of value-added activities and services, other than the wholesale trade, was initially underestimated and must be

incorporated. Williamson (1987) had already marked this element of the restructuring trend in co-operatives as *diversification*<sup>12</sup>.

Moreover, although horizontal integration<sup>13</sup> (mergers and acquisitions) had been taken into consideration in Table 1, in order to mark a distinct non-traditional co-operative model, there was no reference to a model of *vertical integration* activity. This is partially reasonable because co-operatives are principally a major tool for vertical integration in the value chain. For example, when pharmacists -owners of an independent retail store- establish a co-operative, they actually perform an act of backward vertical integration in the supply chain of medicines, i.e. engagement in wholesaling activity. However, the evidence unveils a reverse process which has been activated, though not been explicitly shaped yet. Co-operatives seem to move to a kind of primary *forward vertical control* over their members' business activities (if not, a *forward vertical quasi-integration*)<sup>14</sup> by establishing or participating in voluntarily chains of pharmacies and undertaking a certain part of stores' management, though not their ownership. In a rather recursive schema, it used to be the retailers (pharmacists) who established the co-operatives in order to organize their supplies in an effective and profitable manner. But now, it is the co-operatives which intervene in the retail market in order to help pharmacies organize and transmute their retail activity; hence, ensure their existence. This evidence shares similarity with the recent developments in the European pharmaceutical wholesaling, as they are described in the relevant review of studies regarding the sector, in Chapter 3 (see Figure 3). It also refers to an important body of literature (Blois, 1972; McWilliams & Gray, 1995; Perry, 1989; Porter, 1980). This fact forms an extra type of departure from the traditional co-operative model which had not been considered in the relevant discussion in Chapter 2 and emerged from the analysis of research findings; some co-operatives' strategy is gradually, though still vaguely, aligned with that of the large European privately-owned wholesalers. The strategy has its particularities, defined by the very nature of the co-operatives but its business function is the same both for the co-operatives and the other market players who adopt it.

An additional need for enrichment of the Typology in Table 1 derives from the intensification of expansionist strategy of some co-operatives. Although mergers and acquisitions have been rather rare and contingent incidents to mark the expansion of one co-operative's activities in the same line of business, territorial expansion by means of establishment subsidiaries or 'aggressive' marketing tactics becomes an apparent disposition in the co-operative pharmaceutical wholesale trade. Once again, this tendency has been described in the review of studies regarding the sector, in Chapter 3 (see Figure 3). The fundamental principle of the co-operation between co-operatives is compromised and replaced by a state of competition of *co-operative against co-operative*.

Finally, the fact that in several co-operatives new-comers are discouraged to gain membership status because of the high value of the basal co-operative share could not be ignored by our analysis. It is true that there is no institutional transformation of the respective co-operatives into a type of new-generation co-operative with restricted

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<sup>12</sup> The development of new products, services or technologies which may have or may not have similarities with the existing product or service line.

<sup>13</sup> *Horizontal integration* is a fusion of entities pursuing the same line of business. (Kanavos et al., 2011, p.31).

<sup>14</sup> *Forward vertical integration* occurs when a firm purchases or controls its distributors/clients. *Forward vertical quasi-integration* is a form of forward vertical control between firms in neighboring stages without the full assumption of distribution, points of sale or ownership (Blois, 1972).

membership. However, it is also obvious that this situation has been old enough to be just a temporary issue. Solutions as the equity pay-back and the subsequent depreciation of the nominal value of basal share are actually denied by the existing membership of the co-operatives, either due to an anxiety concerning the capital base of the co-operative amid recession or because the existence of hidden delinquencies is implied. In any case, these co-operatives operate in a quasi-closed membership status and seem indifferent to integrate the whole community of independent pharmacists. Concluding our analysis, we remove from Table 1 non-traditional models that have not been traced out in our research in Greek pharmaceutical co-operatives, while we incorporate those we identified in our findings. A novel typology of co-operative models which deviate from the traditional model is introduced in the following table:

<b>Co-operative Model</b>	<b>(violated) Traditional Principle</b>
Differential policy co-operatives	Members' equal treatment
Proportional investment co-operatives	Equal contribution of capital
Member-investor co-operatives	Equal contribution of capital; Profit distribution in proportion to the use
Co-operatives adopting Diversification	User principle
Co-operatives with Subsidiaries	Autonomy and independence; One member – one vote; User principle
Co-operatives adopting expansionist strategy	Autonomy and independence; Co-operation among co-operatives
Co-operatives exercising forward vertical control	User principle
Quasi-closed membership co-operatives	Open membership; Concern for community

Table 2: Typology of non-traditional co-operative models in Greek pharmaceutical co-operatives

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Returning to the general literature about change in organizations, we can plausibly assign the changes, which are implied by the non-traditional co-operative models presented above, to Ackerman's *transitional* type of change. Traditional governing values, methods and processes are replaced by new ones over a period of nearly two decades. Yet, our sample of co-operatives did not enter a *transformational* phase. All of our respondents may acknowledge similarities with investor-owned firms but they are entirely confident about the fact that their co-operatives maintain and enhance the difference from investor-owned firms, despite those changes.

As far as the degeneration argument it concerns, one could definitely rule out any type of institutional degeneration. Greek pharmaceutical co-operatives remain user-owned, user-controlled and user-benefited firms (Cook, 1995). Furthermore, organizational degeneration is not apparent, at least in the findings of this research. It seems that there is a high degree of harmonization between elected leaders' and professional managers' intentions and attitudes. Or, at least, only minor principle-agent problems could be

traced. However, there is efficient evidence supporting the assumption of goal degeneration (mostly in terms of prioritization of constant growth and of intensely expansive plans) as well as of degeneration deriving from obstacles to membership of new-comers.

Observing the changes in traditional co-operative model, one could unmistakably argue that Greek pharmaceutical co-operatives have entered a moderate degeneration stage. Nevertheless, one must be careful enough not to anticipate an inevitable escalation to organizational or institutional degeneration, in accordance with the general degeneration thesis. There may be evidence which confirms the assumptions that change in co-operatives is an irrevocable trend from the traditional model to a model closer to an investor-owned firm. At the same time, there is also evidence that change process is restricted by the particular characteristics of the co-operative organization and, despite the transformation of their traditional structure and operation, their mutual character remains unaltered. Other evidence proves that certain ‘business’ (or ‘economic’) reasons are introduced to justify this type of changes (i.e. raising equity, overcoming bank lending difficulties, confront competition, avoid legislation obstacles, improve performance, align with the era of globalization demands, etc.). Therefore, it supports the argumentation coming from scholars who consider co-operatives as organizations actually dominated by their economic perspective and not the social. On the other hand, there is also apparent evidence which supports the opposite argumentation put forward by scholars that treat the co-operative mainly as a members’ society (civil association), though with a definite economic character. The co-operatives under study cannot observe their interests outside the continuous satisfaction of their pharmacists-members’ interests; they acknowledge their totally distinct nature comparing with privately-owned enterprises of the same scope as well as the fact that they preserve non-economic values or at least they are not solely focused on profit generation. The main aim of the changes that occurred or going to occur is the overall service of the member-patrons and their survival which comes through the survival of the co-operative, and vice versa.

Taking into serious consideration those apparently conflicting evidence, one should acknowledge the reservations of many other scholars who challenge the universal validity of degeneration thesis. According to this theoretical trend, the *regeneration* of the co-operative organizations is possible, under certain conditions. Even in cases that degeneration process has advanced (Batstone, 1983; Cornforth, 2005; Harnecker, 2012; Hernandez, 2006; Hunt, 1992; Ng & Ng, 2009; Stryjan, 1994, 2004). Other scholars also challenge the argument of the allegedly inefficiency of co-operatives to which degeneration thesis and structural inefficiency thesis converge. They argue that, amid the last devastating global financial crisis, co-operatives have shown strong resilience comparing with the investor-owned firms in certain sectors of the economy, while their particular characteristics are enhanced instead of degenerating and their number is increased (Birchall & Ketilson, 2009; Bretos & Marcuello, 2017; Langmead, 2016; Narveiza et al., 2017; Pollet, 2009; Roelants et al., 2012; Stervinou et al., 2015; Storey, et al., 2014; Webster et al., 2012).

To conclude, all the abovementioned recurring contradictions, which sometimes end up to the form of a paradox, have to be examined further and deeper. To move from superficial conclusions about change in this certain type of co-operatives, means to investigate *how* change unfolds, not only what types of change can be identified and

what reasons for. To accomplish this task one needs to distance oneself from dominant and convenient assumptions about the “degeneration” and “structural inefficiencies” of the co-operative organization. Neither dominant economic-led observations (e.g. bad performance, inherent inefficiency, environmental maladjustment, etc.) nor typical sociological answers (e.g. co-operation, solidarity, trust, etc.) can sufficiently advance the understanding about change in co-operatives. One must employ a theoretical framework which can handle with the hyper-complex organizations of hybrid nature like the co-operatives. However, this research exceeds the aims of the current announcement and is part of a future work.

## **8. Research contribution**

The area of contribution of this research extends over the field of co-operative studies, in a multiple way. I must remind that the main aim of the research is to indicate and identify the types of change which Greek pharmaceutical co-operatives have experienced the last two decades. In its explorative phase, the study examines the so-called *restructuring trend* (i.e. transition from the traditional model of co-operatives to a more business-oriented) in the Greek pharmaceutical co-operative sector; its identification and the diffusion of its main characteristics to the Greek context. For descriptive reasons and in order a proper basis for change models to be established, a novel *typology* of co-operative models that are distanced from the traditional one was initially developed (Table 1). This typology includes and systematizes (in a kind of meta-analysis) various contributions of scholars who study changes in co-operatives and it was explicitly imprinted in the design of the questionnaire as well as implicitly in the design of semi-structured interviews. It was redeveloped after it was enriched by evidence of the research (Table 2) and it is offered as a *diagnostic tool-kit* in similar research projects. Hence, the research contributes to the relevant literature by identifying the diffusion degree of elsewhere observed change models within Greek co-operative context as well as by formulating a typology which can be used in the study of change in co-operatives.

Moreover, this study offers another specific, though supplementary, contribution as it can be ascribed to the literature of non-agricultural co-operatives. The literature about co-operatives is dominated by works referring to the agricultural co-operatives (and much less to workers co-operatives); most of the typologies regarding change in co-operatives have their origins in the study of those. Our study begins from findings of works based mostly on studies of change in agricultural co-operatives. It disseminates them to the field of retailer-owned ones (pharmaceutical co-operatives), traces their relevance and then re-examines them. Thus, it contributes to a scientific effort for the development of a unifying theory regarding organizational phenomena in co-operatives, regardless the industry they operate in. Especially within the Greek context, the current contribution to the studies of non-agricultural co-operatives becomes significant because the relevant literature is remarkably underdeveloped, if hardly exists.

The outcome of the study and the relevant discussion which hopefully enlightens some aspects of change in co-operatives, could have certain implications for those working or related in one way or another to pharmaceutical co-operatives (pharmacists-members of the co-operatives, executives, managing directors, Board members, consultants,

etc.). Taking into account the multitude of change types in the co-operatives under study, practitioners must be aware of the fact that there are multiple solutions for the same problem. Certain decisions about change imply that there were (and maybe still are) other decisions that could be made, *functionally equivalent* to those already taken, which could perform the same function but with different side-effects (Besio & Pronzini, 2010, pp. 13-14). Reviewing those equivalents and shedding light on the side effects of each one (for example, different solutions for the problem of raising equity in a co-operative which imply different outcome of change) could re-irritate the organization from within and reconsider taken for granted structures.

One might also reasonably imply that the conclusions could be transferred to countries of the European South which share similarities with Greece as far as the pharmaceutical market formation, the legal framework, the role of co-operatives and the welfare policies or austerity policies are concerned (e.g. Portugal, Spain, etc.). Nevertheless, the present thesis is definitely limited to the social, cultural, political and economic context of Greek pharmaceutical market. It is the reader's (or user's) decision whether the results of the research could be transferred to another industry, country or population.

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