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Ueli Benedikt Löffel

Entrepreneurial orientation in the third sector

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Ueli Benedikt Löffel https://orcid.org/0000-0002-7203-7369

Entrepreneurial orientation in the third sector

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Ueli Benedikt Löffel
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Content

Preface

As policy reforms based on neoliberalism lead to changes in the regulatory environment, resulting in increased competition and pressure from stakeholders to operate more efficiently, organizations in the third sector[1] are forced to find new ways of managing themselves to compete and meet the demands of stakeholders, clients, and members. Consequently, they adopt practices that are widespread within their (new) frame of reference (also known as *becoming business-like*). In response to efficiency requirements, these organizations are professionalizing their management or pursuing an entrepreneurial strategy to increase their competitive flexibility and anticipate changes in the regulatory environment and customer and member preferences. However, there are unanswered questions about the impact of adopting business-like practices on different dimensions of organizational success, the boundary conditions, and whether adopting business-like practices is as effective for organizations which are not purely profit-oriented. This dissertation addresses some remaining research questions focusing on an entrepreneurial orientation (EO). The concept of EO, which aims to capture the essence of an entrepreneurial organization, was introduced by Miller (1983) based on the work of Mintzberg (1973). It was conceptualized by Covin & Slevin (1989) and has established itself as a construct in management research (see (Rauch et al., 2009; Wales et al., 2011). According to Miller (1983), entrepreneurial organizations focus on innovation, take the necessary risks and are the first to enter markets. *Innovativeness* refers to a firm's propensity to constantly create or change products or services (Covin & Slevin, 1989; Miller, 1983). *Proactiveness* as an active rather than a passive attitude towards competitors (Lumpkin & Dess, 1996) or "the anticipatory development and implementation of innovations in advance of others" (Morris et al., 2011, p. 959). *Risk-taking* is a firm's preference for bold and high-risk projects under uncertainty (Zahra & Covin, 1995). While several aspects of EO are extensively researched for for-profit-oriented organizations, there is a need to catch up in research for non-profit-oriented organizations (Lumpkin et al., 2013; Morris et al., 2020; Morris et al., 2011). It is not yet clear how EO is related to the performance of these organizations, what factors influence their EO and whether EO is as favourable for organizations that are not primarily profit-oriented as it is for for-profit oriented organizations. This dissertation aims to answer some of these questions and provide more evidence on whether business-like practices such as an EO can address the challenges organizations of the third sector face in the current market environment.

[1] The third sector (or non-profit sector) includes all organizations which are not primarily profit oriented and that belong neither to the for-profit private nor the public sector such as associations, clubs, chambers, cooperatives, and others. Defourny, J., Borzaga, C., & Defourny, J. (2001). From third sector to social enterprise. *The Emergence of Social Enterprise; Borzaga, C., Defourny, J., Eds*, 17-31.

Introduction

1 Challenges in the management of non-profit organizations

Non-profit organizations (NPO) differ from for-profit organizations most significantly in their mission. To simplify, whereas in non-profit organizations, the value (out of services or products) delivered to members or clients is central, and profit must be invested in the organization's purpose (mission dominance), in for-profit organizations, the return on investment dominates the importance of the value delivered to customers (profit dominance). An implication is that non-profit organizations are oriented towards the needs of their members, clients or stakeholders, and competitors are less critical. Other differences are the goods which are produced (NPOs mainly produce non-marketable goods), the financing of the operations (high importance of member contributions, public financing, and donations for NPOs), and the governance and management (high amount of voluntary work and importance of participative structures) (Gmür et al., 2023).

Policy reforms based on neoliberalism and new public management introduce market logic and economic incentives in providing public goods and increasingly question the difference between for-profit and non-profit organizations. The reforms push non-profit organizations to use resources efficiently and make necessary organizational and managerial adaptations. In addition, market reforms and the introduction of competition in previously protected environments lead to competitive pressure and the need to address strategic positioning issues.

Due to donor accountability requirements or public procurement directives, non-profit organizations are increasingly forced to apply accountability standards such as financial reporting, minimum financial reserve requirements, and organizational efficiency. They must also provide public goods as efficiently as possible within public service contracts. Organizations are responding to these demands and requirements by adopting organizational structures and behaviours widely used in for-profit organizations to meet the requirements of the public mandate (*professionalization*) and marketizing their services to diversify revenue streams and increase performance. At the individual level, the transfer of human resources from the private to the non-profit sector and educational management programs that incorporate the expectations, and prevailing policies amplify the effect. Shifting discourses, ideologies, and political, economic, and civic realities creates uncertainty. Organizations respond to this uncertainty by imitating organizational structures, practices, and behaviours of organizations in the field which they perceive as successful. These above-described processes of organizational homogenization due to similar environments are known as *institutional isomorphism* (DiMaggio & Powell, 1983). Organizations adapt their organization, practices and strategies to the dominant corporate logic to gain legitimacy from stakeholders, resources, and stability and increase survival chances (Meyer & Rowan, 1977).

Next to institutional isomorphism, which mainly relies on beliefs and myths about successful practices, there is the view that practical and efficiency reasons force organizations to adopt certain

practices. Policy reforms create markets for previously excluded for-profit-oriented organizations. The resulting competition changes the economic conditions for non-profit organizations and forces them to deal with questions of strategic positioning and alternative ways to acquire resources. As a result, non-profit organizations are applying practices that give them an advantage over their competitors. This form of convergence between organizations due to rational considerations is known as *competitive isomorphism* (DiMaggio & Powell, 1983).

The literature discusses that non-profit organizations are becoming similar to for-profit organizations or "business-like" through adapting their organizational structure and main processes (*organizational rationalization*) and through *managerialism*, normatively claiming that non-profit organizations should adopt corporate management knowledge and practices (Maier et al., 2016). There are different manifestations of becoming business-like. *Corporatization* aims to transform non-profit organizations into corporate business structures. Another aspect of "becoming business-like is *marketization*, adopting market-type relationships of non-profit organizations towards their members (members as customers). In this context, *market orientation* is seen as a strategy to increase performance and generate competitive advantage (Glaveli & Geormas, 2018; Hersberger-Langloh, 2022). *Professionalization* is the tendency of non-profit organizations to increasingly rely on a professional workforce rather than volunteers, and *managerial professionalization* is the involvement of a workforce with a business management background. Furthermore, it is claimed that entrepreneurship or *entrepreneurial orientation,* the alignment of strategies and behaviours which are based on taking considerable risks, focusing on innovativeness and entering markets before others do (proactiveness), is a means to achieve objectives in non-profit organizations under these changing conditions (Maier et al., 2016; Stock et al., 2024).

However, there is a debate on whether adopting business-like strategies leads to advantages or disadvantages for non-profit organizations. Researchers warn that adopting business-like practices leads to mission drift, where an organization deviates from their initial social mission (Cornforth, 2014). Suykens et al. (2023) describe the causal chain of how business-like practices might negatively affect non-profit organizations and cause mission drift: First, the adoption of business-like practices to achieve the organization's mission introduce underlying business values such as profitability or efficiency and become an element of the organization's culture and an end itself (*interpretation frame effect*). Second, only private goods (e.g. healthcare services or housing) are easily marketable. Other goods, such as advocacy, community building, or civic engagement, are only marketable if they are made excludable for users. The public good aspect of the objective, such as advocacy (e.g. promotion of sport in society with the aim of strengthening public health), community building (e.g., free participation of refugees in sports training of the same sports club) or civic engagement (promotion of democratic participation for members of a sports club) might be less easy to transform into a commercial activity than other excludable services (e.g., training services for members, participation at a competition etc.). Thus, the focus on commercialization could lead to a prioritization of

marketable goods and services (*commercial revenue effect)*. Third*,* it is argued that the focus on efficiency might not give enough room for participative activities and lead to the disappearance of "byproducts" of non-profit activities, such as the generation of social trust or democratic skills for members which emerges through the process of production of the social objective, and which could negatively affect the functioning of the organization (*production effect*). An example is a sports club that professionalizes activities and crowds out voluntary engagement, resulting in lower engagement and participation rates of members. The adverse effects might thus depend on the type of objectives non-profits pursue and the type of goods offered.

On the other hand, applying the most successful practices in the market leads to increased revenues through the sale of goods, more resources from private and public donors and more effective achievement of mission-related objectives. Quantitative studies find evidence that managerial practices and performance evaluation positively affect organizational performance (Suykens et al., 2023). Market orientation is positively associated with the fulfilment of the organization's economic (Benos et al., 2016; Glaveli & Geormas, 2018) and social objectives (Hersberger-Langloh, 2022), and an entrepreneurial orientation leads to better-achieving non-profits organizational performance objectives (Stock et al., 2024).

Although the discourse generally focuses on NPOs, the challenges vary among private non-profit organizations providing private and collective economic, social, and cultural goods and advocacy services to members and non-members.[2] Self-help NPOs or mutual benefit organizations offer collective and private services and goods to their members, depending on members' preferences and less on changes in external markets and the regulatory environment. In contrast, third-party user non-profit organizations, which offer services and goods to non-member users, depend on market changes or changes in the regulatory environment. Furthermore, the relative weighting of objectives between market-related, social, and member-related objectives differs among organizational types, affecting the outcomes of applying business-like practices.

1.1 Challenges for third-party service organizations - the example of homecare organizations

Organized within the legal form of associations, homecare organizations offer care for sick and elderly patients in their familiar home environment[3]. Regulatory reform of care financing in 2011 led to equality between Swiss public homecare organizations (non-profit homecare) and private homecare

[2] Depending on the recipients of goods and services private non-profit organizations can be distinguished into self-help and third-party user organizations. It must be noted that the distinction into self-help and third-party user NPO is not always selective and there are various hybrid forms of organizations. While self-help NPOs are mostly organized as chambers, federations, third-party-user NPOs are organized as associations, foundations or for-profit organization with a social purpose Gmür, M., Lichtsteiner, H., Stuhlmann, K., Erpf, P., & Andessner, R. (2023). *Das Freiburger Management-Modell für Nonprofit-Organisationen*. Haupt Verlag.

[3] Homecare services in Switzerland are traditionally non-profit organizations (also known as public Spitex). The almost 600 independent organizations are united in cantonal associations, and the umbrella organization called Spitex Switzerland. Private and mostly for-profit homecare organizations are united in their association (Association Spitex Privée Suisse ASPS, founded in 2005). Furthermore, there are a significant number of individual service providers.

organizations (mostly for-profit oriented). Today, there is no remaining difference between public and private homecare organizations in terms of admission, quality, and employee regulations on the federal level. The remaining differences regarding residual financing (which varies between cantons), the payment of value-added tax on household services for private organizations and tax exemption of public organisations are increasingly questioned. Due to the regulatory reform, public homecare organizations lost market share to their private counterparts and individual providers. Comparing pre- and post-regulatory reform years, the market share of private organizations increased (FTE + 13%, revenues +12%, clients, +6%) while the market share of public organizations decreased (FTE -14%, revenues -14%, client -11%). The differences are mainly due to the robust growth rates of private organizations, with 256% more clients since 2011, compared to a lower growth rate of non-profit homecare organizations (+60% clients) (see *Figure 1*).

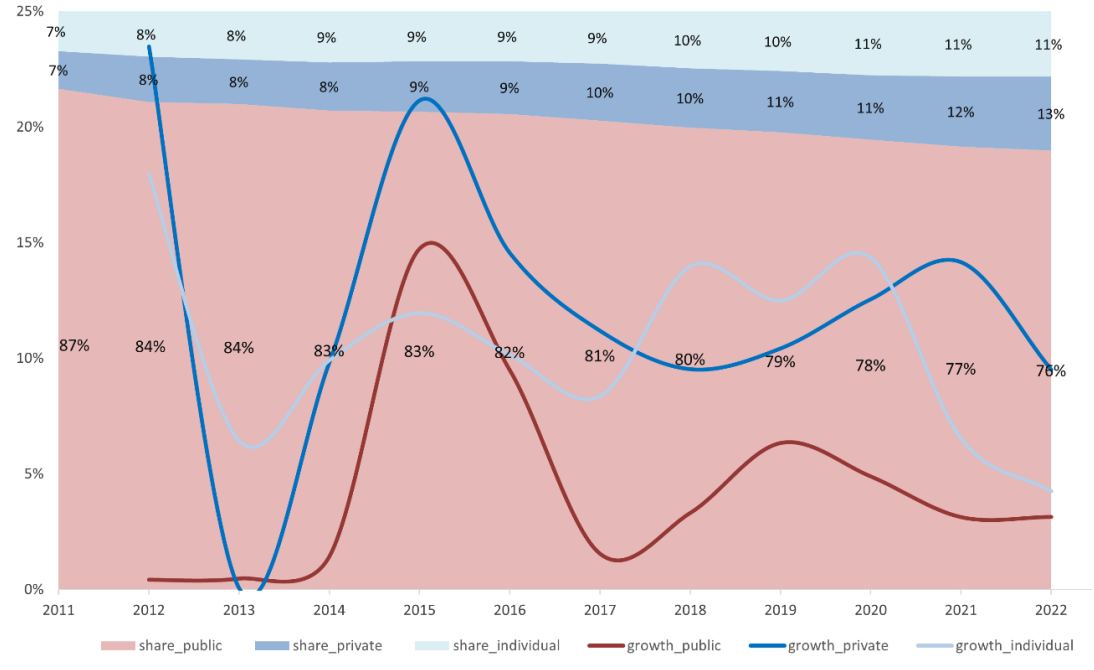

Figure 1 Market share and growth rates (left axis) in terms of clients of Swiss homecare organizations since the regulatory reform in 2011

Although the market situation is favourable[4] with increasing clients, the stakeholder pressure has increased for public organisations (Hehli, 2018). Consequently, they must provide services more efficiently due to regulatory reforms and face partial market competition. For public homecare organizations, the question is whether business-like practices such as EO help them fulfil their service mandate and perform in a competitive environment.

The literature comparing non-profit and for-profit homecare organizations reveals that non-profit agencies perform better in terms of quality of care and employee well-being, while for-profit

[4] The market share of public (non-profit) homecare in terms of staff (73%), clients (76%), and revenue (76%) is still higher than for private (mostly for-profit oriented) organizations (23% share of staff, 13% of clients, 20% of revenues) (FSO, 2023)

organizations perform better in meeting their financial goals but perform worse in terms of quality of care and employee satisfaction (Bos et al., 2017; Cabin et al., 2014; Geraedts et al., 2016; Wang et al., 2017). These results point to possible side effects of business-like practices on treatment quality and employee satisfaction.

On the other hand, scholars value the potential of entrepreneurial management to achieve above-average growth for healthcare organizations in an environment of increasing complexity and competition between for-profit and non-profit organizations due to deregulation (Guo, 2006). The potential of an *entrepreneurial orientation* is seen in improving the efficiency and quality of the healthcare system and overcoming the challenges of rising healthcare costs and quality expectations (Brandt & Znotka, 2021). Empirical research confirms this and show positive relationships between healthcare organizations' *entrepreneurial orientation* and organizational performance (Bhuian et al., 2005; Chahal et al., 2019; Davis et al., 2013; Hinz & Ingerfurth, 2013).

However, the question remains whether public (non-profit) homecare organizations benefit from business-like practices such as an *entrepreneurial orientation* when for-profit and non-profit become competitors in the same market due to regulatory reforms and the formal public service mandate is increasingly shaped by market logic.

2 Challenges in the management of cooperatives

Similar to non-profit organizations, which are now facing competition due to regulatory reforms, cooperatives are active in markets and manage to gain a competitive advantage under certain conditions and in economic niches (Boone & Özcan, 2016; Núñez-Nickel & Moyano-Fuentes, 2004). In recent years, competition has increased due to globalization, market reforms and changing customer preferences (Benos et al., 2016; Kyriakopoulos et al., 2004).

Cooperatives[5] have a unique member-based democratic organizational structure while operating in different economic sectors and with variation in the degree of orientation towards members, markets, and competitors. They promote economic objectives but simultaneously have characteristics of non-profit organizations, such as the dominance of the cooperative mission, democratic organizational structure, member promotion, limited distribution of profits, and a high proportion of self-financing. Because of these characteristics and their similarity to self-help NPOs, they can be viewed as part of the third sector (Purtschert, 2005).

As Purtschert (2005) notes, cooperatives are moving in a continuum between third sector and market objectives, with blurred boundaries. He argues that cooperatives with member objectives transform into cooperatives with market objectives throughout their life cycle, with a more considerable capital and member base, profit pressure and management dominance rather than member dominance.

[5] According to the Swiss Code of Obligations, cooperatives are defined as "a corporate entity consisting of an unlimited number of persons or commercial enterprises which primarily aims to promote or safeguard the economic interests of the cooperative's members by way of collective self-help or which is founded for charitable purposes (Art. 828.1)See https://www.admin.ch/opc/en/classified-compilation/19110009/index.html#a828, 15.04.2020

Consequently, the challenges in management and the usefulness of business-like practices for cooperatives vary depending on their position along the third sector and market continuum.

Purtschert (2005) defines the first cluster of cooperatives as one that follows the logic of mutual benefit. These cooperatives provide services and goods primarily to members and cultivate cooperative values and democratic participation. Member-oriented cooperatives tend to be small and inward-looking, with a dominant member logic and a self-conception similar to non-profit organizations, including pronounced democratic decision-making, integration of interests and personal liability of members. Member-oriented cooperatives can be found in various sectors, such as agriculture, housing, and infrastructure. They operate in markets with direct competitors but are partly shielded from direct competition since they provide goods and services to members. Nevertheless, they must provide added value (e.g. affordable housing), rebates or kickbacks to members or common goods (such as dairy infrastructure). Their main challenge is changing and increasing customer requirements and competitors offering similar goods. In response, member-oriented cooperatives must find ways to be innovative and flexible to anticipate these changing preferences and provide high-quality services and goods while delivering the services and goods more efficiently.

In contrast, market-oriented cooperatives have moved away from traditional cooperatives. They focus on customers rather than members, operate in competitive markets and sometimes use their cooperative values primarily for marketing purposes (Gmür et al., 2019). Examples include retail cooperatives operating in highly competitive markets (such as Coop and Migros) and banks (such as the Raiffeisen group). These cooperatives are financed through a high proportion of side selling and, due to their size and efficiency reasons, have less democratic participation. They must survive in tough competition and use business-like practices to prevail. On the other hand, they can still gain a competitive advantage from their cooperative values, but they might suffer conflicting goals between going business-like and losing cooperative values.

A third cluster comprises cooperatives that focus on objectives of general interest (social, ecological, ideological). They provide members and non-members with goods and services in culture, housing, advocacy, and ecological retail, intending to change social values. They differ from member-oriented cooperatives in that they produce collective goods and are, therefore, not primarily focused on the benefit of the members but on a broader user base. These civil society cooperatives share similarities with third-party non-profit organizations that aim at the community's general interest. In contrast, traditional member-oriented and market-oriented cooperatives focus on the self-interest of cooperative members and are, therefore, more comparable to corporations that maximize the owners' benefits (Blome-Drees & Moldenhauer, 2021). Cooperatives which focus on objectives in the general interest are less affected by changes in the market environment than by societal or regulatory changes and changes in customer preferences.

In response to the challenges of a changing market environment or the challenges arising from necessary growth and development along the cooperative life cycle, the application of business-like practices and their effects are gaining increasing interest. Following neoclassical economic theory, the relatively low emergence of cooperatives is explained by inefficiencies in their business model. As a remedy, the corporatization of the cooperative business model is proposed. It has been discussed that innovations in the cooperative organizational structure can help cooperatives fix disadvantages ascribed to the cooperative business model, such as economic disincentives or agency and coordination costs (Chaddad & Iliopoulos, 2013; Fabio R Chaddad & Michael L Cook, 2004). Furthermore, the professionalization of cooperative boards (Cornforth, 2004) and management and as well as its implications are increasingly discussed (Basterretxea & Martínez, 2012; Chaddad & Iliopoulos, 2013; Cook, 1994; Deng & Hendrikse, 2015). As a response to increasing market pressure, the orientation towards customers or *market orientation* is seen as a strategy to increase performance and generate a competitive advantage (Benos et al., 2016; Glaveli & Geormas, 2018; Kyriakopoulos et al., 2004). Similarly, the role of entrepreneurship and *entrepreneurial orientation* is increasingly discussed (Diaz-Foncea & Marcuello, 2013; Guzmán et al., 2020; Kyriakopoulos et al., 2004).

On the other hand, it is proposed that cooperatives can renew their values and use their collective characteristics to gain a competitive advantage (Birchall, 2012; Boone & Özcan, 2016; Menzani & Zamagni, 2010; Núñez-Nickel & Moyano-Fuentes, 2004; Talonen et al., 2016).

In this, tensions between a focus on the market with the use of efficiency-oriented management tools and the challenge of maintaining the cooperative identity with values such as democracy and participation (dealing with the *dual nature of cooperatives*) is an extensively discussed issue (Michaud & Audebrand, 2022; Novkovic et al., 2022; Puusa & Saastamoinen, 2021). Michaud and Audebrand (2022) identify several areas of tension, among others, member participation in the decision-making process versus efficiency in decision-making through delegation mechanisms (*participation vs. efficiency*), member representation at the board versus the choice of management experts (*representation vs. expertise*), tensions between economic and social objectives and, more broadly, the tension between adapting governance to the corporate model while preserving the cooperative identity (*going mainstream vs. preserving the identity*). These tensions are inherently present in cooperatives but gain importance with the increasing influence of the orientation towards the market. Therefore, cooperatives must use the advantages of an orientation towards the market while maintaining their cooperative values or preventing mission drift and demutualization.

Studying cooperatives is interesting for non-profit research because cooperatives, as member-based organizations, cover the entire spectrum from economic to social objectives. Researching EO's impact in cooperatives can provide insights into the nature and usefulness of EO for hybrid organizations and, due to similar structures, also allows conclusions to be drawn for other types of non-profit organizations. Focusing on different types of cooperatives thus allows us to understand better under

what conditions business-like practices like EO are beneficial and which factors are decisive for EO in third-sector organizations.

3 EO of non-profit organizations and cooperatives: state of research and research questions

EO is generally associated with the superior performance of organizations (Covin & Slevin, 1991; Miller, 1983), explaining part of the research interest in EO. Within EO research, a vast stream of literature focuses on the measurement of the construct, including the dimensionality (Lumpkin & Dess, 1996), the combinations of the subdimensions (Anderson et al., 2015) or adaptations to different organizational types (Morris et al., 2011). Another strand of research focuses on the determinants of EO, including the internal characteristics of organizations, e.g., of individuals and teams (Covin et al., 2020; Covin & Slevin, 1991) and the external environmental configurations (Rosenbusch et al., 2013; Wiklund & Shepherd, 2005). Empirically, a majority of research aims to shed light on the EO – performance relation (Rauch et al., 2009) for different economic sectors and organizational types such as SMEs (Wiklund & Shepherd, 2005), family businesses (Strobl et al., 2022), large firms (Gupta & Gupta, 2015), in different environmental configurations (Rosenbusch et al., 2013), and across different cultural areas (Wales et al., 2019).

Existing research on EO in the third sector either focuses on (i) the definition and measurement of EO (Lurtz & Kreutzer, 2017; Morris et al., 2011), (ii) the antecedents, and (iii) the outcomes of EO (Lumpkin et al., 2013). Since EO initially refers to the entrepreneurial orientation and strategy of SMEs and is seen as a means to gain a competitive advantage, it can be categorized within business-like practices (Maier et al., 2016). Some authors claim that EO is more than business-like behaviour (Stock & Erpf, 2022). The logic behind this argument is, that dependent on the magnitude of change to the initial scale and by deriving additional dimensions from the non-profit literature, the adapted EO scale shifts from a measure of business-like behaviour to a measure that at least partly reflects the essence of entrepreneurial behaviour in non-profit organizations. Nevertheless, the starting point remains a measure of business-like entrepreneurial behavior and the essence of entrepreneurial behaviour of third-sector organizations can, in my view, only be approximated.

Although the definition and measurement of EO, or the ontology of EO (*what it is*), is vital to define concepts of social or other forms of entrepreneurship, this thesis mainly focuses on *how* EO (as a business-like behaviour) is related to outcomes and antecedents in the third sector. The insights can be used to examine the cause-and-effect relationships between EO, antecedents and outcomes and add to the research question of whether EO is a valuable orientation for third-sector organizations such as non-profit organizations and cooperatives. Furthermore, by adapting the initial EO scale to non-profit organizations and cooperatives and testing additional dimensions from the literature, the findings could also be used to examine further the essence of entrepreneurial postures in organizations of the third sector.

Research on EO is relevant for non-profit organizations; as described in section 1, they are increasingly exposed to constraints, external quality requirements or competition, which force them to deal with strategic questions. First, due to reforms in the light of new public management and budget cuts, they are expected (sometimes used as a political argument to facilitate the adoption of budget-cutting measures) to use resources more efficiently and to be entrepreneurial and innovative to achieve their social mission. The pressure of being more entrepreneurial and having a widespread entrepreneurial mindset is spilling over into the third sector, leading to initiatives focusing on entrepreneurial and smart solutions to deliver public goods. This tendency is encouraged by pressure from policy makers and propelled through various educational programs (*institutional isomorphistic pressures*). Second, regulatory reforms create market competition between for-profit and non-profit organizations. Since EO as a strategic orientation is especially important in a competitive and dynamic environment (Wiklund & Shepherd, 2005), it is increasingly relevant to non-profit organizations (*competitive isomorphistic pressures*). Similarly, competition has increased for cooperatives due to globalization, market reforms and changing customer preferences (Benos et al., 2016; Kyriakopoulos et al., 2004) and therefore, finding a synthesis between collective characteristics and entrepreneurial posture (Cook, 1994; Purtschert, 2005) is of particular importance for cooperatives (see section 2)

Researchers have theorized that EO benefits non-profit organizations (Lumpkin et al., 2013; Morris et al., 2011) as well as cooperatives (Cook, 1994; Guzmán et al., 2020; Kyriakopoulos et al., 2004) because it is associated with performance in the for-profit sector (Rauch et al., 2009). Considering the potential side effects of adopting business-like practices in non-profit organizations and cooperatives, the question arises whether an entrepreneurial orientation has a positive impact on their performance (3.1), what the determinants of EO are (3.2) and whether organizations which are not profit-oriented benefit from EO to the same extent as for-profit organizations (3.3).

3.1 EO and performance of non-profit organizations and cooperatives

The study of the impact of entrepreneurial orientation on different performance measures helps assess whether organizations in the third sector benefit from business-like practices or whether adverse override positive effects. In contrast to for-profit organizations, non-profit organizations and cooperatives maximize multidimensional outcomes for stakeholders (social and economic). Since EO or its subdimensions could have stronger or weaker effects on multidimensional performance (Lumpkin et al., 2013), it is crucial to examine the impact of EO on broad organizational objectives (Lumpkin & Dess, 1996). A meta-analysis on the EO-performance relationship in non-profit organizations by Stock et al. (2024) reveals a positive impact of EO on mission and financial performance and no differences between the strength of the relationship, suggesting that EO affects mission and financial performance to the same extent. However, according to the authors, measurement problems such as higher effect size for subjective performance measures and overlaps in the operationalization of EO and performance measures in the evaluated studies could explain the strong effect of EO on the achievement of mission-related performance. Furthermore, in a different

meta-analysis, the authors find mixed results of EO on resource-related performance measures, such as organizational costs, equity ratio, and stakeholder support, which could, according to the authors, question the positive effect of EO on the survival and growth of non-profit organizations (Stock & Erpf, 2022).

Overall, the relationship between EO and economic and social performance is not definitively clarified. If EO aims to be a valuable strategy for non-profit organizations and cooperatives, it should not negatively impact organizations' mission achievement and, in the best case, positively impact financial and mission-related performance measures. Studying multiple performance measures thus answers the call for research of EO on broad organizational performance to rule out adverse effects (Lumpkin & Dess, 1996) and unravels the potential of EO for different aspects of the functioning of an organization (Wales et al., 2011).

Furthermore, there is a gap in the literature on the potential of EO as a mediator of third-sector organizations' performance (Guzmán et al., 2020; Stock & Erpf, 2022). As Wales et al. (2011) point out, studying mediation aims to show effect chains in EO research, which are, according to them, often overlooked. Examining the mediating effect of EO in the context of third-sector organizations can answer the question of how organizational-specific characteristics or peculiarities, such as the use of their collective characteristics, can be transformed into superior performance and thus give an additional insight into the usefulness of EO for their performance and of the potential of combining business-like practices and characteristics of collective organizations. Additionally, examining the link between financial and mission-related performance could unravel interaction effects between EO and multidimensional performance measures.

Finally, existing studies on EO in the non-profit sector mainly focus on third-party user organizations that offer healthcare, culture, education, and social support services (Stock et al., 2024). However, a research gap remains in how EO relates to multiple objectives in self-help or mutual-benefit organizations facing different challenges than third-party user organizations (see section 1 and section 2). This aspect is particularly relevant for cooperatives (as mutual-benefit organizations) since it is a long-debated question of how cooperatives can compete using their entrepreneurial potential and collective characteristics (Boone & Özcan, 2016). Despite the relevance of EO for cooperatives, only two studies focus on the relationship between EO and financial performance, while the multidimensional aspect of performance and the use of the collective characteristics is not treated (Guzmán et al., 2020; Kyriakopoulos et al., 2004). I aim to close these gaps with my first research question (*RQ1*):

Do cooperatives and non-profit organizations benefit from EO to reach their multi-dimensional objectives, and can they use collective characteristics (inter and intra-organizational cooperation) to increase performance?

3.2 Determinants of EO in cooperatives

The second research question focuses on the antecedents of EO in cooperatives. Prior research identified antecedents of EO, such as organizational resources and competencies, organizational culture, and organizational structure (Covin & Slevin, 1991). The relationship between the antecedents and EO is also extensively researched empirically, focusing on the explanatory effect of human resource management, leadership, strategy, organizational features, team and management characteristics, and resources in the business context (Wales et al., 2011). However, the non-profit sector needs to catch up (Lumpkin et al., 2013). Prior research theoretically identified different antecedents that might influence the EO of non-profit organizations to a stronger or weaker extent than for-profit organizations, such as social motivation, opportunity identification, access to resources, access to funding and multiple stakeholders (Lumpkin et al., 2013). Empirical research on non-profit organizations tested the impact of some of the antecedents on EO, for example, organizational factors, individual employee factors, financial resources, management factors, composition of the board and environmental factors (Stock & Erpf, 2022). However, there are remaining research gaps on antecedents of EO in the non-profit sector. Firstly, as described above, some antecedents have been examined for service and culture non-profit organizations. However, there is limited research on antecedents of EO in cooperatives, with a single contribution examining the relationship between cooperative governance and EO (Guzmán et al., 2020).

Secondly, although there is some research on access to and availability of financial resources, there is a gap in how networking resources affect EO in organizations of the third sector. Furthermore, a view of how the different types of resources (financial, human capital, networking resources) affect EO simultaneously is missing. The topic is relevant since resources are identified as an important antecedent of EO (Covin & Slevin, 1991; Wiklund et al., 2009), and access to financial resources is an issue for non-profit organizations and cooperatives (Fabio R. Chaddad & Michael L. Cook, 2004; Lumpkin et al., 2013).

Thirdly, the external environment is crucial for EO and performance (Rosenbusch et al., 2013; Wiklund & Shepherd, 2005). Nevertheless, there is not much research on the environmental impact of EO in non-profit organizations (Hinz & Ingerfurth, 2013), and there is a research gap in the context of cooperatives. I aim to close some of these gaps with the second project and by answering the research question (*RQ2*):

How do organizational and contextual factors determine the EO of cooperatives?

3.3 Comparative research on EO in non-profit organizations

While the contributions from *RQ1* and *RQ2* can be used to derive antecedents and outcomes of EO for organizations in the third sector, the question remains whether EO is equally beneficial if for-profit and non-profit organizations are directly compared. Comparative research in the same industry offers

the possibility to find differences between non-profit and for-profit organizations that could not be explored in prior studies and find results not confounded by industry variance (Dess et al., 1990).

However, up to date, there is not much theory-based thinking and less comparative research on whether and why EO should differ between for-profit and non-profit organizations if they are in direct competition. Overall, there are only two comparative EO studies in the healthcare sector: Davis et al. (2011) find no significant differences in EO between for-profit and non-profit nursing homes, but differences regarding environmental scanning and seeking relevant information. Hinz and Ingerfurth (2013) found differences in the levels of EO for for-profit compared to non-profit hospitals (which were both significantly higher than for public hospitals). Nevertheless, a research gap exists on whether for-profit and non-profit organizations' EO – performance relationship differs. Moreover, there is a gap in linking EO research with theory in the field of non-profit organizations and in general (Wales et al., 2011). The third research question thus takes a comparative stance *(RQ3)*:

Is there a difference in EO and associated outcomes between for-profit and non-profit organizations operating in the same market?

4 Overview of the research projects

The dissertation is cumulative. The research questions are answered based on two primary collected datasets. The first dataset contains cross-sectoral data on cooperatives in Switzerland. The second dataset contains data from private (for-profit) and public (non-profit) homecare organizations. The data was used for various papers and articles. Of these, I selected five articles for my dissertation.

The first research question *(RQ1)* was answered with Paper 1a and a cross-sectoral survey among 368 Swiss cooperatives (see Section 4.1.1). The relationships were tested for subgroups such as housing and infrastructure cooperatives, resulting in a published Paper 1b on housing cooperatives (see Section 4.1.2). The research question was also tested with Paper 3 and a survey among 168 for-profit and 36 non-profit homecare organizations (see Section 4.3.1).

The second research question (RQ2) was examined with a survey of 730 cooperatives, resulting in Papers 2a and 2b. While Paper 2a examined how EO is related to external (environmental munificence, hostility, and dynamism) and internal organizational influence factors (see Section 4.2.1), Paper 2b, taking a subset of the sample, focuses on resources and participative structure as determinants of EO (see Section 4.2.2).

The remaining research question *(RQ3)* is answered with Paper 3 and a survey among 168 for-profit and 36 non-profit homecare organizations (see Section 4.3.14.3.1). An overview of the related publications and presentations of the dissertation project is given in Section 4.4.

4.1 Project 1: EO and performance of cooperatives

4.1.1 Paper 1a: Entrepreneurial cooperatives: the impact of entrepreneurial orientation on economic and social performance.

Paper 1a answers RQ1 by a cross-sectoral quantitative study of 368 Swiss cooperatives. Cooperatives have a long history and are important in the market economy in providing goods and services to their members. Most cooperatives are SMEs and compete with corporations. Policymakers and academics value them as an organizational alternative combining the objectives to reach a sustainable and equal economy in their business model. However, cooepratives are often described as inefficient and structurally inert compared to corporations. Therefore, they only manage to compete under certain conditions and in economic niches (Boone & Özcan, 2016). Prior literature discussed different approaches to how cooperatives manage to be innovative and efficient, given the characteristics of the cooperative model.

On the one hand, focusing on the inefficiencies of the cooperative business model, the first approach aims to correct inefficiencies such as incentive problems and higher agency costs because of collective decision-making and incentives to free-ride. On the other hand, focusing on the potential of collective mobilization, literature claims that cooperatives can mobilize resources through their collective organizational form and draw a competitive advantage from it. Although both approaches have their value, there are no conclusive results regarding their competitive advantage.

The paper discusses a third approach focusing on an entrepreneurial orientation as a means for cooperative success and competitive advantage. It addresses the research gap in the relationship between EO and multi-dimensional cooperative performance. The question is relevant since cooperatives face market-related, member-related, and society-related objectives, and EO shows only its usefulness if relevant objectives are not negatively affected by an entrepreneurial orientation (Lumpkin & Dess, 1996). The question is also relevant for non-profit organizations that face similar multidimensional objectives.

Second, it discusses how the collective characteristics of cooperatives, which include internal and external collaboration, are related to EO and performance. It aims to show that collective characteristics can increase EO and performance. Discussing the importance of collective characteristics for entrepreneurial orientation adds to the cooperative literature strand, which claims that entrepreneurship in the cooperative context is about collectives rather than individuals (Diaz-Foncea & Marcuello, 2013) and of a more collectivistic perspective on entrepreneurship (Dimov, 2007; Stevenson & Jarillo, 1990). It thereby aims to set a counterpart to the understanding of EO as a firm-level orientation, which is shaped by the top management level (Covin & Slevin, 1989). The topic is relevant for cooperatives since an entrepreneurial orientation could help them use the advantages of their business model and increase their performance. However, it is equally important for non-profit organizations in general having similar ownership structures.

This study relies on a survey of 5233 Swiss cooperatives (excluding infrastructure cooperatives and self-help or interest representation organizations without any market focus) registered in the Swiss Trade Register at the end of 2017. A letter including the survey plus a short link to its online version was sent to the management/executive board in the summer of 2019. To account for the collective characteristics of cooperatives, the item battery of Covin and Slevin (1989) was adjusted slightly so that the items that focused on the top management level emphasized EO at the firm level.

Economic Sector[2]	*Subsample used*[1]	*Share in subsample*	*Sample*	*Population*	*Response rate*
Production	48	13.0%	102	947	10.8%
Housing	108	29.3%	260	2399	10.8%
Retail Trade	81	22.0%	99	737	13.4%
Finance/Insurance	85	23.1%	100	457	21.8%
Services	46	12.5%	84	693	12.1%
Total	368	100%	645	5233	12.3%

[1] Cooperatives with direct competitors

[2] Sectors were built following the Swiss NOGA classification, which is nearly identical to the European version (NACE).

Table 1 Sample and response rate

Secondary performance indicators were collected by hand from annual reports to test the trustworthiness (external validity) of the profitability measure. The results show that the profitability measure was reliable ($\alpha = 0.78$, $n = 100$). Furthermore, secondary economic and geographic data accounted for regional differences. The data was analysed using structural equation modelling.

The paper shows that EO is positively linked to market-related performance and member-related and social performance through perceived market performance as a mediator. Furthermore, inter- and intra-organizational cooperation led to higher levels of EO and, indirectly, market-related performance.

Answering the research question of whether EO is linked to cooperatives' broad economic and social performance measures the paper gives cross-sectoral evidence of EO's positive direct impact on cooperatives market-related and, indirectly, on member-related and social performance. It provides evidence that EO is a strategy for cooperatives to perform in a competitive market economy and that entrepreneurial orientation is a promising success factor. The results are interesting for non-profit organizations, as they often face multiple objectives, and EO is thus only valid if it influences these different performance dimensions.

Second, answering the research question of how cooperatives could use their collective characteristics to foster EO and performance shows, that using cooperative-specific aspects (internal and external cooperation) positively affects EO and indirectly performance through EO as a mediator. The results emphasize that cooperatives can use their collective characteristics to achieve a competitive advantage, which is relevant for non-profit organisations having a comparable ownership structure.

4.1.2 Paper 1b: Unternehmerische Orientierung und Zielerreichung von Schweizer Wohnbaugenossenschaften.

Paper 1b answers RQ1, focusing on housing cooperatives as a subgroup of cooperatives. Housing cooperatives offering housing services for their members are relevant since they are a cost-effective alternative to conventional housing and a means to solve the problem of housing shortages and increasing housing prices, especially in cities.

	Number of apartments in housing cooperatives	*Market share of housing cooperatives*	*Appartement growth housing cooperatives (2011-2019)*	*Appartement growth overall (2011-2019)*
Switzerland	168'723	3.7%	10.4%	10.9%
Zurich	44'218	19.4%	12%	8%
Basel	9'718	9.7%	1.5%	1.7%
Geneva	5'264	4.8%	11%	5%
Berne	6'775	8.5%	28%	3%
Lausanne	6'040	7.6%	14%	7%

Table 2 Growth of Swiss housing cooperatives in cities 2011 - 2019 (*source: BWO (2021)*)

Entrepreneurial orientation is seen as a means to increase housing cooperatives' success and indirectly lead to better housing situations. Focusing on housing cooperatives as member-oriented, mutual-benefit organizations is interesting since they have other properties than cooperatives with a more open user policy. Housing cooperatives focus on niches and try to optimize the services for members rather than directly competing with other organizations. Their reference framework is thus primarily members, and direct competition with other organizations is less frequent. In contrast to the previous paper, it was necessary to adapt the EO dimension to member-oriented cooperatives and change the dimension of proactiveness such that it referred to stakeholders rather than competitors.

Examining the relationship between EO and performance for a subgroup of cooperatives and slightly adapting the measurement instrument to its context, Paper 1b aims to generate new insights into mutual-benefit organizations oriented towards members and not acting in competitive markets. The results are also interesting for other self-help non-profit organizations not directly involved in market activities such as clubs or associations. Furthermore, it shows that depending on the study's objective, it is necessary to adapt the EO scale to third-sector organizations, as suggested by (Morris et al., 2011).

The Paper relies on the same Study as Paper 1a, focusing on housing cooperatives. The initial sample was reduced to account for missing's and Paper 1b, thus based on the answers of 222 housing cooperatives. In contrast to Paper 1a, the EO dimension of proactiveness was operationalized as the enactment of change relative to main stakeholders (Morris et al., 2011). The data was analysed using structural equation modelling.

The results show that EO positively impacts housing cooperatives' market-related performance measures in terms of growth, market position, and profitability. Moreover, the mobilization of employees and the external network was positively related to EO for housing cooperatives. The results showed that self-help organizations that are not acting in competitive markets can benefit equally from an EO. Furthermore, the results showed that the adapted EO measurement to self-help organizations fit the data. The results thus provide empirical evidence of an adaptation of the EO as proposed by Morris et al. (2011).

4.2 Project 2: Determinants of EO in cooperatives

4.2.1 Paper 2a: Determinants of entrepreneurial orientation in cooperatives: the interaction between organizational and contextual factors.

Paper 2 focuses on the antecedents of EO of cooperatives (RQ2). While there are various theoretical and empirical articles on the relationship between context factors and EO (Covin & Slevin, 1991; Rosenbusch et al., 2013), there is a need for research in the non-profit sector (Lumpkin et al., 2013; Stock & Erpf, 2022). Although some antecedents have been examined for service and culture non-profit organizations, there is limited research on antecedents of EO in cooperatives, with a single contribution examining the relationship between cooperative governance and EO (Guzmán et al., 2020). Paper 2 enters this research gap and examines organizational and environmental determinants that affect cooperatives' EO. In an explorative manner, the relevant influence factors of EO in the cooperative context were identified by the cooperative-specific business canvas developed by Mazzarol et al. (2014). The identified organizational variables potentially related to EO, such as purpose and strategy (mission orientation and growth), variables related to the profit formula of cooperatives (share of third-party users, differentiated pricing, and profit distribution), resources (physical, core competencies and networking resources), share structure, and governance were examined.

Additionally, widely used external determinants related to EO, such as environmental hostility, dynamism and munificence, were included in the model (Rosenbusch et al., 2013; Wiklund & Shepherd, 2005). The paper examines the interplay between environmental and organizational variables affecting EO, which is of relevance since EO is a success factor for cooperatives' performance, as shown by Papers 1a and 1b and by previous literature (Guzmán et al., 2020; Kyriakopoulos et al., 2004).

The study relies on the primary dataset collected in 2019 and the answers from 730 cooperatives in Switzerland.

SECTOR	*Sample share*	*Sample*	*Population**	*Response rate**
Production	13%	92	947	9.7%
Infrastructure	21%	153	1063	14.6%
Housing	29%	210	2399	8.8%
Retail Trade	13%	97	737	13.2%
Finance/Insurance	13%	96	457	21.0%
Services	11%	82	693	11.8%
TOTAL	100%	730	6296	11.6%

Table 3 Sample and response rate

To measure cooperatives' EO, the peculiarity of cooperatives as member and market-oriented organizations was considered. The initial measurement instrument was adapted to include an additional dimension of proactivity, embracing the proactiveness towards external stakeholders (Morris et al., 2011). Several control variables collected, and secondary data (regional and economic CVs) controlled the relationship between determinants and EO. The fit of the model was first assessed by structural equational modelling. The relationship between determinants and EO was then analysed using hierarchical regressions.

The results indicate that organizational determinants explained a particular variance in EO (9.4%), with growth strategy and networking resources being the most important factors. Second, the results show that the environment is vital for cooperatives' EO and explains an additional share of 6.4% of the variance in EO, with environmental hostility as the most critical influence factor. By examining the interaction between elements of the cooperative business model and the environment, the paper finds that environmental munificence and dynamism positively moderate the growth strategy - EO relationship. Although cooperatives without side-selling to third parties showed no direct effect between growth strategy and EO, the effect became more substantial in a munificent and dynamic environment, suggesting the importance of the environment for different cooperative types. Furthermore, it is shown that the relationship between financial reserves (high equity ratio) and EO is more substantial in a dynamic environment.

4.2.2 Paper 2b: Determinants of entrepreneurial orientation in cooperatives: organizational resources and the double-edged sword of member participation.

By relying on the analysis of Paper 2a, this paper focuses on resources and member participation as antecedents of EO in cooperatives. It closes the research gap on the relation between networking resources and EO and assesses the relevance of different types of resources (financial, human capital, networking resources) as determinants. Resources are generally seen as a relevant antecedent of EO (Covin & Slevin, 1991; Wiklund et al., 2009) and access to resources as an issue for cooperatives and non-profit organizations (Lumpkin et al., 2013). Furthermore, it discusses the relationship between member engagement and EO.

The paper relies on the same dataset as Paper 2a but uses a smaller sample of 615 cooperatives. The fit of the measurement model was first tested with structural equation modelling, and the relationships between determinants and EO are examined by hierarchical regression.

The paper shows that resources explain a particular variance in the EO of cooperatives, with networking resources being more important than financial or human resources. Furthermore, it shows that member engagement and participation is negatively related to EO. There was a good fit between the EO measure adapted to the cooperative context with the additional dimensions of member proactiveness and Covin and Slevin's (1989) measurement instrument. The result of a higher loading of member proactiveness compared to the original proactiveness measure indicates that proactivity towards stakeholders is essential for cooperatives.

4.3 Project 3: Comparative research on EO in non-profit organizations

4.3.1 Paper 3: Similar but different – a comparison of entrepreneurial orientation and goal attainment in non-profit and for-profit homecare services

While Papers 1a and 1b focused on whether EO is beneficial for the success of non-profit organizations, the remaining research question is whether there are differences between non-profit and for-profit organizations (RQ3). Taking a comparative view and examining organizations operating in the same market, and thus allowing to rule out sector-specific influence factors, Paper 3 aims to close this remaining research gap. Using agency and stakeholder theory, it argues that differences between non-profit and for-profit organizations translate into differences in the EO level. Furthermore, it includes theories of strategic positioning (Porter's generic strategies and Miles and Snow's strategic typology) and argues that the market position and regulatory environment impact EO and the relation between EO and performance between non-profit and for-profit organizations.

The topic is relevant for home care organizations as they provide healthcare services at clients' homes, making them a cost-effective alternative to stationary treatment in hospitals. They are gaining importance because of the demographic change of the society. Because of regulatory reform in 2011 and a change in the financing scheme, Swiss private (mostly for-profit) homecare organizations were allowed to enter the market, and public (non-profit) homecare organizations lost around 10% of their market share until 2019. In the following, strategy and competitive advantage questions are gaining importance for non-profit homecare organizations.

Beyond that, the topic of this paper is relevant for third-sector organizations in general as they face competition with for-profit organizations due to market reforms and privatization and because entrepreneurial orientation (EO) is discussed as a strategic orientation beneficial in a competitive and dynamic environment (Wiklund & Shepherd, 2005).

The paper uses the initial scale by Covin and Slevin (1989) and additionally includes the dimension of collective mobilization, which is an important feature in healthcare (Haase & Franco, 2020; Möckli et

al., 2023) and is seen as essential for entrepreneurial outcomes (Ribeiro-Soriano & Urbano, 2010; Yan & Sorenson, 2003; Yan & Yan, 2016). Based on a comparative dataset of 168 non-profit and 36 for-profit homecare organizations, the paper analyzes RQ3 using structural equational modelling and hierarchical regression.

The research shows differences in EO between for-profit and non-profit organizations. For-profit organizations exhibit higher EO levels, but the profit status does not significantly affect the strength of the relationship between EO and performance. EO subdimensions reveal that risk-taking and proactiveness were higher for for-profit and non-profit organizations.

4.4 Related publications and presentations

4.4.1 Publications

Peer-reviewed journal articles

- Löffel, U. & Gmür, M. (2024). Entrepreneurial cooperatives: the impact of entrepreneurial orientation on economic and social performance. *Journal of Co-operative Organization and Management*
- Löffel, U. (2023). Determinants of entrepreneurial orientation in cooperatives: organizational resources and the double-edged sword of member participation. *Die Unternehmung*, *77*(4), 394-419.
- Löffel, U., & Gmür, M. (2022). Unternehmerische Orientierung und Zielerreichung von Schweizer Wohnbaugenossenschaften. *Zeitschrift für das gesamte Genossenschaftswesen*, *72*(4), 268-289.

Non reviewed articles

- Löffel, U, Gmür, M. (2023), Similar but different – a comparison of entrepreneurial orientation and goal attainment in non-profit and for-profit homecare services, *Working Paper*
- Löffel, U. (2022), "Determinants of entrepreneurial orientation in cooperatives: the interaction between organizational and contextual factors", *Working Paper*
- Löffel, U. (2019). Wirtschaftlich tätige Genossenschaften in der Schweiz. *Verbands-Management*, 45(3), 18-24.
- Gmür, M., Löffel, U., & Schmid, P. (2019). Aktuelle Entwicklungen im Genossenschaftssektor. *Verbands-Management*, *45*(3), 6-16.
- Gmür, M., & Löffel, U. (2019). Unternehmerische Kultur und Zielerreichung in Pflegediensten. *Verbands-Management*, *45*(2), 17-25.

Book chapters

- Gmür, M., & Löffel, U. (2023). Unternehmerische Kultur und Organisationserfolg in Pflegediensten. In *Unternehmerische Führung und Kultur in Non-Profit-Organisationen:*

Erfolgsbeispiele und aktuelle Trends (pp. 197-209). Wiesbaden: Springer Fachmedien Wiesbaden.

- Löffel, U., & Gmür, M. (2023). Unternehmerische Orientierung und Zielerreichung von Selbsthilfegenossenschaften. In *Unternehmerische Führung und Kultur in Non-Profit-Organisationen: Erfolgsbeispiele und aktuelle Trends* (pp. 317-337). Wiesbaden: Springer Fachmedien Wiesbaden.

4.4.2 Published interviews

- Löffel, U. (2021) Interviews on participation in cooperatives, In: Magazin, SensSuisse 02/2021.
- Löffel, U. (2020). «Sind Genossenschaften Teil vom Sozialen Unternehmertum»? Interview on social entrepreneurship and cooperatives. In: Magazin, SensSuisse 02/2020.
- Markus Gmür & Ueli Löffel (2019): „Öffentliche sehen eine Bedrohung, Private die Marktchancen" Interview zur Unternehmerischen Kultur in privaten und öffentlichen Spitex-Organisationen. In: Spitex-Report 11/2019.
- Markus Gmür & Ueli Löffel (2019): „Bei Konkurrenz treten Spitex-Organisationen aggressiver auf, nicht zukunftsorientierter" Interview zur Unternehmerischen Kultur in öffentlichen Spitex-Organisationen. In: Spitex-Report 4/2019.

4.4.3 Presentations

- Presentation at the *International Society for Third-Sector Research Conference ISTR,* 12.07.2022, Montreal, Canada
- Presentation at the *International ISTR PhD Seminar,* 10.07 – 12.07.2022, Montreal, Canada
- Presentation (online) at the *International Research Conference on Social Enterprise EMES*, 06. October 2021, Teruel, Spain
- Presentation (online) at the *Nachwuchswissenschaftertagung der AGI at WU Wien*, 20.09.2021, Vienna, Austria
- Presentation (online) at *14th International NPO Colloquium,* 08.04.2021, Linz, Austria,
- Presentation at the *PhD seminar of the Department of Economics at the University of Fribourg*, 10.09.2019, Schwarzsee, Switzerland

Scientific contributions

1 Paper 1a: Entrepreneurial cooperatives: the impact of entrepreneurial orientation on economic and social performance

Löffel, U. & Gmür, M. (2024)

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Ueli Löffel: Conceptualization, Methodology, Investigation, Data curation, Software, Analysis, Project administration, Validation, Writing – original draft, Writing – review & editing.

Markus Gmür: Conceptualization, Project administration, Resources, Feedback on the Manuscript

Entrepreneurial cooperatives: The impact of entrepreneurial orientation on economic and social performance.

Ueli Löffel & Markus Gmür

Although most SMEs are corporations, a substantial proportion are cooperatives and direct competitors in the same business areas. Cooperatives are an organizational alternative combining the ingredients for a sustainable and equal economy in its business model. However, they are often alleged to be inefficient and structurally inert compared to corporations. It is not clear how cooperatives manage to be innovative and efficient, given the characteristics of the cooperative model. Furthermore, there is a lack of understanding how an entrepreneurial orientation (EO) helps them to perform in competition. This study theoretically and empirically examines whether cooperatives benefit from EO in their multi-dimensional goal system. Additionally, the study asks how cooperative-specific collective characteristics relate to EO and performance. Using cross-sectoral data of 368 cooperatives in Switzerland and applying structural equation modelling (PLS), the results show that EO is significantly and positively linked to economic performance. Inter- and intraorganizational cooperation is associated with higher levels of EO and indirectly affects performance through EO. The results suggest that cooperatives, like other SMEs, benefit from EO in competition and can take advantage of cooperative-specific characteristics.

Ueli Löffel* (corresponding author, ueli.loeffel@unifr.ch)

Markus Gmür* (markus.gmuer@unifr.ch)

*Institute for Research on Management of Associations, Foundations and Cooperatives, University of Fribourg (CH), Bd de Pérolles 90, 1700 Fribourg, Switzerland

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JEL classification C12, L25, L26, P13

1. Introduction

The cooperative model, with its mix of democratic governance, profit sharing for members, and social and community goals, is regarded by scholars in the past and present as a viable organizational alternative to capitalism (Boone & Özcan, 2016; Whyman, 2012). Different organizational forms like cooperatives or social enterprises have regained relevance since the 2008 financial crisis and the reconsideration of economic plurality to create a more sound and sustainable economic system (Michie, 2017). International organizations like the UN promote cooperatives as a valuable instrument to reach its 2030 SDGs (UN, 2021), and the ILO (2021) considers cooperatives as a means to improve living and working conditions and provide services and infrastructure in underdeveloped areas. Today, cooperatives are present in various sectors and compete with corporations. Although the 300 most important cooperatives generated a turnover of 2.180 billion USD and accounted for 280 million jobs worldwide in 2019, according to the World Cooperative Monitor (ICA, 2021), cooperatives are generally SMEs[1] (Guzmán et al., 2020). Despite the importance of cooperatives for sustainable economic development, they remain the exception rather than the rule in a competitive market economy

[1] In Switzerland 99% of cooperatives are SMEs (FSOb, 2019).

and manage to compete with corporations only under certain conditions and in economic niches (Boone & Özcan, 2016; Monteiro & Stewart, 2015; Núñez-Nickel & Moyano-Fuentes, 2004).

In light of this gap between optimistic attitude and economic reality, Boone and Özcan (2016) point out that it would be essential to know how cooperatives perform in competition, given the advantages and disadvantages of the cooperative model. Two approaches are discussed in the cooperative literature without conclusive results.

The first approach focuses on the correction of organizational disadvantages of cooperatives. From a neoclassical economic perspective, the relatively low emergence of the cooperative business model is explained by the disadvantages emerging from their collective organization. According to this perspective, cooperatives suffer from incentive problems leading to underinvestment, preventing them from raising the necessary funds to operate efficiently and competitively (Jensen & Meckling, 1979; Porter & Scully, 1987; Rey & Tirole, 2007). Furthermore, cooperatives have higher agency costs than for-profit organizations because of collective decision-making and the incentive to free ride (Fama & Jensen, 1983; Hart & Moore, 1996). The first approach, thus, focuses on improving the organizational disadvantages of the cooperative business model to enhance performance and survival in a competitive environment (Chaddad & Cook, 2004). The approach can be understood in the light of institutional isomorphism (DiMaggio & Powell, 1983), with the organizational adaptation of cooperatives to their direct competitors. The adaptations range from models with revised incentive structures to attract risk capital and align divergent member interests, models where decision power is delegated to professional managers, to models where the governance is comparable to corporations (Chaddad & Iliopoulos, 2013). The second approach claims cooperatives can draw a competitive advantage from their characteristics through the collective mobilization of networks, members, and employees (Birchall, 2012). Cooperatives use networks to attract resources (Menzani & Zamagni, 2010). They benefit from close ties to members as customers (Bhuyan, 2007; Birchall & Simmons, 2004; Talonen et al., 2016). Members' and employees' participation and loyalty are based on financial incentives and a common identity with cooperative values such as fairness or trust (Bastida et al., 2021; Morrow Jr et al., 2004). Therefore, cooperatives can rely on their commitment during asymmetric economic shocks or recessions (Núñez-Nickel & Moyano-Fuentes, 2004).

Next to the two approaches, strategy and entrepreneurial posture are increasingly discussed as essential factors in explaining how cooperatives generate a competitive advantage. The topic is gaining interest from different scholars who focus on the definition of cooperative entrepreneurs (Diaz-Foncea & Marcuello, 2013), the internal and external drivers leading to the establishment of cooperative firms (Bastida et al., 2021; Díaz-Foncea & Marcuello, 2015), the effect of an entrepreneurial posture on cooperatives performance (Kyriakopoulos et al., 2004), and the interrelation with cooperative governance or principles (Guzmán et al., 2020).

Entrepreneurial posture is relevant for cooperatives because, as Cook (1994, p. 46) points out, the above-described disadvantages of cooperatives, such as economic disincentives, underinvestment, and coordination problems, lead to a "conservative, defensive, operation-oriented corporate culture (…)", which is a competitive disadvantage. Therefore, the management of cooperatives should put efforts into entrepreneurial abilities to compensate for limited resources and simultaneously develop group cohesiveness to align member interests. Moreover, comparing innovations in cooperative structures to address the disincentives with the impact of entrepreneurial orientation, Kyriakopoulos et al. (2004) find evidence that the latter is more critical for cooperatives' performance.

Entrepreneurial orientation (EO) focusing on innovativeness, proactiveness, and risk-taking (Miller, 1983) is a firm-level strategic orientation associated with SME performance (Semrau et al., 2016; Wiklund et al., 2009). While a few studies confirm the positive effect of entrepreneurial orientation on cooperatives' financial performance (Guzmán et al., 2020), there is a research gap in the link between entrepreneurial orientation and cooperatives' performance with regard to member- and society-related objectives or expectations. Achieving member-related goals and social objectives is relevant for cooperatives as they promote economic, social and community objectives for their members and beyond (Mazzarol et al., 2018). At the same time, they must perform in a competitive environment. Therefore, cooperatives strive for member-related, market-related, and finally society-related goals, that are not necessarily compatible, to fulfil their cooperative mission and sustainably perform in markets (Michaud & Audebrand, 2022; Soboh et al., 2009). The successful promotion of their mission is also relevant for society, as cooperatives contribute to the development of communities (Vieta & Lionais, 2015). Since cooperatives are formed in response to local needs and challenges, they provide essential goods and help to overcome social and economic shortages and crises (Rao & Greve, 2018; Schneiberg et al., 2008). Our research addresses this gap by examining the link between EO, broad market-related, member-related and social performance objectives, which are relevant to cooperatives' organizational success and prosperity and indirectly contribute to achieving community or society goals (Fig. 1).

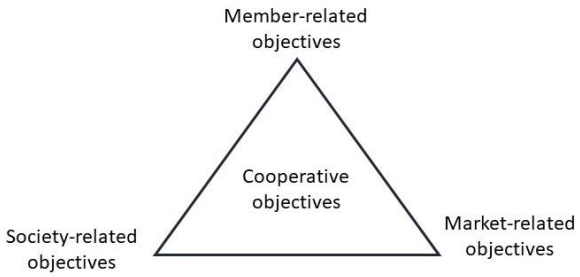


Fig. 1: The multiple identities of cooperatives

Furthermore, we focus on how cooperatives can generate competitive advantage from their characteristics by examining the relationship between collective mobilization (*inter- and intra-organizational cooperation*) and cooperatives' entrepreneurial posture and performance. As explained

above, collective mobilization is vital not only for resource generation but also linked to entrepreneurship. Diaz-Foncea and Marcuello (2013) propose that entrepreneurship in the cooperative context is generally a collective rather than an individual undertaking. Cook and Plunkett (2006) emphasise the importance of *inter-organizational cooperation* or *collective entrepreneurship,* where single cooperatives engage in entrepreneurial endeavours, for agricultural cooperatives' entrepreneurship and success. Furthermore, the mobilization *within* cooperatives (*intra-organizational cooperation*) is equally essential for cooperatives' innovative capability and entrepreneurship (Diaz-Foncea & Marcuello, 2013; Muñoz et al., 2020). Although the importance of collective mobilization for cooperative success seems evident, there is a gap in the literature on how these aspects are linked to entrepreneurial opportunity generation (Camargo Benavides & Ehrenhard, 2021) or how cooperatives can use collective characteristics to increase EO and performance. We add to this second research gap by examining the relationship between the tendency to cooperate with the external network (entrepreneurial cooperation (EC)), the use of the collective capacity of the workforce (collective entrepreneurial capacity (CEC)), and EO and performance.

The contribution of this paper is twofold: First, we answer the research question of whether EO is linked to cooperatives' broad economic and social performance measures. In doing so, we add empirical evidence on the EO performance relation and give cross-sectoral evidence on the positive direct impact of EO on cooperatives market-related and indirectly on member-related and social performance. We thereby show that EO is a strategy for cooperatives to perform in a competitive market economy. Second, in answering the research question of how cooperatives could use their collective characteristics to foster EO and performance, we show that using cooperative-specific aspects (CEC and EC) fosters EO and indirectly affects performance through EO.

2. Theoretical framework

2.1 EO of cooperatives and the link to market-related, member-related and social performance

EO attempts to capture the nature of an entrepreneurial firm. The concept was introduced by Miller (1983) based on the work of Mintzberg (1973), was then conceptualized by Covin and Slevin (1989), and finally became an established construct in management research (see Rauch et al. 2009). Miller (1983) proposed a unidimensional measure of EO, including strategic aspects, managerial practices, and firm behaviour, with the dimensions of *innovativeness, proactiveness, and risk-taking.*

An entrepreneurial orientation (EO) benefits SMEs (Khedhaouria et al., 2015; Rauch et al., 2009; Semrau et al., 2016; Wiklund et al., 2009). Compared to large firms, small businesses have fewer resources for investments in research and development, market research, and other innovation-related activities (Acs & Audretsch, 1990). Therefore, in competition, cost leadership or differentiation may not be a strategic option compared to a focus strategy (Porter, 1985). Thus, small firms adopting EO may have a comparative advantage over large firms by being more dynamic, flexible, and responsive to

changing circumstances (Wiklund, 1999). Despite its importance for SMEs' performance, EO has received little attention in cooperatives. However, there is evidence of a positive effect on financial performance in agricultural cooperatives (Kyriakopoulos et al., 2004) as well as a positive mediating role between cooperative governance or principles defined by the International Cooperative Alliance (ICA) and financial performance in basque worker cooperatives (Guzmán et al., 2020).

To understand the channels through which EO may affect performance in cooperatives, it is worth looking at the subdimensions of *innovativeness, proactiveness,* and *risk-taking* separately:

Innovativeness refers to a firm's propensity and engagement to create or change products, services, and processes (Covin & Slevin, 1989; Miller, 1983). Zahra and Covin (1995) suggest it gives firms the first-mover advantage out of which they can profit through selling premium products and charging higher prices. Furthermore, entrepreneurial firms often build a strong market reputation and high customer loyalty which can generate competitive advantage.

Cooperatives act in competitive markets (banking, insurance, retail, manufacturing) and are therefore equally dependent on innovative capability to perform and to be competitive (Basterretxea & Martínez, 2012; Drivas & Giannakas, 2010). Innovations help to keep the market share, increase the reputation, and maintain the loyalty of members and external customers. However, cooperatives face difficulties getting financial access to equity and debt (Ben-Ner, 1988; Novkovic, 2007), particularly for long-term investments (Li et al., 2015). Because of these financial constraints, it is discussed that cooperatives rely on comparably cheaper incremental rather than expensive radical technological innovations (Novkovic, 2007), and processes and managerial innovations are critical (Rodríguez & Guzmán, 2013).

Proactiveness is the way how firms deal with competitors, as an active rather than a passive attitude towards competitors. Proactive firms monitor market developments, react flexibly to changes, and profit from them (Zahra & Covin, 1995). Cooperatives with such a strategy detect market trends, innovate in promising areas, and enter markets faster than competitors. Knowing the members' needs gives cooperatives a competitive advantage in markets because, with access to valuable information, they can provide services tailored to customers, resulting in more sales. It is, therefore, essential to scan members' needs, which is easier with strong ties to members and high member participation (Talonen et al., 2016).

Risk-taking is a firm's propensity to be involved in high-risk projects with a business model which relies on active, wide-ranging decisions and acts rather than incremental progression and taking risks in an uncertain environment (Zahra & Covin, 1995). Generally, cooperatives are more risk-averse than investor-owned firms (IOF) regarding important investment decisions. The first reason is that risk-taking is closely linked with the availability of resources. As mentioned, cooperatives have issues attracting enough equity, and access to capital is difficult. The other reason lies in cooperatives' objective function, which maximizes members' benefits, including their employees, rather than a small group of owners like in IOFs. Cooperatives, therefore, have to balance the different objectives and risk preferences and might, for example, not respond to economic crises with employee layoffs (Borzaga et al., 2022).

Furthermore, some cooperatives are created to share and lower risks (e.g., infrastructure, insurance, and agricultural cooperatives). Van der Krogt et al. (2007) indicate additional non-financial factors which lead to a more risk-averse behaviour of cooperatives compared to IOF: dual control of the board together with the general assembly, and distribution of decision power with the principle of "*one man, one vote"* which both results in more compromises because of heterogeneity regarding the risk-preferences, resulting in a less radical strategy choice. Although the general level of risk-taking might be lower in cooperatives than in IOFs, a certain level of risk-taking may give a counterweight to a risk-averse member base (Van der Krogt et al., 2007) and help to undertake necessary investments to be competitive (Kyriakopoulos et al., 2004).

To sum up, cooperatives with an EO take (more) risks to invest in process or management-oriented innovations. They screen the market and anticipate trends, create strong ties to members, and profit from information advantage, and with their innovations, they keep or even increase market shares. In competition, like other SMEs, they benefit significantly from an entrepreneurial strategy because they are limited in other strategic options like cost leadership due to the lack of resources. An entrepreneurial posture can give them a comparative advantage over large firms by being more dynamic, internally flexible, and responsive to changing circumstances (Wiklund, 1999). Although cooperatives face several management issues (limited access to equity capital, risk-aversion due to the horizon problem, and costly and time-consuming bargaining if a change is initiated), they may significantly benefit from an organic and flexible strategy like EO (Cook, 1994; Guzmán et al., 2020; Kyriakopoulos et al., 2004). We, therefore, suggest that:

H1: EO is positively linked to cooperatives' market-related performance.

Cooperatives primarily serve members' goals, which, depending on the cooperative business model, are either monetary, such as economic self-help (wage, interest, kickback, discounts) or non-monetary (goods, services, participation) (Birchall, 2012; Mazzarol et al., 2018). EO increases the range and quality of goods and services provided to members. Furthermore, entrepreneurial orientation affects the relationship with cooperative members by offering services and innovative programs which allow members to engage and participate within the cooperative. Therefore, EO positively affects member-related performance. However, EO could have drawbacks in the short term because the proactive screening of the market, innovativeness, and especially investments in risky projects are resource intense (Wiklund et al., 2009), and these resources (in terms of finance or time) may not be available for monetary or non-monetary returns for members. Nevertheless, we argue that similar to the business context, there is a short-term trade-off between investing in an EO and performance, but in the long run, the investment pays off (Wiklund, 1999). We, therefore, suggest that:

H2: EO is positively related to cooperatives' member-related performance.

Literature suggests a positive relationship of EO with non-profit organizations' mission-related (or social) performance (Alarifi et al., 2019; Coombes et al., 2011). Next to market-related and member

objectives, cooperatives focus on intangible goals such as social or ecological mission achievement. An EO helps cooperatives to create new services and goods or increases their quality or effectiveness. Depending on the cooperatives' mission and the goods provided, this leads to social and sustainable outcomes for cooperative members and also the community involved (Mazzarol et al., 2018). Housing cooperatives, for example, provide housing units for economically disadvantaged people, increasing the members' benefits and reducing the community's housing shortages. Moreover, they innovate and invest in energy efficiency, affecting ecological objectives with positive intangible effects. Cooperative banks offer products fostering social or ecological projects or regional industries, creating value for the community and region. Retail cooperatives improve social and ecological standards and provide locally produced goods, affecting the community's sustainable development. In order to successfully implement these projects, proactive observation of social trends is necessary, and cooperatives may take considerable economic and relational risks.

H3: EO is positively related to cooperatives' social performance.

EO affects member-related and social performance through increased market-related performance as a mediator. A financially healthy or growing cooperative can invest and reach more objectives (financial and non-financial). Member satisfaction and engagement increases because more services and programs are offered to members and their monetary and non-monetary returns are increased. Financial success and growth allow for investment in the effectiveness and number of programs with social or ecological objectives. Thus, we hypothesize that:

H4: EO positively relates to cooperatives' member and social performance through market-related performance.

2.2. Cooperation, EO and performance

Johannisson (2003) describes entrepreneurship as a collective endeavour, with cooperatives being a particular organization with institutionalized collective action. Different expressions of collective entrepreneurial action exist, dependent on the cooperative business model. Cooperatives can take advantage of formal or informal networks through knowledge and information sharing, joint financing, and taking risks under uncertainty with the goal of rent-seeking. This form of *inter-organizational cooperation* is known as *collective entrepreneurship*, where single-producer cooperatives take advantage of collective action (Bijman & Doorneweert, 2010; Cook & Plunkett, 2006; Sacchetti & Tortia, 2016). Next to *inter-organizational cooperation,* the collective mobilization of employees, primarily owners at the same time, fosters innovation of cooperatives (Muñoz et al., 2020) and is essential to *cooperative entrepreneurship*, rooted in collective rather than individual actions and containing the participative undertaking of cooperative owners, with the elements of collective decision making and risk-bearing and the main objective of generating benefits which are thereafter equally distributed (Diaz-Foncea & Marcuello, 2013). This type mostly suits employee-owned firms (Diaz-Foncea & Marcuello, 2013), but it can be argued that *intra-organizational cooperation* combined with

ownership rights is present in other cooperative types[2]. We draw on this definition and aim to capture cooperatives' collective entrepreneurial capacity, which we define as the collective discussion and decision-making on entrepreneurial issues combined with ownership rights.

An essential condition and enabler for collective action and cooperation within and outside of cooperatives are values and norms such as fairness, the preference for equitable outcomes (Fehr & Schmidt, 1999; Kahneman et al., 1986), trust, the belief under uncertainty that others will not behave in an exploitative manner (Fehr, 2009), and reciprocity, that kind actions are rewarded and unkind punished (Falk & Fischbacher, 2006). Fairness is crucial such that the contributions of cooperators (members, employees, other organizations) are accordingly rewarded, and there is an incentive to participate in collective action. Trust helps to believe in mutually beneficial outcomes and enter cooperative interactions. Positive reciprocity helps to sustain fairness and trust over time (Borzaga & Tortia, 2017). These values and norms are persistent in cooperative cooperation. For example, Pesämaa et al. (2013) found that trust among cooperative partners leads to interpersonal commitment and, finally, to inter-organizational commitment; additionally, reciprocity strengthens inter-organizational commitment. The finding suggests the importance of both paths for enabling inter-personal and inter-organizational relationships in cooperatives.

The external network is vital for the EO of SMEs because it allows them to access resources and information necessary to detect and exploit opportunities (Wiklund et al., 2009). *Inter-organizational cooperation* through formal and informal networks fosters entrepreneurial actions. At the example of agricultural producer cooperatives, Cook and Plunkett (2006) argue these networks can be used to share information and knowledge, encourage innovation, seek opportunities, and bear risks under uncertainty by, e.g., investing collectively in processing and distribution facilities and intangible assets (brand names). This contrasts with defensive loss-avoiding farmers who invest in mechanisms to compensate for losses arising from strategic decisions of other suppliers or procurers.

Cooperation is linked to subdimensions of EO: Basterretxea and Martínez (2012) show that Basque industrial cooperatives more often cooperate with technology centres and universities than IOF. Rodríguez and Guzmán (2013) argue that cooperation agreements are a determinant of managerial and technological innovation and sketch the importance of knowledge spillover from partners for small basque cooperatives. Other empirical evidence in the agricultural sector confirms the positive effect of *inter-organizational* cooperation on innovation (Borgen & Aarset, 2016; Fiore et al., 2020).

Concerning the EO construct with the dimensions of *innovativeness, proactiveness, and risk-taking,* Guzmán et al. (2020) find a positive effect of cooperative governance defined by the International Cooperative Alliance (ICA) on EO. The most relevant principle for EO was cooperation with other

[2] A considerable share of cooperatives reported that employees are at the same time owners (56% reported all employees, 14% a considerable minority) and 66% of the cooperatives reported frequent meetings where employees discuss and decide collectively on important issues.

cooperatives. In our study, we include a measure of *inter-organizational cooperation* by the perceived proclivity of addressing challenges through cooperation with other organizations, and we suggest that:

H5: Entrepreneurial cooperation (EC) is positively related to EO.

Combining the hypothesized positive relation of EO and performance in cooperatives and the positive effect of entrepreneurial cooperation (EC) on EO, we argue that entrepreneurial cooperation (EC) affects the performance of cooperatives through EO:

H6: *EO mediates the relation between entrepreneurial cooperation and market-related (H6a), member-related (H6b) and social performance (H6c).*

The internal network is strongly associated with entrepreneurial behaviour. Informal networks help to detect opportunities and entrepreneurial behaviour based on employees' capabilities to exploit these opportunities (Stevenson & Jarillo, 1990). In cooperatives, the collective entrepreneurial capacity influences EO through different channels. The first is sharing explicit and implicit knowledge, which plays a pivotal role in SMEs' EO (De Clercq et al., 2015). Knowledge sharing is increased through intensive intra-firm exchange by bringing complementary knowledge together, impacting the collective knowledge breadth and depth, and creating more entrepreneurial opportunities (De Clercq et al., 2013). Different views help assess opportunities' strengths and weaknesses, resulting in better entrepreneurial quality and outcomes (De Clercq et al., 2015). Knowledge sharing is intense in cooperatives by including the workforce in entrepreneurial discussions and through the cooperatives' workforce's participation in decision-making, which affects the motivation to share internal knowledge and positively affects EO (De Clercq et al., 2015).

A second driver of entrepreneurial outcomes is cooperatives' collective identity and shared inherent values combined with ownership, increasing workforce engagement and commitment in general (Bastida et al., 2021; Sacchetti & Tortia, 2021), with positive effects on detecting opportunities, finding and implementing solutions and thus for entrepreneurial outcomes (De Clercq et al., 2010). Furthermore, research on EO in cooperatives suggests additional cooperative-specific factors, such as cooperative governance or principles (with the values of self-help, self-responsibility, democracy, equality, equity, and solidarity) positively influencing EO (Guzmán et al., 2020). If the cooperative principles are anchored, they likely lead to more participative leadership styles, fostering entrepreneurial collective action. Previous research has shown that the unique participatory structure of cooperatives, together with an engaged, skilled and committed workforce and a participatory leadership style, results in entrepreneurial outcomes (Muñoz et al., 2020). A last overarching and supporting factor influencing the relationship between the collective entrepreneurial capacity and EO in cooperatives is social capital, defined as the sum of the resources embedded within and derived from the network of relations (Nahapiet & Ghoshal, 1998). Relational elements of social capital, such as trust and procedural fairness, are related to EO by stimulating interpersonal exchange and increasing the motivation of individuals to contribute to organizational objectives (De Clercq et al., 2010). Furthermore, trust helps establish close

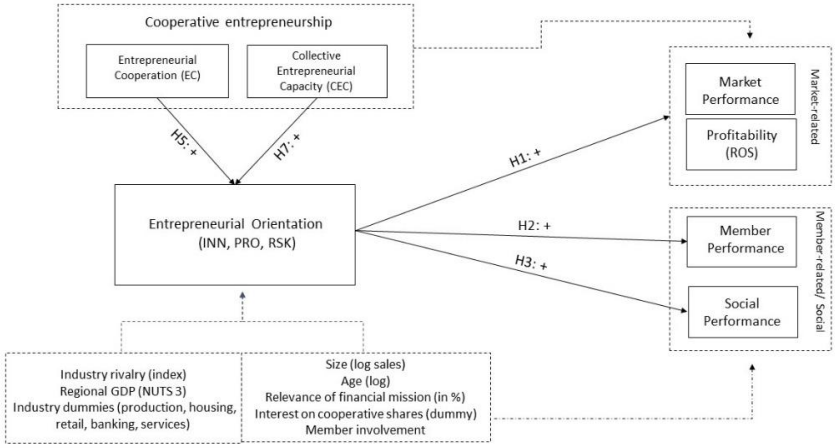
social interactions with external customers and combine it with internal knowledge, helping decision-makers detect opportunities and resulting in higher levels of innovativeness (Parra-Requena et al., 2022). Close social interactions inside the organization influence risk-taking because complementary views reduce uncertainty and thus encourages employees to take more risk. In addition, trust through social interaction generally lowers risk aversion (Kaasa, 2009; Nahapiet & Ghoshal, 1998). Trust and reciprocity are essential for cooperatives, as mentioned above. Furthermore, fairness, trust, and reciprocity play a more critical role in cooperatives than in other organizational forms (Borzaga & Tortia, 2017). Therefore, we argue that the collective entrepreneurial capacity affects EO through elements of social capital.

To summarize, we hypothesize that the cooperative organizational model with participative decision-making at the strategic level, participative leadership, collective ownership, and strong norms of cooperation are optimal conditions for entrepreneurial outcomes. In such a setting, the management and workforce meet regularly to discuss and decide collectively on critical entrepreneurship-related issues. For example, to anticipate market trends and customer needs to be faster than competitors, to decide on investments, to create and implement managerial innovations or innovations to products/services, and to create impulses for employees to start new initiatives:

H7: Collective entrepreneurial capacity (CEC) is positively related to EO.

Using the same line of reasoning with the assumed positive relation of EO and performance and the positive effect of collective entrepreneurial capacity (CEC) on EO, we argue that collective entrepreneurial capacity (CEC) affects the performance of cooperatives through EO:

H8: *EO mediates the relation between collective entrepreneurial capacity (CEC) and market-related (H8a), member-related (H8b), and social performance (H8c).*



H6 & H8 (not shown) states that EO mediates the relationship between collective aspects of entrepreneurship and performance. H4 (not shown) that market-related performance mediates the relation between EO and social and member-related performance.

Fig. 2: Research Model

3. Empirical part

3.1 Data

In Switzerland, which is dominated by SMEs (SECO, 2021), cooperatives play a significant role in different sectors, mainly in housing, retail, banking, and insurance, with a share of 2.7% of the Swiss workforce (in FTE) working in cooperatives in 2018 and a conservative estimation of 2.7% of GDP (Löffel, 2019). According to the Swiss corporate statistics, STATENT (FSO, 2019b), most cooperatives are SMEs (99%), two-thirds have less than ten full-time employees, 30% between 10 and 49, and only 4% have 50 to 249 employees.

During the summer of 2019, all 5233 Swiss cooperatives (excluding infrastructure cooperatives and self-help or interest representation organizations without any market focus) registered in the Swiss trade register at the end of 2017 were contacted. The survey has been developed and carried out in partnership with CooperativeSuisse[3], an interest group and platform for social entrepreneurship.

We sent a letter including the survey plus a short link to its online version to the management/executive board of cooperatives. In a second step, we collected available emails from different cooperatives by hand and sent a reminder to the remaining cooperatives in autumn 2019. Two entrepreneurship experts first validated the letter and the survey questions, and a pretest was carried out with eight cooperatives.

In total, 645 cooperatives completed the questionnaire, which amounts to a response rate of 12.3%. The response rate is balanced across regions. To test for a non-response bias, we did a t-test within subgroups to compare the survey answers in summer 2019 to autumn 2019 and online to paper respondents. The pairwise differences of items in the sector groups were insignificant, suggesting a systematic non-response bias is unlikely.

Table 1 Response rate by sector

Economic Sector[1]	*Subsample used*[2]	*Share in subsample*	*Sample*	*Population*	*Response rate*
Production	48	13.0%	102	947	10.8%
Housing	108	29.3%	260	2399	10.8%
Retail Trade	81	22.0%	99	737	13.4%
Finance/Insurance	85	23.1%	100	457	21.8%
Services	46	12.5%	84	693	12.1%
Total	368	100%	645	5233	12.3%

[1] Sectors were built following the Swiss NOGA classification, which is nearly identical to the European version (NACE)

[2] Cooperatives with direct competitors

[3] Today SENSSuisse

Because our research focuses on the advantages of an EO in a competitive environment, we draw a subsample of cooperatives reporting direct competition. This was done using a filter question ("Do you have direct competitors in your region for the most important products and services?").

The final sample consists of 368 cooperatives in the production (48), housing (108), retail (81), finance and insurance (85), and service sector (46). In the subsample, 53% of cooperatives have less than ten employees, 36% have 10 – 49 employees, 10% have 50 – 249 employees, and 1% have 250 and more employees in FTE (see Table 2). On average, cooperatives are 63.5 years old (MED = 63), have a turnover of 22.3 million CHF (MED = 2.4 M.; Q1 = 0.5 M.; Q3 = 12 M.), and 19.3 million of equity in CHF (MED = 1.9 M.; Q1 = 0.3 M.; Q3 = 18.1 M).

Table 2 Employees by sector in FTE

Economic sector	*N*	*Subsample share*	*Employees in FTE*			
			< 10	*10 – 49*	*50 – 249*	*≥ 250*
Production	48	13.0%	69%	29%	2%	0%
Housing	108	29.3%	87%	12%	1%	0%
Retail Trade	81	22.0%	54%	31%	12%	3%
Finance	85	23.1%	12%	69%	19%	0%
Services	46	12.5%	50%	34%	14%	2%
TOTAL	368	100%	53%	36%	10%	1%

3.2 Measures[4]

3.2.1 Cooperative performance

Cooperatives must survive in competitive markets and simultaneously serve members' needs. They, therefore, have at least a *dual* nature and must meet market and members' goals (Puusa & Saastamoinen, 2021; Soboh et al., 2009). Only focusing on accounting measures could fail to capture cooperative performance (Camargo Benavides & Ehrenhard, 2021). For example, some cooperatives give kickbacks to customers by lowering prices rather than maximizing profit or focusing on organizational growth and reinvesting instead of paying interest, underestimating measured profitability. The literature, therefore, agrees on the importance of measuring cooperatives performance multidimensionally (Benos et al., 2016; Benos et al., 2018; Franken & Cook, 2015). Consequently, various measures are used, including objective and subjective financial, member-related and social performance measures, depending on the study goal (Benos et al., 2018). Franken and Cook (2015) propose a combination of financial and non-financial objective and subjective measures to assess cooperatives' mixed objectives and overall performance. Using broad performance measures in EO research also aligns with Lumpkin and Dess

[4] Measures of the dependent and independent variable are provided in the Table 1A, descriptive statistics of all variables in Table 2A in the appendix.

(1996), who suggest that broad performance measures capture potential countervailing effects of EO on organizational performance. Because our study focuses on EO's effect on different dimensions of cooperative performance, we followed this approach and looked separately at market- related, member-related and social performance.

A combination of growth and financial measures are good indicators to measure economic or market-related performance (Wiklund & Shepherd, 2005). Because secondary financial data is unavailable for most SMEs in Switzerland, we rely on self-reported objective and subjective measures, a common approach in entrepreneurship research (Gupta et al., 2020; Hernández-Perlines et al., 2021). Furthermore, as Rauch et al. (2009) show in a meta-analysis on EO and performance, secondary financial, perceived financial and non-financial performance measures did not differ in their relation to EO, suggesting a robust link. Therefore we measured *market-related performance* with profitability, a common measure of cooperatives efficiency (Benos et al., 2018; Soboh et al., 2009), and with the managements subjective measures of perceived market performance containing growth, market position, and market reputation (Franken & Cook, 2015; Kyriakopoulos et al., 2004).

Profitability was measured by self-reported return on sales (ROS) in the last years. The question was placed after the respondents had to enter accounting data to increase the trustworthiness of the responses. Furthermore, available secondary data collected by hand from annual reports of the largest 100 cooperatives revealed a correlation of 0.67 for ROS, suggesting the external validity of the responses under the assumption that the responses of smaller cooperatives are equally trustworthy. Perceived market performance (PMP) was measured with a latent indicator of two averaged items to assess perceived market position, growth, and reputation compared to other organizations.

Member-related performance (MP) was measured with an averaged index of perceived member satisfaction, which is an overarching measure of member-related performance combined with the share of active members as an indicator of member engagement and participation (Benos et al., 2016; Bhuyan & Karantininis, 2023). Next to the dual nature, cooperatives often have goals that benefit a broad number of defined or non-defined recipients. The measure of these broader impacts, often referred to as intangible or social impact, is challenging (e.g., Rawhouser et al. (2019)). Because there are no available objective measures of *social performance*, we used an averaged index of two items to measure the perceived attainment of social and ecological mission objectives (PSP), which is a usual approach to measuring social performance (Coombes et al., 2011).

3.2.2 Entrepreneurial orientation (EO)

In this study, we translated the Covin & Slevin scale (Covin & Slevin, 1989) to German and only slightly changed the wording to a cooperative context. To assess EO at the firm level, we related all questions to the whole organization rather than the firm's top management. The accuracy of the translations was double-checked by three academic experts in the field of entrepreneurship.

Later in the analysis, we excluded one item (PRO3), which emphasized the competitive orientation towards other organizations and did not load on proactiveness. The exclusion aligns with the view that competitive aggressiveness is not necessarily part of proactiveness but of the additional dimension of competitive aggressiveness (Lumpkin & Dess, 1996). Furthermore, excluding items in a reflexive construct does not change its validity, although reliability measures might be lower (Jarvis et al., 2003). EO was measured as a second-order unidimensional (reflective) construct (Covin & Wales, 2012; George, 2011).

3.2.3. Entrepreneurial cooperation and collective entrepreneurial capacity

Entrepreneurial cooperation (EC), defined as the tendency for cooperation (Guzmán et al., 2020; Sacchetti & Tortia, 2016), was measured by a 7-point Likert-scaled opposed statement («We master challenges alone » – 1 – 7 – «We cooperate with partners (to master challenges)"). *Collective entrepreneurial capacity (CEC),* drawing on Diaz-Foncea and Marcuello (2013) definition of cooperative entrepreneurship and aiming at capturing the entrepreneurial capacity within cooperatives with the dimensions of discussion, decision-making related to entrepreneurial issues, and ownership trough membership, was measured by four items (5-point Likert-scaled). Organizations were asked if staff meetings were repeatedly held to discuss and decide collectively on essential issues related to entrepreneurial activities, i.e., to realize innovations in products/services, that employees get new impulses and start initiatives, are encouraged to take risks and identify and realize future expectations of members.

3.2.4. Controls

Industry rivalry was modelled by perceived competition multiplied with a category of self-reported direct competitors to capture qualitative and quantitative elements of direct competition and control for a negative impact on performance.

Several controls, external and internal to the organization, were included. To account for regional economic differences affecting performance, we controlled for regional GDP *per capita* at the NUTS-3 level (FSO, 2019a). Furthermore, dummies for different *economic sectors* (production, housing, retail, banking, services) based on the General Classification of Economic Activities (NOGA) were included for sector-specific differences.

As organizational-specific controls, we include the self-stated relative *importance of economic mission* and a dummy for ex-ante-defined *interests on shares* to control for the relative importance of economic goals between different cooperative types affecting *market-related performance*. Furthermore, *controls for member involvement* in decision-making outside the regular general assembly are included as a control for member-related performance. Furthermore, utilized organizational control variables were included, like *size* (measured by log. turnover) and *age* (in log. since founding).

4. Results

4.1 Measurement model

We used structural equation modelling (SEM) to estimate the model with latent constructs. We applied a two-step approach and tested the reliability, convergent and discriminant validity of the measurement model using exploratory (EFA) and confirmatory factor analysis (CFA) in the first step before estimating the structural model (Anderson & Gerbing, 1988; Fornell & Larcker, 1981). All estimations were done using the *lavaan* package in R (Rosseel, 2012).

EFA and CFA show the dimensionality of the constructs. Confirmatory factor analysis (CFA) indicates a satisfactory fit with the data (Chi-square = 333.299, df = 119, CFI = 0.946, SRMR = 0.051). Composite reliability of the latent constructs is acceptable (EO: CR = 0.82; CE: CR = 0.89, PMP: CR = 0.75) (Hair Jr et al., 2014).

The reliability of the dimensions of EO with innovativeness (CR = 0.78) and risk-taking (CR = 0.71) are given except for proactiveness (CR = 0.67) which consists only of two items. Because we modelled the EO scale as a second-order reflective construct (George, 2011), cross-loadings between the sub-dimensions are expected, influencing the sublevels' reliability. An alternative model with a first-order definition of EO revealed a significantly weaker fit (Chi-square = 370.785, df =122, CFI = 0.88, SRMR = 0.062), indicating that the second-order specification of EO was appropriate. Furthermore, EO as a higher order construct is reliable (CR = 0.82).

Following the approach of Fornell and Larcker (1981), convergent validity (AVE > 0.5) was given except for risk-taking, which is not problematic given that composite reliability was acceptable (CR = 0.71). We assessed discriminant validity with the HTMT procedure, which was given (HTMT < I0.85I) (Henseler et al., 2015). The measures are provided in Tables 1A and 3A in the appendix.

The test for a common method bias where we specified a model where all items loaded on one common factor (Podsakoff et al., 2003) revealed a poor fit (Chi-square = 1238.398, df = 151, CFI = 0.531, SRMR = 0.125). We therefore come to the conclusion that a common method bias is unlikely.

4.2 Structural model

Because of non-normality[5] and missings, we used full information maximum likelihood estimation (fiml) with robust 'Huber-White' standard errors. *Fiml* is an efficient procedure and appropriate for item-level missingness under the assumption of missing (completely) at random (MCAR) (Newman, 2014). On average, 4% of data are missing, and less than 10% for every variable. There is a theoretical indication that missings are completely random (MCAR).[6]

The model has an acceptable fit with the data (Chi-sq. = 366.720, df = 226, CFI = 0.938, SRMR = 0.048). It explains a substantial share of the variance of perceived market performance (R^2 = .51) and

[5] The skewness of the variables ranges between -2.25 and 0.78
[6] A test of MCAR could not be rejected (Little, 1988).

profitability (R^2 = .33). In contrast, the explained variance of social (R^2 = .05) and member-related performance (R^2 = .07) is less critical.

Among the control variables, size (β = .34, p < .001), age (β = - .17, p < .05), and interest on shares (β = .16, p < .01) had a significant relation to perceived market performance, while financial mission (β = .10, p < .05) and interest on shares (β = .47, p < .001) had a significant relation to profitability. Member-related performance was decribed by member involvement (β = .14, p < .05) and EC (β = .12, p < .05). Social performance was described by age (β = - .20, p < .01) and size (β = .15, p < .05).

Table 3 Results structural model

	Std. β-coeff. (β)	*β-coeff. (B)*	*SD*	*p*-value	*z* - value	*Hypothesis supported*
H1: EO → Market performance (PMP)	0.571***	1.391***	0.324	0.000	4.298	Yes
EO → Profitability (ROS)	0.159*	0.570*	0.262	0.029	2.177	Yes
H2: EO → Member-related performance (MP)	0.121	0.072	0.041	0.083	1.736	No
H3: EO → Social performance (PSP)	0.095	0.193	0.140	0.169	1.376	No
H5: Entrepreneurial cooperation (EC) → EO	0.254*	0.053*	0.021	0.014	2.466	Yes
H7 : Collective entrepreneurial capacity (CEC) → EO	0.163*	0.039*	0.018	0.027	2.219	Yes
Chi-sq. (robust)	366.720					
df	226					
CFI (robust)	0.938					
SRMR	0.048					

Mlr estimator: *p < 0.05; **p < 0.01; ***p < 0.001, *CV:* Industry rivalry, regional GDP p.cap, size, age, relevance of financial mission, interest on cooperative shares, member involvement

Testing the hypotheses, EO was significantly and positively related to *market-related performance*, consisting of subjective market performance (β = .57, p < .001) and profitability (β = .16, p < .05), *supporting* hypothesis *H1*. In contrast, the relation of EO to *member-related* (β = .12, p > .05) and *social performance* (β = .10, p > .05) was not significant, thus rejecting *H2 and H3*.

EO is partially explained by its antecedents (R^2 = .13). *Entrepreneurial cooperation* (β = .25, p < .05) and *collective entrepreneurial capacity* (β = .16, p < .05) have a positive relation to EO, *supporting H5 and H7*. The control variables remained insignificant (see Table 3).

4.2.1 Robustness checks

An alternative model where industry dummies were included (housing, finance, retail, and service sector, production omitted) revealed a similar fit with the data (Chi-sq. = 497.155, df = 280, CFI = 0.912, SRMR = 0.055).

The model explains a higher variance of profitability (R^2 = .40, diff. = .07), subjective market performance (R^2 = .54, diff. = .03), social (R^2 = .09, diff. = .04) and member-related performance (R^2 = .15, diff. = .08). Coefficients only changed slightly, except for the path of EO on profitability (β = .21, p < .01), suggesting industry differences matter most for profitability. Profitability was higher in the financial (β = .23, p < .01) and housing sectors (β = .17, p < .05). In contrast, social performance was lower in the financial sector (β = - .29, p < .01).

EO was explained by its antecedents (R^2 = .22, diff. = .06), with higher EO levels for the service sector (β = .30, p < .001) compared to other industries.

4.2.2 Mediation models

We tested the indirect effect of CEC and EC on performance through EO *(H6)* (see Table 4). In our initial model EC (β = .25, p < .05), CEC (β = .16, p < .05) influenced EO, and EO was positively related to market performance (β = .57, p < .001), and profitability (β = .16, p < .05). In contrast, there were no significant paths between EO, member-related and social performance (see Table 3).

We tested the indirect effects by calculating bootstrap confidence intervals (Hayes & Scharkow, 2013). The test confirmed the positive indirect effect between EC (β = .15, p < .001), CEC (β = .09, p < .05), and market performance (PMP) through EO. A weaker indirect effect was found for the relation between CEC (β = .03, p < .10), EC (β = .04, p < .10) and profitability, *supporting H6a & H8a.* Testing the indirect effects of EC and CEC on member-related, and social performance revealed no mediation effect. We can, therefore, *reject H6b&c and H8b&c.*.

Table 4 Results mediation through EO

Indirect and direct effects	*Std. β-coeff (β)*	*β-coeff (B)*	*SD*	*p-value*	*z-value*	*CI*	*Mediation*
H6a: EC → EO → PMP	0.145**	0.073**	0.028	0.008	2.645	0.029; 0.141	Yes
EC → PMP	-0.022	-0.011	0.035	0.743	-0.328	-0.078; 0.058	
H6a: EC → EO → ROS	0.040	0.030	0.016	0.055	1.918	0.007; 0.074	Yes
EC → ROS	0.039	0.029	0.041	0.472	0.719	-0.051; 0.112	
H6b: EC → EO → MP	0.031	0.004	0.003	0.165	1.388	-0.001; 0.011	No
EC → MP	0.123*	0.015*	0.007	0.041	2.044	0.000; 0.030	
H6c: EC → EO → PSP	0.024	0.010	0.009	0.240	1.175	-0.002; 0.033	No
EC → PSP	-0.062	-0.026	0.026	0.320	-0.995	-0.076; 0.026	
H8a: CEC → EO → PMP	0.092*	0.055*	0.024	0.024	2.261	0.015; 0.110	Yes
CEC → PMP	0.021	0.012	0.032	0.706	0.378	-0.047; 0.079	
H8a: CEC → EO → ROS	0.026	0.022	0.012	0.073	1.795	0.005; 0.058	Yes
CEC → ROS	-0.086	-0.075	0.042	0.073	-1.793	-0.154; 0.010	
H8b: CEC → EO → MP	0.008	0.003	0.002	0.205	1.267	-0.001; 0.009	No
CEC → MP	0.017	0.002	0.008	0.757	0.310	-0.012; 0.018	
H8c: CEC → EO → PSP	0.015	0.008	0.007	0.270	1.104	-0.001; 0.028	No
CEC → PSP	0.007	0.003	0.026	0.900	0.126	-0.051; 0.055	
Chi-sq. df CFI SRMR	379.449 226 0.937 0.048						

ML estimator: *p < 0.05; **p < 0.01, bootstrapping (Bca) based on n = 5000 subsamples (CI=95%)

We applied the same procedure as above and tested the indirect effect of EO on member-related (H4a) and social performance (H4b) through market-related performance (market performance (PMP) and profitability (ROS)) with a mediation model. Testing these indirect effects we found that the relationship between EO and member-related (β = .18, p < .10), and social performance (β = .38, p < .05) were mediated by market performance (PMP) but not by profitability, *partially supporting H4* (see Table 5).

Table 5 Results mediation through market-related performance

	Std. β-coeff (β)	*β-coeff (B)*	*SD*	*p-value*	*z-value*	*CI*	*Mediation*
H4a: EO → PMP→ MP	0.178	0.105	0.061	0.085	1.720	0.031; 0.241	Yes
EO → ROS→ MP	-0.003	-0.002	0.008	0.855	-0.182	-0.020; 0.013	No
EO → MP	-0.053	-0.031	0.075	0.676	-0.418	-0.177; 0.107	
H4b: EO → PMP→ PSP	0.379*	0.767*	0.328	0.019	2.336	0.401; 1.430	Yes
EO → ROS→ PSP	-0.013	-0.026	0.030	0.389	-0.862	-0.106; 0.012	No
EO → PSP	-0.269	-0.545	0.319	0.088	-1.707	-1.192; -0.117	
Chi-sq. df CFI SRMR	381.451 227 0.937 0.048						
Ml estimator: *p < 0.05; **p < 0.01, bootstrapping (Bca) based on n = 5000 subsamples (CI=95%)							

5. Discussion and conclusions

This study shows that *(i)* EO is significantly and positively linked to market-related performance and to member-related and social performance through perceived market performance as a mediator and *(ii)* that inter- and intra-organizational cooperation led to higher levels of EO and, indirectly, market-related performance. Entrepreneurial strategy matters, and the findings support previous empirical evidence on EO and the performance of cooperatives (Guzmán et al., 2020; Kyriakopoulos et al., 2004). The control for economic sectors did not change the results substantially, suggesting the generalization of the results to different cooperative types. Like SMEs, cooperatives adopting an entrepreneurial orientation benefit from it to perform in a competitive environment and potentially confront large corporations by being more flexible and dynamic.

The results show that EO is not significantly directly linked to social and member-related performance despite the importance of these objectives. At the same time, mediation analysis revealed that EO indirectly positively affects member-related and social performance through the achievement of market-related goals (including growth, market position and reputation).

The finding on member-related and social performance contradicts our hypothesis that EO is a one-size-fits-all strategy to achieve all cooperative objectives directly and points toward the importance of EO primarily for market-related performance. An explanation for the mixed effect is that entrepreneurial alignment, including proactive market screening, innovativeness, and investments in risky projects, is resource-intense (Wiklund et al., 2009). Resources invested in EO may not be available for member

payouts or kickbacks, improvement of services, or social or environmental objectives. Next to this potential crowding out effect, the focus on EO and financial performance measures could shift the organizational attention to the external market at the cost of member-related and social objectives, with the danger that business and cooperative goals are not balanced (Michaud & Audebrand, 2022) and of demutualization and degeneration (Mazzarol et al., 2018). Investment in EO could come at the expense of member participation: organizations with an emphasis on EO and financial objectives may not be ready to include the member base sufficiently in the democratic decision-making process, which could be negatively associated with member satisfaction and participation (Puusa & Saastamoinen, 2021). The finding of neither positive nor negative effect may indicate that the long-term positive effects of EO neutralize the above-described potential drawbacks. An alternative explanation is that the management of entrepreneurial cooperatives manages to balance the different cooperative goals and mitigate the drawbacks. Further research could examine if, and under what conditions focusing on EO crowds out social performance and member objectives in the short term and if the result depends on the stages of the life cycle of a cooperative.

EO helps to reach member or social objectives indirectly through market success and the increased availability of resources. The finding makes us conclude that financial and non-financial performance are intertwined in the long term and bear the potential for entrepreneurial cooperatives to reach their purpose of creating value for members and, beyond that, creating social and ecological value for the community (Mazzarol et al., 2018). EO, thus, is a means to reach the cooperative purpose, but this will only work if a cooperative's hybridity is considered (Mazzarol et al., 2018) and business, member and social objectives are balanced (Michaud & Audebrand, 2022).

Examining the second research question on how entrepreneurial cooperation (EC) and collective entrepreneurial capacity (CEC) are linked to EO and performance, we find a positive relationship between EC, CEC and EO, and market-related performance through EO as a mediator.

The results are consistent with the evidence that inter-organizational cooperation benefits EO and performance (Guzmán et al., 2020). The context is that cooperatives benefit from networks to gain information and knowledge (Cook & Plunkett, 2006), increase innovative capability (Novkovic, 2007; Rodríguez & Guzmán, 2013), reduce costs at the production level and increase market value and power (Diaz-Foncea & Marcuello, 2013).

Secondly, we find that including employees to discuss and decide collectively on entrepreneurial issues is positively linked to EO and market-related performance through EO as a mediator. The latter is compatible with findings from Muñoz et al. (2020) that the participation of employees results in entrepreneurial outcomes. In addition to the skills, experience and management abilities of employees as a basis (Rodríguez & Guzmán, 2013), the finding highlights the importance of internal knowledge sharing, high engagement and commitment (Muñoz et al., 2020), shared collective values, economic participation, and participation in decision-making (Sacchetti & Tortia, 2021). For this purpose,

adopting a participative leadership style is vital to encourage the skilled workforce to innovate (Muñoz et al., 2020). Furthermore, cooperative norms like reciprocity and trust are essential underlying values (De Clercq et al., 2010), which affect EO through internal exchange processes (De Clercq et al., 2013).

Regarding practical implications, cooperatives adopting an EO with innovativeness, proactiveness, and risk-taking increase market-related performance, benefit in a competitive environment and reach member and society objectives. The latter objectives are not directly achieved through EO but through economic success and balancing business and member goals, including investment in the cooperative's purpose. For the latter, Puusa and Saastamoinen (2021) highlight the importance of education and knowledge about the cooperative idea at the board and management level and for members and employees.

Likewise, cooperatives are encouraged to use their values of democratic participation, trust, reciprocity, and participative leadership style to create an innovation-friendly environment by encouraging employees to take responsibility, encouraging communication and knowledge sharing, creating open error management, and building trust among employees and close ties to members and customers. They may attract a skilled, motivated, and value-oriented workforce (Bastida et al., 2021). Furthermore, they may use their cooperative network to gather information, share costs, or increase knowledge. In contrast, managers of conventional firms could discover the power of social ideas and a worker-friendly environment with participatory management styles to address the needs of increasingly aware customers and a picky young workforce.

Policymakers could provide equally balanced information about the cooperative business model on the official information channels. These efforts could be seconded by private initiatives like mentoring programs for cooperative startups, which are a valuable complement to fostering successful cooperative firm entry. Although direct state support for cooperatives may not align with some countries' economic policies, research and education on cooperative management could be supported. Next to public efforts, cooperatives could support other cooperatives with advice, research, and education programs.

In conclusion, our findings contribute to the research question brought up by Boone and Özcan (2016) about how cooperatives manage to perform and survive in competition by adopting an entrepreneurial orientation while safeguarding their cooperative values. The results could shed light on the puzzle that in comparative studies on firm survival, cooperatives manage to compete with corporations under certain conditions and give empirical evidence of the competitive advantage of the cooperative business model (Birchall, 2012). These findings are relevant from an organizational perspective and for society because cooperatives are seen as an alternative to a corporate-dominated economy and a means to address different social, environmental, and economic issues (ILO, 2021; UN, 2021).

Furthermore, our study shows, in line with previous studies (Guzmán et al., 2020), that cooperative structure and values may not conflict with an entrepreneurial attitude and that entrepreneurial cooperation (EC) and collective entrepreneurial capacity (CEC) add to EO and performance. The latter

could be empirical evidence that cooperative-specific entrepreneurship exists as a more particular collective form of entrepreneurship, with a unique governance structure and with members' participation in decision-making on entrepreneurial issues, combined with ownership rights (Diaz-Foncea & Marcuello, 2013), that cooperatives may take comparative advantage of it (see Birchall, 2012), and that even corporations could learn from cooperatives to be more competitive as suggested by Boone and Özcan (2016).

The findings are interesting for EO researchers, who could examine the aspect of CEC and EC further along different concepts of entrepreneurship and gather evidence on whether entrepreneurship is a collective or individual phenomenon (Morris et al., 2020).

This study has several limitations which offer opportunities for future research. From a methodological point of view, the consequent use of secondary data of the dependent variables and a more sophisticated measure of member satisfaction with a combination of members' and management-reported satisfaction could be used if feasible and available and improve the robustness of the results. These improvements could advance the field of cooperative performance measurement. Second, it would be interesting if the findings held over time and over the lifecycle of cooperatives, which could be addressed by a longitudinal study design and could, at the same time, rule out reverse causality.

Finally, the results are limited to Switzerland, a country with a long cooperative history dominated by SMEs. Both preconditions give a fruitful ground for cooperatives to prosper. It would be interesting to see how cooperatives in other countries benefit from an EO. Moreover, it is unclear how EO affects the performance of cooperatives compared to other organizational forms; future research could gain insights into this issue through comparative studies.

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Appendix

Table 1A Measures

Dependent and independent variables[1]	Loadings[3]	z-value
Performance		
Perceived market performance (1 – does not apply» to 5- «applies very much») (CR= 0.75, AVE = 0.53) (Franken & Cook, 2015; Kyriakopoulos et al., 2004)		
Market position	0.620	8.171
Our market position in the industry is excellent.		
With our innovations, we have a major competitive advantage.		
Growth	0.781	
We have grown faster than our market and competitors in recent years.		
Many new options for additional service offerings have emerged in recent years.		
Reputation	0.733	11.353
Our reputation is higher compared to other organizations in our industry.		
Profitability (Kyriakopoulos et al., 2004; Soboh et al., 2009) Return on sales (ROS) in the last years (1 – "more losses than gains", 2 – "0 – 2% gain", 3 – "3 – 5% gain", 4 – "6 – 10% gain", 5 – "Over 10% gain").	n/a	
Member-related performance (0-1) (Bhuyan & Karantininis, 2023; Franken & Cook, 2015) Averaged index of: perceived member satisfaction "The satisfaction of the members of the cooperative is extraordinarily high" **(**1 – does not apply» to 5- «applies very much») combined with the share of active cooperative members (in %)	n/a	
Perceived social performance (1 - does not apply» to 5- «applies very much») (Coombes et al., 2011)	n/a	
We achieve our ecological targets excellently.		
We always manage to maintain our social standards.		
Entrepreneurial orientation (EO) (CR = 0.82) (Covin & Slevin, 1989)		
Innovativeness (1 -7 opposing statements) (CR= 0.78, AVE= 0.57)	**0.877**	**3.734**
We place particular emphasis on proven products/services / We place particular emphasis on new or further development in our products/services. (INN1)	0.664	
We have not changed anything in our products/services in the last five years. / Over the past five years, we have made many changes to our products/services. (INN2)	0.760	8.987
There have been only minor changes in our products/services over the last five years. / There have been fundamental and far-reaching changes in our products/services over the past five years. (INN3)	0.826	12.010
Risk-taking (1 -7 opposing statements) (CR= 0.71, AVE = 0.48)	**0.723**	**3.767**
We prefer projects with a decent return but low risks. / We prefer projects with particularly high returns, even if they involve major risks. (RSK1)	0.640	

We are convinced that in our industry, it is better to act cautiously and move forward in small steps. / We are convinced that in our industry, it is necessary to pursue one's goals courageously and in big steps. (RSK2)	0.753	9.583
In an uncertain decision-making situation, we tend to wait so that we can avoid expensive wrong decisions. / In an uncertain decision-making situation, we dare to act so that we can achieve great success afterwards. (RSK3)	0.629	7.787
Proactiveness (1 -7 opposing statements) (CR= 0.63, AVE = 0.67)	**0.552**	
Typically, we respond to activities of our competitors. / Typically, we launch activities to which our competitors then respond. (PRO1)	0.585	
It hardly ever happens that we are the first to appear on the market with new products/services or ways of working. / It happens very often that we are the first to appear on the market with new products/services or ways of working. (PRO2)	0.881	5.271
Cooperation		
Collective entrepreneurial capacity (CEC) (CR= 0.89, AVE = 0.69) (Diaz-Foncea & Marcuello, 2013) Do staff meetings always take place in your organization where important issues are discussed and decided collectively? If yes, these meetings take place primarily to ensure that... (1 - "strongly disagree" 5- "strongly agree")		
… we can realize important innovations in our products and services. (CEC1)	0.986	
… we identify and meet future expectations of our members. (CEC2)	0.807	13.732
…we encourage each other to take greater risks. (CEC3)	0.600	11.705
… our employees can get new impulses and start initiatives. (CEC4)	0.995	29.108
Entrepreneurial cooperation (EC) (Sacchetti & Tortia, 2016) We master challenges alone / We cooperate with partners (to master challenges) (1-7 opposing statements)	n/a	
Control Variables (CV)		
Industry rivalry Index: qualitative measure («In our industry, competitors leave each other alone – 1 - 7 – « There is generally tough competition in our industry) multiplied with a category of self-reported direct competitors (ranging from 1 = 1 comp. to 6 > 99 comp.)	n/a	
GDP (regional) per capita at the NUTS-3 level (FSO, 2019a)	n/a	
Industry (production, housing, retail, service, financial/insurance) Sectors built following the Swiss NOGA classification which is nearly identical to European NACE	n/a	
Importance of economic mission in % (compared to social and member-oriented mission)	n/a	
Interest on shares ex-ante defined interests on shares (1 - “shares bear interests”; 0 – “shares don’t bear interests”)	n/a	

Member involvement Involvement of cooperative members in decision-making in addition to the regular general assembly (ranging from “never”, “rarely”, “from time to time” to “always”)	n/a	
Size Log. turnover in year 2018 in CHF	n/a	
Age Age since founding (base year =2018)	n/a	

[1]All items translated from German

[3] The loadings refer to the measurement model after the exclusion of one item (PRO3) , **N/a** indicates single-item measure/non-reflective construct

Table 2A Descriptive statistics and correlations

	Construct/Indicator	**Mean**	***SD***	***Min.***	***Max.***	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Perceived market performance (PMP)	3.2	0.86	1	5	1																
2	Profitability (Return on sales, ROS)	3	1.3	1	5	.235*	1															
3	Member related performance (MP)	0.60	0.21	0.14	1	.21*	.022	1														
4	Perceived social performance (PSP)	3.8	0.7	1	5	.358*	-.041	.267*	1													
5	Entrepreneurial Orientation (EO)	3.9	1.03	1	7	.414*	.123*	.148*	.080	1												
6	Innovativeness (INN)	4.1	1.5	1	7	.374*	.134*	.126*	.067	.854*	1											
7	Proactiveness (PRO)	4.2	1.1	1	7	.313*	.013	.096	.115*	.662*	.352*	1										
8	Risk-taking (RSK)	3.3	1.2	1	7	.262*	.116*	.129*	-.004	.794*	.514*	.278*	1									
9	Collective entrepreneurial capacity (CEC)	2.6	1.4	1	5	.110*	-.070	.063	-.003	.178*	.182*	.101	.106*	1								
10	Entrepreneurial cooperation (EC)	4.2	1.7	1	7	.129*	.092	.173*	-.032	.265*	.229*	.137*	.202*	.151*	1							
11	Industry rivalry	11.5	8.9	1	42	.051	.059	-.008	-.042	.117*	.126*	.110*	.060	.061	.148*	1						
12	Regional GDP p.cap. (in 1000 CHF)	79.4	1.28	50.1	200	.000	-.114*	-.066	.085	.040	.067	-.025	.011	.005	-.069	-.096	1					
13	Size (sales in million CHF)	22.3	19.5	0	348	.310*	.198*	.067	.009	.144*	.168*	.050	.078	.073	.241*	.219*	-.087	1				
14	Age (since foundation)	63.5	37.8	2	145	.087	.227*	-.003	-.11*	.040	.088	.033	-.012	-.002	.131*	.199*	-.010	.575*	1			
15	Relevance of financial mission (compared to non-fin.)	0.55	0.29	0	1	.112*	.171*	.073	-.062	.038	.020	.003	.051	.005	-.004	.181*	-.101	.287*	.251*	1		
16	Interest on cooperative shares *ex-ante* (compared to none)	0.38		0	1	.182*	.515*	.024	-.017	.008	.062	-.046	-.001	-.030	.049	.151*	-.122*	.286*	.236*	.126*	1	
17	Member involvement	2	1.1	1	4	-.067	-.19*	0.12*	-.038	.034	.026	.034	.033	.086	.026	-.13*	.057	-.19*	-.21*	-.19*	-.25*	1

18	Production	0.13		0	1	-.097	-.089	0.056	.036	-.124*	-.154*	-.045	-.052	-.012	-.096	-.003	-.080	-.163*	.024	.165*	-.130*	.063
19	Housing	0.29		0	1	-.103*	.090	-0.31*	.022	-.206*	-.212*	-.078	-.170*	-.216*	-.190*	-.231*	.236*	-.199*	-.050	-.285*	.042	.095
20	Retail Trade	0.22		0	1	-.092	-.299*	.11*	.008	.073	.026	.141*	.050	.110*	.034	.047	-.048	.056	-.071	.076	-.280*	.004
21	Finance/Insurance	0.23		0	1	.206*	.431*	.096	-.156*	.069	.171*	-.082	.021	.099	.249*	.305*	-.171*	.392*	.347*	.209*	.537*	-.292*
22	Services	0.13		0	1	.093	-.177*	.116*	.121*	.231*	.197*	.090	.197*	.046	-.004	-.126*	.039	-.145*	-.304*	-.138*	-.259*	.168*

Correlations: * $p < 0.05$, the latent constructs (PMP, EO, INN, PRO, RSK, CEC) are calculated with a summative averaged index.

Table 3A Discriminant validity: heterotrait-monotrait ratio of correlations (HTMT)

Construct	INN	RSK	PRO	CEC
Perceived market performance (PMP)	0.52	0.41	0.46	0.15
Innovativeness (INN)		0.68	0.49	0.22
Risk-taking (RSK)			0.42	0.15
Proactiveness (PRO)				0.14

2 Paper 1b: Unternehmerische Orientierung und Zielerreichung von Schweizer Wohnbaugenossenschaften

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Markus Gmür: Conceptualization, Project administration, Resources, Feedback on the Manuscript

Unternehmerische Orientierung und Zielerreichung von Schweizer Wohnbaugenossenschaften.

Entrepreneurial Orientation and Performance of Swiss Housing Cooperatives.

Zusammenfassung: Wohnbaugenossenschaften (WBG) vereinigen in ihrem Förderauftrag wirtschaftliche Aktivitäten und zivilgesellschaftliches Engagement. Dementsprechend vielfältig sind ihre Zielsysteme. Der Beitrag untersucht, wie sich eine unternehmerische Orientierung auf die Erfolgsfaktoren von WBG auswirkt und welche Rolle dabei genossenschaftsspezifische Aspekte des Unternehmertums spielen. Mittels einer Umfrage bei 222 WBG wird gezeigt, dass sich eine unternehmerische Orientierung positiv auf den finanziellen und organisationalen Erfolg auswirkt. Weiter wird gezeigt, dass eine unternehmerische Kooperation und unternehmerische Mobilisierung von Mitarbeitern eng mit der unternehmerischen Orientierung verbunden sind.

Abstract: Housing cooperatives combine economic activities and civic engagement in their mission. Accordingly, their target systems are diverse. This article examines the impact of an entrepreneurial orientation (EO) on the success factors of housing cooperatives and the role played by aspects of entrepreneurship that are specific to cooperatives. By means of a survey of 222 housing cooperatives, it is shown that EO has a positive impact on financial and organizational performance. It is further shown that entrepreneurial cooperation and entrepreneurial mobilization of employees are closely linked to EO.

Resumé : Les coopératives d'habitation réunissent dans leur mission de promotion des activités économiques et un engagement dans la société civile. Leurs objectifs sont par conséquent très variés. L'article examine l'impact d'une orientation entrepreneuriale sur les facteurs de succès des coopératives d'habitation et le rôle joué par les aspects de l'entrepreneuriat spécifiques aux coopératives. Une enquête menée auprès de 222 coopératives montre qu'une orientation entrepreneuriale a un effet positif sur le succès financier et organisationnel. Il est également démontré que la coopération entrepreneuriale et la mobilisation entrepreneuriale des collaborateurs sont étroitement liées à l'orientation entrepreneuriale.

1. Einleitung

Der gemeinnützige Wohnungsbau[1] verfolgt in einem Umfeld von Wohnungsknappheit und steigenden Mietpreisen in den Städten den Anspruch, diesen Herausforderungen mit bezahlbarem Wohnraum zu begegnen (sotomo, 2017). In der Schweiz werden Wohnbaugenossenschaften (WBG) deswegen teilweise gefördert, mit vereinzeltem Erfolg und einem in manchen Städten dynamischen Wachstum in den letzten Jahren. Die Nachfrage nach Wohnraum bleibt aber insbesondere in den Städten hoch und hat sich durch die Corona-Krise wegen steigender inländischer Nachfrage weiter erhöht. Mietwohnungen sind dadurch knapper und in allen Preissegmenten teurer geworden, vor allem in den Regionen Zürich, Zug, der Genfersee Region und im Grossraum Bern (BWO, 2021a). Demgegenüber steht ein Angebot an genossenschaftlichem Wohnraum, welcher gesamtschweizerisch knapp 4% beträgt und in den letzten Jahren in einem ähnlichen Rahmen wie der Gesamtmarkt gewachsen ist. In den Städten fällt der Anteil dagegen teilweise weit höher aus und vergrössert sich durch ein schnelleres Wachstum der Anzahl Wohnungen in WBG im Vergleich zum Gesamtmarkt (vgl. Tab. 1).

	Anzahl Wohnungen in WBG	**Marktanteil Wohnungen WBG**	**Wachstum Wohnungen WBG (2011-2019)**	**Wachstum Wohnungen gesamt (2011-2019)**
Schweiz	168’723	3.7%	10.4%	10.9%
Zürich	44’218	19.4%	12%	8%
Basel	9’718	9.7%	1.5%	1.7%
Genf	5’264	4.8%	11%	5%
Bern	6’775	8.5%	28%	3%
Lausanne	6’040	7.6%	14%	7%

Tab 1: Wachstum Wohnungen in WBG 2011 – 2019 (Quelle: BWO (2021b), eigene Darstellung)

Obwohl WBG teilweise auf Förderinstrumente zurückgreifen können, stehen sie in Konkurrenz mit renditeorientierten Anbietern, verfolgen über die wirtschaftlichen Ziele für ihre Mitgliederbasis hinaus aber oft auch noch sozialpolitische oder ökologische Zielsetzungen. Angesichts dieser Herausforderungen rückt das Management von WBG in den Fokus, insbesondere, wie es gelingt, innerhalb der bestehenden Rahmenbedingungen mehr Angebote bereitzustellen und Marktanteile zu gewinnen. Eine Möglichkeit ist dabei, sich der Konkurrenz anzugleichen und deren Praktiken zu übernehmen. Eine solche Form von Isomorphismus (DiMaggio & Powell, 1983) umfasst ein professionelles Management und eine unternehmerische Ausrichtung. Zugleich wird davor gewarnt, dass eine einseitige Imitation von profitorientierten Unternehmen die Gefahr birgt, der dualen Natur der Genossenschaft, zwischen Marktzielen und sozialen und ökonomischen Zielen der Mitglieder, nicht mehr gerecht zu werden und diese auf dem Weg zu mehr Markterfolg zu verlieren (Michaud & Audebrand, 2022; Puusa & Saastamoinen, 2021).

Es gibt bisher erst wenige Beiträge, die eine unternehmerische Ausrichtung und den Einfluss auf Erfolg bei Genossenschaften untersuchen (Guzmán et al., 2020; Kyriakopoulos et al., 2004). Noch gar nicht untersucht ist, wie sich eine unternehmerische Ausrichtung bei WBG auf die relevanten Erfolgsdimensionen (Markterfolg, Zufriedenheit der Genossenschafter und sozialer/ökologischer Erfolg) auswirkt und dazu taugt, den Marktanteil der WBG zu erhöhen, ohne dabei die genossenschaftliche Werte zu verlieren.

Die Studie schliesst diese Lücke, indem sie den Einfluss des strategischen Managements auf den finanziellen und nicht-finanziellen Erfolg der Genossenschaften untersucht. Sie misst die unternehmerische Ausrichtung durch das in der Forschung etablierte Konstrukt der unternehmerischen Orientierung (EO), bestehend aus den Dimensionen Innovativität, Risikobereitschaft und Proaktivität, und passt dieses an den Kontext der Selbsthilfegenossenschaften an. Zusätzlich fügt sie die unternehmerische Mitarbeitermobilisierung und unternehmerische Kooperation als

[1] Der gemeinnützige Wohnungsbau in der Schweiz ist mehrheitlich genossenschaftlich organisiert.

genossenschaftsspezifische Aspekte des Unternehmertums bei und untersucht, wie WBG ihre Einzigartigkeit im Wettbewerb nutzen können.

2. Untersuchungsmodell

2.1 Unternehmerische Orientierung

Unternehmerische Orientierung (engl. *Entrepreneurial Orientation (EO))* erfasst als Konstrukt die Eigenschaften von Unternehmertum auf Organisationsebene. Das ursprüngliche Konstrukt von Miller (1983) geht von einem eindimensionalen (reflexiven) Maß aus und umfasst strategische Aspekte, Managementpraktiken und Firmenverhalten mit den Dimensionen Innovativität, Proaktivität und Risikobereitschaft. Die Reflexivität des Konstrukts bedeutet, dass ein Unternehmen eine Kombination der drei Dimensionen aufweisen muss, um als unternehmerisch zu gelten. Innovativität umfasst die ständige Verbesserung des Leistungsangebotes, Proaktivität die aktive Gestaltung des Umfeldes (Agieren statt Passivität) und Risikobereitschaft die Wahrnehmung von neuen Marktchancen, unter Unsicherheit und der Inkaufnahme eines möglichen Verlusts (Lumpkin & Dess, 1996).

In unserer Studie verwenden wir die in der empirischen Forschung am häufigsten verwendete Skala von Miller/Covin & Slevin (1989), passen jedoch die Dimension der Proaktivität an Selbsthilfeorganisationen an, indem wir diese als «Agieren statt Passivität» im Innenbereich gegenüber den Genossenschaftern, statt gegenüber anderen Organisationen definieren. Beim Konstrukt von Miller/Covin & Slevin (1989) bilden direkte Wettbewerber und das Marktumfeld den Referenzrahmen für die Proaktivität einer Organisation. Bei WBG als Selbsthilfeorganisationen liegt der Referenzrahmen für proaktives Verhalten dagegen hauptsächlich im Innenbereich: WBG legen den Fokus auf ihre Mitglieder, besetzen im Wohnungsmarkt eine Nische und stehen selten in direkter Konkurrenz mit anderen Organisationen (Suter & Gmür, 2017). Dies zeigt sich auch in unserer Studie, in welcher ein Grossteil der WBG angibt, keine direkten Wettbewerber zu haben. Aus diesem Grund ist es für WBG weniger wichtig als Erste im Vergleich zu anderen Organisationen in einem Markt Produkte anzubieten oder schneller als direkte Wettbewerber zu sein, als vielmehr Initiativen zu starten und Leistungsangebote zu entwickeln und damit auf die eigenen Mitglieder zuzugehen. Proaktive WBG schaffen dadurch einen Zusatznutzen für Mitglieder, und gewinnen Marktanteile indirekt über einen guten Ruf und ein attraktives Leistungsangebot.

2.2. Unternehmerische Kooperation und gemeinschaftliche Mobilisierung der Mitarbeitenden

Genossenschaften können verschiedentlich von Kooperationseffekten profitieren, wie etwa durch Kostenreduktion über die Teilung von Investitionen und Aufgaben, durch Lerneffekte bei der Herstellung oder durch Verbundeffekte (Engels, 2006). Netzwerke von Genossenschaften können aber auch unternehmerisch genutzt werden, um Wissen und Informationen zu teilen, Innovationen gemeinsam voranzutreiben, Risiken aufzuteilen und Marktmöglichkeiten zu ergreifen (Cook & Plunkett, 2006).

Auf der anderen Seite werden Kooperationseffekte im Innern einer Genossenschaft genutzt, um unter Mitarbeitenden Ideen zu entwickeln, Wissen zu teilen und dadurch innovativer und unternehmerischer zu werden (De Clercq et al., 2013; Muñoz et al., 2020). Letzteres bedingt einerseits gut ausgebildete, engagierte Mitarbeitende und andererseits einen partizipativen Führungsstil, der den Einbezug der Mitarbeitenden in unternehmerische Überlegungen ermöglicht (Muñoz et al., 2020).

Eine weitere wichtige Grundvoraussetzung, um von diesen Kooperationseffekten zu profitieren ist gegenseitiges Vertrauen und Reziprozität, welche die Zusammenarbeit erleichtern (Pesämaa et al., 2013) und welche Trittbrettfahren unter den Akteuren verhindert (Deng & Hendrikse, 2018). Blome-Drees und Schmale (2006) schlagen deswegen vor, dass Genossenschaften nur dann einen Vorteil im Wettbewerb erlangen, wenn sie ihre genossenschaftlichen Stärken mit einbeziehen können. Die gleiche Ansicht vertreten Diaz-Foncea and Marcuello (2013) welche den kooperativen Aspekt nicht nur als

Hilfsmittel, um unternehmerischer zu werden, sondern als entscheidenden Bestandteil des genossenschaftlichen Unternehmertums betrachten. Empirisch gibt es dazu erst Untersuchungen, die sich mit der Kultur in Genossenschaften im Allgemeinen auseinandersetzen (Bastida et al., 2021), aber wenige, die dies im Zusammenhang mit dem genossenschaftlichen Unternehmertum tun (Camargo Benavides & Ehrenhard, 2021).

Den genossenschaftlichen Aspekt des Unternehmertums erheben wir, indem wir eine eigene Skala entwickeln, welche den Einbezug der Mitarbeitenden in unternehmerische Handlungen misst. Zusätzlich fügen wir eine Variable zur unternehmerischen Kooperation mit anderen Organisationen ein.

2.3 Unternehmerische Orientierung (EO) und Erfolg

Empirische Studien finden einen positiven Zusammenhang zwischen EO und organisationalen Erfolgsindikatoren bei gewinnorientierten Unternehmen (Rauch et al., 2009), im Non-Profit Bereich (do Adro et al., 2021; Morris et al., 2011) und auch bei Genossenschaften (Guzmán et al., 2020; Kyriakopoulos et al., 2004).

EO wirkt sich dabei über die Teildimensionen (Innovativität, Risikobereitschaft und Proaktivität) auf den Erfolg von WBG aus.

Innovative WBG orientieren sich an gesellschaftlichen und Mitgliederentwicklungen. Sie reagieren auf ökologische Bedürfnisse und bauen nachhaltig, orientieren sich an Mitgliederbedürfnissen und erleichtern den Wohnungstausch innerhalb der WBG oder bieten integrierte Kinderkrippen sowie Kindergärten an. Sie engagieren sich für die Gemeinschaft und organisieren soziale und kulturelle Anlässe und bieten die Möglichkeit, mit Entwicklungsprojekten Sinn zu stiften (Suter & Gmür, 2017). Die Innovationsorientierung hilft dabei nicht nur bestehende Kunden zu erhalten, sondern auch neue Kunden zu gewinnen und dadurch Marktanteile zu erhöhen.

Die Risikobereitschaft misst sich an aktiven und weitreichende Entscheidungen und Handlungen sowie der Umsetzung von risikoreichen Projekten (Zahra & Covin, 1995). Genossenschaften gelten bei Investitionsentscheidungen als risikoscheu. Eine risikofreudigere Ausrichtung des Managements kann demgegenüber ein Gegengewicht zu einer risikoscheuen, vermeidenden Mitgliederbasis bilden (Van der Krogt et al., 2007) und helfen, notwendige Investitionen zu tätigen, um wettbewerbsfähig zu bleiben (Kyriakopoulos et al., 2004). Gerade grosse und expansionsorientierte WBG, nehmen Risiken in Kauf und verfolgen gleichzeitig soziale und umweltpolitische Ziele, wie eine Untersuchung von WBG in der Schweiz zeigt (Suter & Gmür, 2017).

Proaktive Organisationen beobachten Marktentwicklungen und Mitgliederbedürfnisse, agieren auf Veränderungen und ziehen daraus einen Vorteil (Zahra & Covin, 1995). Solche Genossenschaften erkennen Markttrends früher, entwickeln sich in zukunftsträchtigen Bereichen wie nachhaltiges Bauen weiter und bieten Produkte an, bevor Mitglieder die Änderungen aktiv einfordern. Sie befriedigen dadurch Bedürfnisse der Mitglieder und gewinnen neue Genossenschafter. Eine Grundvoraussetzung dafür ist die Verfügbarkeit und Qualität von Informationen über sich verändernde Marktbedingungen und Mitgliederbedürfnisse. Dies setzt eine enge Beziehung und Vertrauen zu den Mitgliedern voraus und dass das dadurch gewonnenes Wissen innerhalb der WBG entsprechend verbreitet wird.

Hypothesen H1a & H1b: EO ist in WBG positiv mit Markterfolg (H1a) und Profitabilität (H1b) verbunden.

Ob sich EO auch positiv auf die Mitglieder-Zufriedenheit und soziale und ökologische Zielerreichung bei WBG auswirkt, wurde noch nicht untersucht. Empirische Studien zeigen aber, dass EO positiv mit verschiedenen finanziellen und nicht-finanziellen Erfolgsaspekten verbunden ist, sowohl bei profitorientierten Unternehmen (Rauch et al., 2009) als auch im NPO-Bereich (Alarifi et al., 2019; Morris et al., 2011).

Eine unternehmerische Ausrichtung bindet bei WBG zwar Ressourcen, die kurzfristig nicht für andere Organisationsziele wie gesellschaftliche, soziale und ökologische Ziele oder Leistungsangebote und Massnahmen für Genossenschafter zur Verfügung stehen. Langfristig sind finanzielle und nicht-finanzielle Ziele jedoch miteinander verflochten. WBG, die wirtschaftlich erfolgreich sind, haben mehr Möglichkeiten und können vermehrt ökologischen oder sozialen Wohnraum zur Verfügung stellen, Leistungsangebote für Mitglieder ausbauen oder die Mieten senken, was sich positiv auf die soziale und ökologische Zielerreichung und die Mitglieder-Zufriedenheit auswirkt.

Hypothesen H2a & H2b: WBG mit einer unternehmerischen Orientierung weisen eine höhere Mitglieder-Zufriedenheit auf (H2a) und erreichen ihre sozialen und ökologischen Ziele besser (H2b).

2.4. Unternehmerische Kooperation, gemeinschaftliche unternehmerische Mobilisierung und unternehmerische Orientierung

Unternehmerische Kooperationen helfen WBG Ressourcen zu gewinnen, Informationen und Wissen auszutauschen, Innovationen umzusetzen und dadurch neue Möglichkeiten zu erschliessen. WBG können in unterschiedlichen Bereichen, bei der Finanzierung, beim Bau, dem Betrieb der Infrastruktur oder bei der Bewilligung von neuem Wohnraum mit anderen Genossenschaften oder anderen Organisationen wie lokalen Handwerkern, Banken, Versicherungen, Quartiervereinen oder der Politik zusammenarbeiten:

H3a: Unternehmerische Kooperation mit anderen Organisationen ist positiv mit EO verbunden.

Eine enge Zusammenarbeit und Austausch zwischen den Mitarbeitenden einer WBG kann Wissen verbreitern und vertiefen, dabei mehr unternehmerische Handlungsalternativen generieren und zu höherer EO führen (De Clercq et al., 2013). WBG können dabei Informationen aus der Beziehung zwischen Mitarbeitenden und Kunden nutzen, um proaktiv Marktveränderungen und Mitgliederbedürfnisse zu antizipieren. Wissen und Fähigkeiten der Mitarbeitenden können zur organisationalen Innovationskraft beitragen, und eine enge Zusammenarbeit zwischen den Mitarbeitenden kann das Vertrauen erhöhen und dazu führen, dass mehr unternehmerische Risiken eingegangen werden (Kaasa, 2009):

H3b: Gemeinschaftliche unternehmerische Mobilisierung der Mitarbeitenden ist positiv mit EO verbunden.

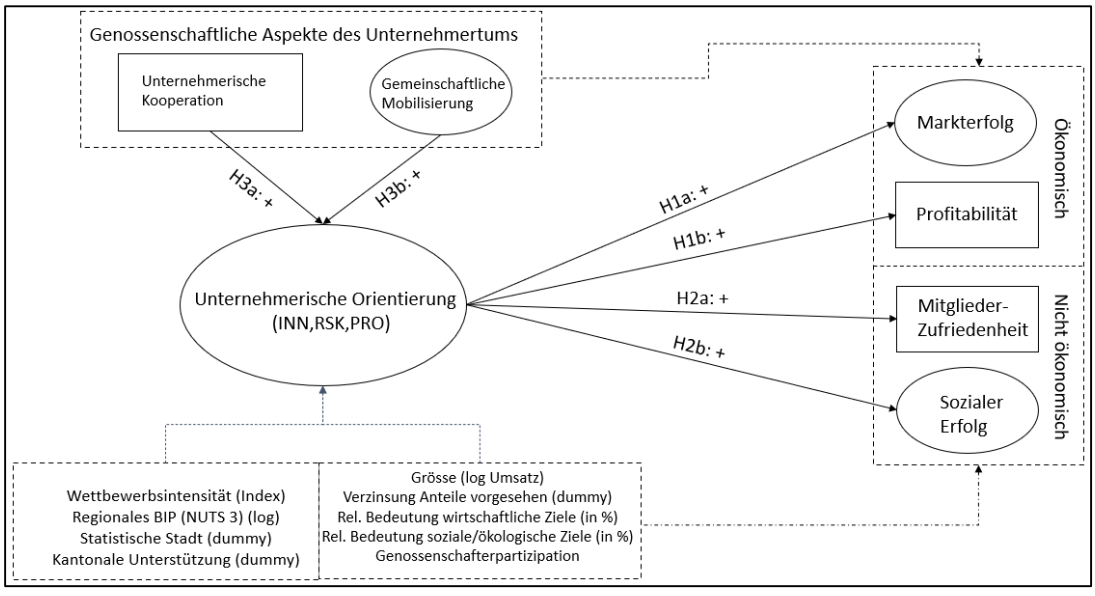

Abb. 1: Untersuchungsmodell (Quelle: eigene Darstellung)

3. Methodik

3.1 Sample

Die Studie bei WBG basiert auf einer Umfrage aus dem Jahr 2019 unter allen Schweizer Genossenschaften, die Ende 2017 im Handelsregister eingetragen waren.[2] Die Befragung erfolgte in Deutsch, Französisch und Italienisch. 260 von 2362 Genossenschaften (abzüglich Retouren) haben im Bereich Wohnbau geantwortet, wovon 222 für die Analyse verwendet werden konnten. Rund 60% füllten die Papierversion aus, 40% die Online-Version. Insgesamt ergibt sich damit eine Rücklaufquote von rund 9%. Die Deutschschweiz ist dabei leicht übervertreten (10% Rücklauf) während die französischsprachige Schweiz leicht (7%) und der italienischsprachige Raum deutlich (4%) untervertreten sind.

3.2 Messgrössen[3]

Zur Erhebung der unabhängigen Variable wurde das Konstrukt von Covin und Slevin (1989) verwendet und an Genossenschaften angepasst. Insbesondere wurden die Fragen immer in Bezug auf die gesamte Organisation gestellt, während bei Covin und Slevin teilweise die Ausrichtung des Top-Managements im Fokus steht. Die Skala wurde auf Deutsch übersetzt und von zwei Experten im Gebiet der EO-Forschung validiert. Die Dimension der Proaktivität wurde angepasst, um den Kontext der Genossenschaften als Selbsthilfeorganisationen zu berücksichtigen. Insbesondere dem Umstand, dass diese den Fokus auf die Mitglieder und weniger auf einen externen Markt mit Wettbewerbern legen.

Der finanzielle Erfolg wurde einerseits durch finanzielle Kennzahlen (Umsatzrendite) und den subjektiven Markterfolg, bestehend aus Marktposition und Wachstum erhoben, was kombiniert ein gutes Mass für den organisationalen Erfolg ist (Wiklund & Shepherd, 2005). Der nicht-ökonomische Erfolg wurde mit Items zur selbst eingeschätzten Mitglieder-Zufriedenheit und sozialen und ökologischen Zielerreichung gemessen.

Zusätzlich wurden Items integriert, welche den kooperativen Aspekt von Unternehmertum bei Genossenschaften erfassen. Dazu wurde einerseits ein Item zu der Kooperationsneigung mit anderen Organisationen bei Herausforderungen und der enge Einbezug der Mitarbeitenden, um unternehmerische Impulse zu setzen, eingefügt.

Als Kontrollvariablen für den organisationalen Erfolg wurden gesamtwirtschaftliche Indikatoren, wie ein Index für die Wettbewerbsintensität, berechnet aus einer subjektiven Einschätzung und der direkten Anzahl Konkurrenten sowie als volkswirtschaftliche Kontrollvariable für Erfolg das kantonale BIP pro Kopf, als regionale Variablen ein Dummy für Städte sowie die kantonale Regulierungsfreundlichkeit gegenüber WBG eingefügt. Weiter wurde auf organisationale Variablen wie die Grösse, die finanzielle und soziale, ökologische und gesellschaftliche Mission, die vorgesehene Verzinsung der Anteilsscheine und die Partizipation der Genossenschafter kontrolliert. Für EO wurde auf die Wettbewerbsintensität, Partizipation und Organisationsgrösse kontrolliert.

3.3 Resultate

3.3.1 Messmodell

Aufgrund der mehrheitlich latenten Variablen im Untersuchungsmodell wurden die Zusammenhänge mit einem Strukturgleichungsmodell (SEM) geschätzt. Zuerst wurde mittels konfirmatorischer Faktoranalyse und in einem zweistufigen Verfahren die Reliabilität des Konstrukts, sowie die konvergente und diskriminante Validität getestet, bevor das Strukturmodell berechnet wurde (Anderson & Gerbing, 1988). Alle Berechnungen wurden in R mit *lavaan* durchgeführt (Rosseel, 2012). Einzelne

[2] Die Umfrage wurde in Zusammenarbeit mit CooperativeSuisse (heute SENSSuisse) entwickelt und durchgeführt.
[3] Alle Messgrössen finden sich im Anhang in Tabelle 4.

Items wurden aufgrund von Kreuzladungen ausgeschlossen (i.e. INN1, RSK1), was bei reflexiven Konstrukten nicht problematisch ist (Hair Jr et al., 2014).

Gemäss konfirmatorischer Faktoranalyse besteht ein akzeptabler Fit zwischen Messmodell und Daten (Chi-Quadrat = 171.117, df = 136, CFI = 0.953, SRMR = 0.051)[4] nach flexiblen Grenzwerten (Niemand & Mai, 2018). Die Reliabilität (CR) der Konstrukte (EO: CR = 0.83; GEM: CR = 0.93, ME: CR = 0.71; SE: CR = 0.66) ist akzeptabel (Hair Jr et al., 2014). Die konvergente Validität (AVE ≥ 0.50) ist mit Ausnahme der Subdimension Risikobereitschaft[5] gegeben. Die diskriminante Validität, gemessen mit dem HTMT-Verfahren, ist für alle Konstrukte gegeben (HTMT < I0.85I) (Henseler et al., 2015) (vgl. Tab. 2). Wobei EO als zweistufiges reflexives Konstrukt gemessen wurde.

Um eine Methodenverzerrung auszuschliessen, wurde ein Messmodell mit einem einzelnen Faktor getestet. Die Passung dieses Modells mit den Daten war ungenügend (Chi-Quadrat = 759.148, df = 135, CFI = 0.620, SRMR = 0.156). Ein Vorliegen einer Methodenverzerrung nach Podsakoff et al. (2003) ist deswegen unwahrscheinlich.

	ME	P	MZ	SE	EO	INN	RSK	PRO	GEM
Markterfolg (ME)	**0.58**	n.a.	n.a.	*0.83*	n.a.	*0.47*	*0.42*	*0.16*	*0.19*
Profitabilität (P)	0.19	**n.a.**	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Mitglieder-Zufr. (MZ)	0.45	-0.04	**n.a**	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Soz/ök Erfolg (SE)	0.82	0.05	0.55	**0.50**	n.a.	*0.13*	*0.12*	*0.10*	*0.10*
EO	0.39	0.24	0.00	0.09	**n.a.**	n.a.	n.a.	n.a.	n.a.
Innovativität (INN)	0.38	0.19	-0.05	0.11	n.a.	**0.55**	*0.61*	*0.63*	*0.23*
Risikobereitschaft (RSK)	0.37	0.16	0.04	0.07	n.a.	0.64	**0.49**	*0.64*	*0.20*
Proaktivität (PRO)	0.05	0.25	0.04	-0.02	n.a.	0.62	0.50	**0.53**	*0.17*
Gem. Mobilisierung (GEM)	0.16	-0.06	0.06	0.11	0.24	0.21	0.16	0.19	**0.81**
Unternehmerische Kooperation (KOP)	-0.09	0.01	-0.13	-0.08	0.35	0.33	0.25	0.22	0.07
Reliabilität (CR)	0.71	n.a.	n.a.	0.66	0.83	0.71	0.60	0.67	0.93
Konvergente Validität: Durchschnittlich erklärte Varianz (AVE) ≥ 0.5 (auf der Diagonalen, fett) *Diskriminante Validität*: *Heterotrait-monotrait ratio* (HTMT) < I0.85I (über der Diagonalen, kursiv) (n.a.): bedeutet kein Wert vorhanden (entweder da einzelnes Item oder zweistufiges Konstrukt)									

Tab. 2: Korrelationen, konvergente und diskriminante Validität der Konstrukte (Quelle: eigene Berechnung und Darstellung)

3.3.2 Strukturmodell

Aufgrund von fehlenden Werten und einer leichten Schiefe in den Daten, wurde ein «*full information maximum likelihood (fiml)»* Schätzverfahren mit robusten (Huber-White) Standardfehlern gewählt. *Fiml*

[4] Aufgrund einer Schiefe in den Daten wurde jeweils Huber-White Standardfehler verwendet.
[5] Risikobereitschaft ist Teil des übergeordneten Konstrukts EO, eine Überschneidung der Unterkategorien ist deswegen plausibel. Eine einstufige Modellierung von EO ergibt zudem einen schlechteren Fit (Chi-Quadrat= 245.059, df = 117, CFI=0.92, SRMR = 0.059), weswegen das zweistufige Modell von EO verwendet wird.

ist am Effizientesten, um mit fehlenden Werten umzugehen unter der Annahme, dass diese vollständig zufällig [6] sind (Newman, 2014).

Das in Abb. 2 dargestellte Strukturmodell hat einen guten Fit mit den Daten (Chi-Quadrat = 336.411, df = 233, CFI = 0.935, SRMR = 0.063). Es erklärt insgesamt 37% der Varianz in der Variable Markterfolg, 21% der Profitabilität, 6% des sozialen/ökologischen Erfolgs, 6% der Mitglieder-Zufriedenheit sowie 25% der Varianz in EO.

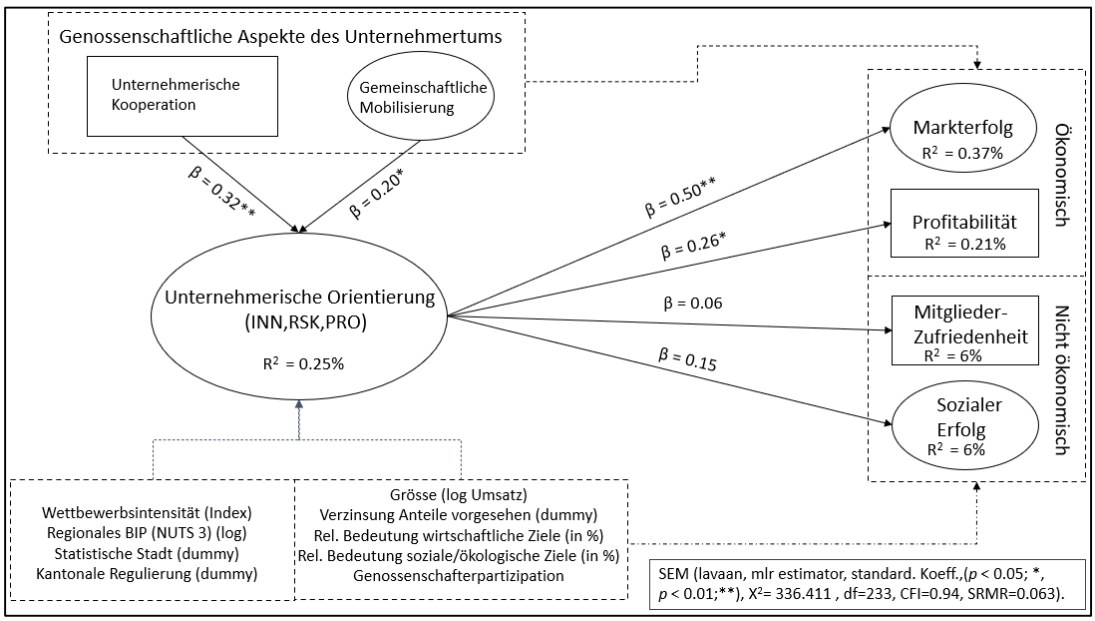

Abb. 2: Resultate Strukturmodell (Quelle: eigene Berechnung und Darstellung)

Der Markterfolg (bestehend aus Marktposition und Wachstum) einer WBG hängt zuerst einmal positiv mit der Grösse der Organisation (= 0.20, $p < 0.05$), der relativen Bedeutung der wirtschaftlichen Ziele (= 0.19, $p < 0.05$), der Partizipation der Mitglieder (= 0.22, $p < 0.01$), der weitergehenden kantonalen Förderung (= 0.24, $p < 0.05$) sowie negativ mit dem kantonalen BIP (= - 0.24, $p < 0.05$) zusammen. Für Profitabilität sind von den Kontrollvariablen die vorgesehene Verzinsung der Anteilsscheine (= 0.24, $p < 0.01$) und das kantonale BIP (= - 0.18, $p < 0.05$) entscheidend.

EO welches durch die Dimensionen INN (= 0.92, $p < 0.01$), RSK (= 0.71, $p < 0.01$) und PRO (= 0.68, $p < 0.01$) definiert wird (vgl. Faktorladungen in Tab. 4 im Anhang), hat einen signifikant positiven Einfluss auf die ökonomischen Erfolgsvariablen wie Markterfolg (= 0.50, $p < 0.01$), bestehend aus Marktposition und Wachstum, und Profitabilität (= 0.26, $p < 0.05$). Im Gegensatz dazu, ist EO nicht signifikant mit der Mitglieder-Zufriedenheit (= 0.06, $p > 0.05$) und dem sozialen und ökologischen Erfolg verbunden (= 0.15, $p > 0.05$). Die Hypothesen *H1a & H1b* können deswegen bestätigt, *H2a & H2b* dagegen nicht bestätigt werden.

Die unternehmerische Ausrichtung hängt zudem positiv mit unternehmerischer Kooperation (= 0.32, $p < 0.01$) und gemeinschaftlicher Mobilisierung (= 0.20, $p < 0.05$) zusammen, die Hypothesen *H3a & H3b* werden deswegen unterstützt.

Um Unterschiede zwischen Genossenschaften zu testen, wurden zwei Gruppen verglichen. Die Gruppen wurden danach gebildet, ob die selbst angegebene relative Bedeutung von wirtschaftlichen und finanziellen Zielen (Modell2a) gegenüber nicht-finanziellen Zielen (Interessen der Genossenschafter oder sozialer/ökologischer Ziele für die Allgemeinheit, Modell 2b) dominieren. Dies, da davon

[6] Dies ist gemäss einem Test gegeben. Zudem gibt es keine theoretischen Anzeichen für systematisches Nichtantworten vgl. Little, R. J. (1988). A test of missing completely at random for multivariate data with missing values. *Journal of the American Statistical Association*, *83*(404), 1198-1202. https://doi.org/10.1080/01621459.1988.10478722

auszugehen ist, dass EO für die Zielerreichung von wirtschaftlich orientierten Genossenschaften eine grössere Rolle spielt, als für sozial orientierte.

Das Modell 2a (Dominanz wirtschaftlicher Ziele) hat einen akzeptablen Fit mit den Daten (Chi-Quadrat = 486.052, df = 286, CFI = 0.831, SRMR = 0.079) nach flexiblen Grenzwerten (Niemand & Mai, 2018). EO hat einen signifikant positiven Einfluss auf Markterfolg (= 0.43, $p < 0.05$) und Profitabilität (= 0.30, $p < 0.05$), nicht jedoch auf sozialen/ökologischen Erfolg (= 0.05, $p > 0.05$) und Mitglieder-Zufriedenheit (= 0.02, $p > 0.05$). Am stärksten wird EO dabei durch die unternehmerische Kooperation erklärt (= 0.27, $p > 0.05$), während die gemeinschaftliche Mitarbeitermobilisierung (= 0.19, $p > 0.05$) eine geringere Rolle spielt.

Modell 2b hat hingegen einen ungenügenden Fit mit den Daten (Chi-Quadrat = 354.585, df = 233, CFI = 0.844, SRMR = 0.091). Dieser erklärt sich vor allem durch die grosse Varianz innerhalb und zwischen den Subdimensionen von EO, insbesondere der Risikodimension.

Hypothesen	**Modell 1 (alle)**	**Modell 2a (Dominanz wirtschaftlicher Ziele)**	**Modell 2b (Dominanz nicht-finanzieller Ziele)**
H1a: EO → Markterfolg	β = 0.50**	β = 0.43*	β = 0.66*
H1b: EO → Profitabilität (Profit in % Umsatz)	β = 0.26*	β = 0.30*	β = 0.36
H2a: EO → Mitglieder-Zufriedenheit	β = 0.06	β = 0.02	β = 0.25
H2b: EO → Sozialer Erfolg	β = 0.15	β = 0.05	β = 0.43
H3a: Unternehmerische Kooperation → EO	β = 0.32**	β = 0.27	β = 0.41
H3b: Gemeinschaftliche Mobilisierung → EO	β = 0.20*	β = 0.19	β = 0.13
N	222	109	107
X^2	336.411	486.052	354.585
Df.	233	286	233
CFI	0.935	0.831	0.844
SRMR	0.063	0.079	0.091
Standardisierte Koeffizienten: * = $p < 0.05$, ** = $p < 0.01$			

Tab. 3: Ergebnisse nach verschiedenen Gruppen (Quelle: eigene Berechnung und Darstellung)

4. Diskussion und Fazit

Die Analyseergebnisse zeigen, dass die auf Selbsthilfeorganisationen angepasste EO mit den Dimensionen Innovativität, Risikobereitschaft und Proaktivität gegenüber den Mitgliedern, in WBG positiv mit ökonomischen Erfolgsgrössen wie subjektiver Markterfolg (bestehend aus Marktposition und Wachstum) und Profitabilität verbunden ist. WBG mit einer unternehmerischen Ausrichtung sind finanziell erfolgreicher und können dieses freie Kapital für ihre Zwecke reinvestieren. Sie weisen zudem eine bessere Marktposition und ein höheres Wachstum auf. Der Einfluss von EO auf den Erfolg ist dabei deutlich stärker als der Einfluss von organisationalen und wirtschaftlichen Kontrollvariablen oder einem für WBG günstigen kantonalen Regulierungsumfeld. Gleichzeitig werden wichtige Zielgrössen wie die Mitglieder-Zufriedenheit oder die soziale und ökologische Zielerreichung, die WBG ausmachen und

von anderen Wohnformen abgrenzen, durch eine ausgeprägte EO nicht besser erreicht. Die gleichen Zusammenhänge zeigen sich auch bei einer Untergruppe von Genossenschaften, bei welchen wirtschaftliche Ziele dominieren. Bei den WBG mit nichtfinanzieller Zieldominanz lassen sich hingegen aufgrund der grossen Streuung innerhalb der Dimension Risikobereitschaft keine Aussagen über die Erfolgszusammenhänge treffen, was ein Hinweis darauf ist, dass das Eingehen von Risiken bei dieser Teilgruppe eine gesonderte Rolle spielt.

Die signifikanten Zusammenhänge sind aufgrund der Methodik der Querschnitterhebung jedoch unter dem Vorbehalt einer möglichen umgekehrten Kausalität zu betrachten. Indem Erfolg den WBG freie Ressourcen und Handlungsspielräume verschafft, um Innovationen umzusetzen und auch wirtschaftliche Risiken einzugehen, wäre es möglich, dass sich dies wiederum positiv auf EO auswirkt. Längsschnittstudien könnten hier zukünftig mehr Gewissheit bringen.

Unter den genannten Vorbehalten zeigen die Resultate, dass eine unternehmerische Ausrichtung eine Möglichkeit ist, verschiedene genossenschaftliche Ziele zu erreichen. Gleichzeitig sind die Resultate ein Hinweis darauf, dass eine einseitige Orientierung an finanziellen bzw. wirtschaftlichen Zielen und eine einseitige Fokussierung auf eine unternehmerische Strategie nicht zu höherer Mitglieder-Zufriedenheit und sozialen und ökologischen Zielerreichung führt. Dies birgt Gefahren, da das Erreichen dieser Ziele entscheidend für den langfristigen Erfolg und die Stabilität von Genossenschaften ist (Puusa & Saastamoinen, 2021). Wie diese Ziele am besten erreicht werden können und ob EO hier indirekt eine Rolle spielt, muss weiter untersucht werden.

Es zeigt sich ausserdem, dass EO bei WBG stärker vorhanden ist, die eine ausgeprägte genossenschaftliche Unternehmenskultur mit Elementen wie Kooperation gegen Aussen und gemeinschaftliche unternehmerische Mobilisierung aufweisen. Genossenschaften können also ihre Fähigkeit zur Kooperation nutzen, um unternehmerischer zu sein. Das Ergebnis legt den Schluss nahe, dass diese Aspekte für Unternehmertum bei Genossenschaften zentral sind, was sich auch mit den Überlegungen von Diaz-Foncea und Marcuello (2013) und Blome-Drees und Schmale (2006) deckt. Für die zukünftige Forschung wäre es interessant, die Bedingungen dafür genauer zu betrachten und auch die Rolle der Mitglieder für unternehmerische Handlungen zu untersuchen.

Zusammengefasst zeigt diese Studie, wie WBG mit einer unternehmerischen Ausrichtung, zusammen mit Kooperation gegen Aussen und der gemeinschaftlichen Mobilisierung der Mitarbeitenden, erfolgreich und wettbewerbsfähig sein können, indem sie sich zu einem gewissen Teil profitorientierten Organisationen angleichen, gleichzeitig aber ihren genossenschaftlichen Eigenschaften treu bleiben. Dies stellt einen dritten Weg dar und ist ein Hinweis eines möglichen komparativen Vorteils von WBG gegenüber profitorientierten Akteuren (Birchall, 2012). Dies setzt einerseits gut ausgebildete Mitarbeitende voraus, andererseits einen horizontalen Führungsstil, der auf Vertrauen und Fairness basiert (De Clercq et al., 2010) und welcher Engagement, den Wissensaustausch und die Initiative der Mitarbeiter fördert und stärkt (Muñoz et al., 2020). Gleichzeitig ist es wichtig, über eine enge Zusammenarbeit intern und extern Vertrauen und die Norm der Gegenseitigkeit zu stärken, welche wiederum bei der internen wie auch externen Kooperation hilft.

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Anhang

Variablen	LV[1]	Ø	σ
Erfolg			
Profitabilität (Profit in % des Umsatzes) Wie hoch war in den letzten Jahren der Gewinn gemessen an den jährlichen Erlösen (z.B. Umsatz)? (1 – «Es gab eher Verluste als Gewinne», 2 – «0 – 2% Gewinn», 3- «3 – 5% Gewinn», 4 – «6 – 10% Gewinn», 5 - «Über 10% Gewinn»	-	2.92	1.28
Subjektiver Markterfolg (α=0.85) **Marktposition (**1 -trifft nicht zu» bis 5- «trifft sehr zu») (α=0.77) Unsere Marktposition in der Branche ist hervorragend. Mit unseren Innovationen besitzen wir einen grossen Wettbewerbsvorteil. Unsere Reputation ist höher als die von anderen Organisationen in unserer Branche. **Wachstum (**1 -trifft nicht zu» bis 5- «trifft sehr zu») (α=0.77) Wir sind in den letzten Jahren schneller als unser Markt und unsere Wettbewerber gewachsen. In den letzten Jahren haben sich viele neue Optionen für zusätzliche Leistungsangebote ergeben.	**0.81** **0.76** 	 3.94 3.15 3.21 2.15 2.48	 0.93 1.25 1.09 1.23 1.22
Genossenschafter-Zufriedenheit (1 -trifft nicht zu» bis 5- «trifft sehr zu») Die Zufriedenheit der Mitglieder ist ausserordentlich hoch.	-	4.34	0.66
Soziale/ökologische Zielerreichung (1 -trifft nicht zu» bis 5- «trifft sehr zu») (α=0.64) Unsere ökologischen Standards erreichen wir ausgezeichnet. Wir schaffen es immer, unsere sozialen Standards zu halten.	 0.67 0.76	 3.95 3.55	 0.82 0.87
Unternehmertum			
Unternehmerische Orientierung[2] (EO) (1 -7) (α=0.76) **Innovativität** (α=0.72) Wir legen besonderes Gewicht auf die Neu- oder Weiterentwicklung in unseren Produkten/Dienstleistungen. (INN1) In den letzten fünf Jahren haben wir viele Veränderungen an unseren Produkten/ Dienst-leistungen vorgenommen. (INN2) Es gab in den letzten fünf Jahren grundlegende und weitreichende Veränderungen in unseren Produkten/Dienstleistungen. (INN3)	 **0.92** 0.75 0.73	 3.28 3.45 3.16	 1.88 2.15 2.04
Risikobereitschaft (1 -7) (α=0.59) Wir bevorzugen Projekte mit besonders hohen Erträgen, auch wenn sie mit grossen Risiken verbunden sind. (RSK1) Wir sind überzeugt, dass es in unserer Branche notwendig ist, seine Ziele mutig und in grossen Schritten zu verfolgen. (RSK2) In einer unsicheren Entscheidungslage wagen wir etwas, damit wir hinterher auch grosse Erfolge erzielen können. (RSK3)	**0.71** 0.78 0.55	 2.35 3.18 3.05	 1.34 1.74 1.52
Proaktivität intern (1 -7) (α=0.68) Typischerweise reagieren wir auf Anliegen unserer Mitglieder. / Typischerweise starten wir Aktivitäten, mit denen wir dann auf unsere Mitglieder zugehen. (SPRO1)	**0.68** 0.63	 3.61	 1.93

Ohne Auftrag von unseren Mitgliedern verändern wir unser Leistungsangebot nicht. / Auch ohne Auftrag von unseren Mitgliedern machen wir häufig Vorschläge für neue oder veränderte Leistungen. (SPRO2)	0.80	3.82	2.08
Gemeinschaftliche unternehmerische Mobilisierung (α=0.93) Finden in Ihrer Organisation immer wieder Mitarbeitertreffen statt, bei denen wichtige Fragen gemeinschaftlich diskutiert und entschieden werden? Diese Treffen finden vor allem dafür statt, dass wir… **(**1 –«trifft nicht zu» 5- «trifft sehr zu»)			
…wichtige Innovationen in unseren Produkten/DL realisieren können. (GEM1)	0.93	2.08	1.46
…zukünftige Erwartungen unserer Mitglieder erkennen und erfüllen. (SGEM2)	0.96	2.18	1.49
…uns gegenseitig darin bestärken, grössere Risiken einzugehen. (GEM3)	0.61	1.42	0.89
…unsere Mitarbeiter neue Impulse bekommen und Initiativen starten können. (GEM4)	0.89	1.98	1.39
…in unserem Umfeld kämpferisch und durchsetzungsstark auftreten. (SGEM5)	0.92	1.93	1.34
Unternehmerische Kooperation Wir meistern Herausforderung alleine «1» – Wir suchen Zusammenarbeit mit Kooperationspartnern «7»		3.48	1.89
Kontrollvariablen			
Wettbewerbsintensität (Index aus Anzahl Wettbewerber und subjektiver Wettbewerbsintensität (0 – 42)		3.82	6.90
Kantonales BIP pro Kopf (log)		4.93	0.14
Statistische Stadt (DEGRUBA) (dummy)		0.59	
Kantonale Unterstützung WBG (Ja: weitergehend als nationale Unterstützung))		0.28	
Grösse (log Umsatz)		5.62	0.94
Verzinsung der Genossenschaftsanteile vorgesehen (dummy)		0.36	
Relative Bedeutung wirtschaftliche Ziele (in %)		36.91	30.28
Relative Bedeutung soziale, ökologische oder Ziele für die Allgemeinheit (in %)		25.61	24.76
Relative Bedeutung Ziele der Genossenschafter (in %)		37.77	30.32
Partizipation Genossenschafter: Einbezug der Genossenschafter bei wichtigen Entscheidungen (1- nur GV – 4 immer)		2.28	1.15

[1] Die Faktorladungen beziehen sich auf das Messmodell nach Ausschluss einzelner Items

[2] Es wurden jeweils gegenläufige Statements vorgelegt (vgl. Covin/Slevin Scale (1989) hier ist aus Platzgründen nur das positive Statement von INN, RSK aufgeführt.

Tab. 4: Messgrössen und deskriptive Statistik (Quelle: eigene Berechnung und Darstellung)

Tab. 5: Ergebnisse Strukturmodell, (Quelle: eigene Berechnung und Darstellung)

Variablen	**Modell 1 alle**	**Modell 2a Wirtschaftl. Zieldominanz**	**Modell 2b Nicht-finanzielle Zieldominanz**
→ ***Markterfolg***			
EO	0.50** (0.009)	0.433* (0.044)	0.66* (0.048)
GEM	0.02 (0.84)	0.16 (0.20)	-0.08 (0.531)
KOP	-0.27** (0.003)	-0.20 (0.15)	-0.41* (0.022)
Sig. KV:			
BIP Kanton	-0.24* (0.033)		
Kantonale Förderung (Ja)	0.24* (0.014)		
Grösse (log Umsatz)	0.20* (0.037)	0.28* (0.03)	
Finanzielle Mission	0.19* (0.027)		
Partizipation Genossenschafter	0.22* (0.008)		0.27* (0.026)
→ ***Profitabilität***			
EO	0.26* (0.021)	0.30* (0.029)	0.36 (0.118)
GEM	-0.10 (0.21)	-0.14 (0.11)	-0.02 (0.865)
KOP	-0.05 (0.53)	0.04 (0.73)	-0.19 (0.290)
Sig. KV:			
BIP Kanton	-0.18* (0.035)		-0.25* (0.042)
Kantonale Förderung (Ja)		-0.19* (0.017)	0.26* (0.038)
Verzinsung (Ja)	0.24* (0.001)	0.29** (0.002)	0.28** (0.002)
Finanzielle Mission			0.20* (0.039)
Soziale/ökologische Mission			0.19* (0.015)
→ ***Mitglieder-Zufriedenheit***			
EO	0.06 (0.52)	0.02 (0.88)	0.25 (0.19)
GEM	0.05 (0.47)	0.11 (0.31)	0.05 (0.65)
KOP	-0.14 (0.075)	-0.20 (0.053)	-0.13 (0.36)
Sig. KV:	-	-	-
→ ***Soziale/ökologische Zielerreichung***			
EO	0.15 (0.24)	0.05 (0.76))	0.43 (0.089)
GEM	0.08 (0.38)	0.27* (0.038)	- 0.07 (0.52)
KOP	-0.14 (0.12)	-0.05 (0.68)	-0.40* (0.018)
Sig. KV:			
BIP Kanton		-0.52* (0.023)	
Kantonale Förderung (Ja)		0.35* (0.041)	
→ ***Unternehmerische Orientierung (EO)***			
Gemeinschaftliche Mobilisierung (GEM)	0.20* (0.032)	0.19 (0.128)	0.13 (0.36)
Unternehmerische Kooperation (KOP)	0.32** (0.003)	0.27 (0.052)	0.41 (0.095)
Sig. KV	-	-	-
N	222	109	107
X^2	336.411	486.052	354.585
Df.	233	286	233
CFI	0.935	0.831	0.844
SRMR	0.063	0.079	0.091

Standardisierte Koeffizienten: * ($p < 0.05$), ** ($p<0.01$)

3 Paper 2a: Determinants of entrepreneurial orientation in cooperatives: the interaction between organizational and contextual factors

Löffel, U. (2023)

Determinants of entrepreneurial orientation in cooperatives: the interaction between organizational and contextual factors

Entrepreneurial Orientation (EO) is vital for the economic performance of cooperatives. However, research on cooperatives has yet to explore how EO depends on organizational and contextual factors. This study theoretically and empirically examines the relationship between organizational resources, organizational culture, and organizational structure of cooperatives and EO. In addition, the impact of environmental hostility, dynamism, and munificence and the interrelation between organizational and contextual factors and EO is assessed. The results of a survey of 730 Swiss cooperatives (mainly SMEs) reveal that elements of the cooperative business model together explain some variance of EO, with growth strategy,and the mobilisation of internal- and external resources being the most important determinants. Furthermore, the results show that environmental hostility, dynamism, and munificence affect EO and moderate the relationship between some elements of the cooperative business model and EO. The results contribute to the research question of how cooperatives become more entrepreneurial by adapting elements of their business model in different environmental contexts.

Ueli Löffel

Ueli Löffel* (ueli.loeffel@unifr.ch)

*Institute for Research on Management of Associations, Foundations and Cooperatives, University of Fribourg (CH), Bd de Pérolles 90, 1700 Fribourg, Switzerland

1. Introduction

Cooperatives have a long-lasting history and play a non-neglectable role in different economic sectors. Worldwide, the 300 most important cooperatives had a turnover of 2.180 billion USD and 280 million jobs in 2019 (ICA, 2021). Next to the economic importance, they are also seen as a means for a sustainable economy and to reach the 2030 SDGs (UN, 2021), including improving living and working conditions and providing services and infrastructure in underdeveloped areas (ILO, 2021).

However, it is a long-lasting debate on how cooperatives manage to be innovative and entrepreneurial and how they manage to perform in economic niches and direct competition with other organizational forms (Berti & Pitelis, 2022; Boone & Özcan, 2016; Mazzarol et al., 2018).

An entrepreneurial orientation (EO) is seen as a vital feature in reaching the financial performance objectives of cooperatives (Guzmán et al., 2020; Kyriakopoulos et al., 2004). EO is used to transform the advantages of the cooperative business model into economic success (Guzmán et al., 2020). EO gives a counterweight to a "conservative, defensive, operation-oriented corporate culture" (Cook, 1994, p. 46). It might thereby help to overcome disadvantages that are often alleged to the cooperative business model, such as incentive problems (Jensen & Meckling, 1979; Porter & Scully, 1987; Rey & Tirole, 2007), collective decision-making costs, and the incentive to free ride (Dilger et al., 2017; Hart & Moore, 1996).

However, there is a lack of research on the antecedents of EO in cooperatives. The research proposes different antecedents of EO, such as organizational resources and competencies, organizational culture, and organizational structure (Covin & Slevin, 1991). Moreover, several of them were empirically examined, focusing on the explanatory effect of, e.g. team and management characteristics, human resource management, leadership, strategy, organizational features, and resources in the business context (Wales et al., 2011) and in the context of non-profit organizations (Stock & Erpf, 2022). In the cooperative context, a single contribution by Guzmán et al. (2020) shows that cooperative values and governance principles are related to EO. However, there is a research gap on how other elements of the cooperative business model, such as e.g. strategy, resources and organizational structure, are related to EO. We close this gap by examining the impact of different elements of the cooperative business model and EO. For this purpose, we use the conceptual business model framework for cooperatives developed

by Mazzarol et al. (2014), which describes relevant variables or *building blocks* of the cooperative business model. We examine the impact of these building blocks of the cooperative business model (such as purpose, profit formula, key resources and processes, share structure, and governance) on EO. The cooperative-specific business canvas allows for a fine-grained differentiation between cooperative types, which goes beyond other typologies based on financial industries (Birchall, 2012) or ownership and control (Chaddad & Iliopoulos, 2013) and consequently provides a broader view of the determinants of EO in cooperatives.

Furthermore, there is a research gap on the relationship between the environment and EO in the cooperative context. Empirical studies extensively researched the impact of environmental hostility, dynamism, and munificence on the EO and performance of SMEs (Rosenbusch et al., 2013; Wiklund & Shepherd, 2005). Adapting to the environment is increasingly important for cooperatives because they operate in markets and compete with other organizations (Mazzarol et al., 2014). Furthermore, increasing environmental dynamisms poses a challenge not only to SMEs but also to cooperatives' development. We address this research gap by examining the influence of environmental hostility, dynamism, and munificence on EO and close this research gap for cooperatives. Moreover, we examine how structural elements of the business model and the environmental variables interrelate.

The paper contributes to the research question of how entrepreneurial orientation is determined by the cooperative business model and how the environment moderates the relation. It shows that cooperatives can adjust internal variables to increase the EO level, which is vital for the performance of cooperatives (Guzmán et al., 2020; Kyriakopoulos et al., 2004). It expands existing knowledge on the relationship between governance and EO (Guzmán et al., 2020) by including other cooperative business model elements and assessing them simultaneously. Secondly, it shows that the economic environment affects EO similarly to SMEs, suggesting the usefulness of the EO construct in different environmental settings. Third, by examining the interrelation between structural elements and the environment we answer the call for more practitioner oriented research by showing how the elements can be adjusted in different environmental contexts.

2. Theoretical framework

2.1 Attributes of the cooperative business model

Different attempts describe the elements of cooperative business models and distinguish different cooperative types. While Birchall (2012) proposes a typology based on the type of ownership and economic industry, others like Chaddad and Iliopoulos (2013) propose a more sophisticated typology based on ownership and control or share structure, which also allows addressing questions related to performance, efficiency, and innovativeness of cooperative business models. Based on the latter approach, Kyriakopoulos et al. (2004) examine the impact of entrepreneurial orientation and different structural elements on market orientation and performance. Similarly, Benos et al. (2016) assess both the impact of structural attributes and strategic elements (market orientation) on the performance of agricultural marketing cooperatives. However, the interrelation between structural elements and entrepreneurial orientation is not yet assessed.

In addition to structural attributes, there might be other elements of the cooperative business model, such as principles and values, resources, and processes, potentially related to entrepreneurial orientation. Guzmán et al. (2020) show that cooperative values or governance principles (democratic member control, member economic participation, education, cooperation, and concern for community) defined by the ICA positively affect EO. They suggest potential mechanisms for how governance principles might affect EO indirectly through HRM practices, managerial capabilities, cooperation with other organizations, and concern for the community. Furthermore, there is a research gap on how structural attributes, values, and human capital affect EO simultaneously.

The cooperative-specific *business canvas* (Mazzarol et al., 2018; Mazzarol et al., 2014) is an integrated framework to assess the impact of different cooperative-specific variables on the performance and efficiency of the cooperative business model. The business canvas includes mission and strategy, organizational resources and processes, governance, and organizational structure. It can be used to analyze existing business models or develop new ones from scratch by addressing common structural problems such as economic disincentives and coordination problems (Fama & Jensen, 1983; Hart & Moore, 1996; Jensen & Meckling, 1979). By including different aspects of the cooperative business model, the framework allows assessing structural attributes as well as other elements of the cooperative business model together

The framework is built along several decision-making steps which have to be considered when designing a cooperative and also help to analyze whether it is constructed sustainably and efficiently: (1) set the purpose of the cooperative (meeting the member's needs), (2) articulate the value proposition (maximize members benefits), (3) identify the market segments (target areas of greatest member needs), (4) define the value chain configuration (suppliers and or customers are members and owner of the firm), (5) estimate cost and profit potential (offer higher prices to suppliers and lower prices to customers), (6) define the position in the value chain (block substitution threats and form strategic partnerships within the co-op membership, (7) formulate a competitive strategy (offer members best value), and finally (8) evaluate performance (economic and social value).

Based on these decision-making steps, Mazzarol et al. (2014) propose the main building blocks of the business canvas as a conceptual model for the enterprise-level analysis: the *purpose of the cooperative,* which is mainly enshrined in the cooperative constitution and encompasses either financial or non-financial self-help for cooperative members or addressing social or ecological goals. The *profit formula* comprises the revenue model, the cost function, and the distribution of the profits. *Key resources* include core competencies which refer to knowledge and skills to run the cooperative efficiently, physical assets (financial and human capital and other tangible resources), and the ability to form a strategic network with partners. *Key processes* to deliver the benefits to its members. *Share structure* defines if and how surpluses are distributed in cooperatives and how this is dependent on voting rights. *The governance of a cooperative* includes the structure of the board, the interactions between the board, management team, and members, and the inclusion and mobilization of members into the decision-making process.

<TABLE 1 >: Business canvas by Mazzarol et al. (2014) (slightly adapted)

Pillar	Building Blocks	Description
Purpose and strategy	Member Value Proposition (MVP)	A cooperative's strategic reason for existing and the offer of value that it makes to members.
	Target Members	The choice of members and of narrow or broad membership
Profit formula	Cost Structure	Monetary consequences of the means employed in the business model
	Revenue Model	How the cooperative makes money through revenue flows
	Profit distribution	How the profits are distributed to members
Key resources	Core competencies	Competencies necessary to execute the cooperative business model
	Physical assets	Financial, human, and tangible assets is required in order to achieve the purpose
	Partner Networks	Network of co-operative agreements with other organisations
Key processes	Distribution channel	Means of coop to get in touch with members
	Relationship	Links between coop and its members

	Value configuration	Arrangement of activities and resources
Share structure	Ownership rights	Arrangements for distribution of share capital within the coop
	Voting rights	Relationship between share capital ownership and ownership rights
Governance	Member engagement	Arrangement for ensuring that member is engaged in the governance of the coop

2.2. The regulatory environment of Swiss cooperatives

Cooperatives are embedded in a social and regulatory environment that restricts the business model's degrees of freedom. In Europe, different legal frameworks exist, which can be explained by the cooperative history or legal developments of countries.

Across European legislation, cooperatives' purpose focuses on members' economic, social and cultural interests. These goals have to be equally crucial, while in some countries (Germany, Netherlands, Poland), the economic interest of members stand in the first place while other goals are secondary (CooperativesEurope, 2021). For Switzerland, similar to Norway, the purpose is defined as the "promotion of economic interests" but its also for cooperatives to pursue non-profit objectives.

Regarding membership, the general principle in the legislation of different European countries (including Switzerland) is open membership but with no obligation to accept the members. Members' refusal needs to be well justified or related to the purpose of cooperatives. Swiss cooperatives based on the statutes may, and in compliance with the principle of non-closed membership, make more detailed provisions on admission, but these should not make the admission excessively difficult. The same holds for member exit, where most countries follow the principle of free exit. Some countries have restrictions regarding the timing of the withdrawal or the payment of exit fees (Netherlands) (CooperativesEurope, 2021). Switzerland's cooperatives might demand the payment of exit fees and even impose further restrictions like an exit ban for a maximum of five years. However, this is not to be regarded as absolute and must not stand in the way of the unrestricted right to leave the cooperative. Instead, in this case, a redemption sum must be paid.

Concerning the revenue model, Swiss cooperatives, similar to cooperatives in other European countries, are free to undertake any economic activity but are restricted in some areas, for example, banking, because of restrictions on specific financial instruments. Concerning transactions with non-members, although in most countries in principle permitted, some countries restrict non-member transactions so that these do not become the primary source of income for the cooperative. Other countries like Switzerland are more liberal concerning non-member transactions and do not impose restrictions.

In general, the allocation of profits to members is allowed in Switzerland, similar to other countries. The allocation of profits might be restricted with the purpose of forming a legal reserve; these restrictions usually apply until a particular share of the capital is reached. Profits or patronage refunds are mainly redistributed proportionally to the transactions or the use of cooperative services/goods of members. In Switzerland, profits are reinvested into the cooperative unless the statutes provide the distribution to members. Furthermore, the interest on shares is not allowed to be higher than long-term bond yields on the market.

Concerning voting rights, the principle in Switzerland is one man- one vote, regardless of the invested capital. The exception to this rule is delegation at the general assembly if the cooperative has more than 1000 members (maximum of 9 to 1 vote). Furthermore, cooperatives with more than 300 members or when the majority of members are cooperatives, are free to transfer decision-making powers to a delegates' meeting. The delegates usually have one vote unless the statutes provide otherwise.

In comparison, the Swiss legal framework can be regarded as more or less comparable to the framework of other countries, although it might be regarded as more liberal because fewer issues are treated in the law. Swiss cooperatives, therefore, have degrees of freedom: How the different goals (economic, social, member) are balanced: How key resources are used and key processes defined; if there is an economic incentive to invest through higher interest rates with the result of more incentives; how close members are included in the decision-making process; whether users are restricted to members and to what extent third-party users can benefit from the proposed value; if users and members pay the same price or it is differentiated to prevent free-riding; if dividends are paid or reinvested.

They are, therefore, free to combine structural, managerial, and governance elements to a certain extent to achieve their mission, overcome structural issues, and use the advantages of their business model. Dependent on the degrees of freedom, we analyzed the relationship between the elements of the business model and EO.

2.3 Entrepreneurial orientation (EO)

EO aims at capturing the nature of an entrepreneurial firms management and organizational culture. The initial unidimensional measure with strategic aspects, managerial practices, and firm behaviour contains the dimensions of *innovativeness, proactiveness, and risk-taking* (Miller, 1983). It is mainly used with the operationalization of Covin and Slevin (1989) (Rauch et al., 2009).

In the scientific community, variations of the EO construct evolved: multidimensional, with the additional dimension of competitive aggressiveness and autonomy (Lumpkin & Dess, 1996), mixed models with a separation of risk-taking from the other dimension of EO (Anderson et al., 2015) and adaptations of the scale to the NPO-sector (Kraus et al., 2017; Lurtz & Kreutzer, 2017). The latter results from ongoing debates about the nature of social entrepreneurship and the implications for the EO scale. It implies different questions like the optimal combination of innovativeness, risk-taking, proactiveness, and the optimal level of risk-taking (see Morris et al. (2020) for the debate). Although cooperatives can be regarded as a subset of social enterprises (Defourny & Nyssens, 2008; Gonin & Gachet, 2014), they have unique futures like member and market orientation (hybridity) and democratic governance. There are no adaptations of the EO scale to cooperatives, and there are only two contributions which refer to the scale developed by Deshpandé et al. (1993) (Kyriakopoulos et al., 2004) as well as Covin and Slevin (1989) (Guzmán et al., 2020).

We believe that different necessary adaptations must be made to apply the construct of Covin and Slevin (1989) to the cooperative context. The first is that the measure of EO on the top management level (Covin & Slevin, 1989; Lumpkin & Dess, 1996) does not fit the cooperative context because of the democratic decision-making mechanisms with small teams and horizontal hierarchies. We, therefore, ask for EO on the firm level rather than at the top management level. The second is the measure of proactivity. Lumpkin and Dess (1996) argue that a proactive organization takes the initiative, seizes market opportunities, and actively shapes the field of activity, thus influencing trends or even creating demand.

Although most cooperatives are oriented towards members *and* external markets and compete with other organizations, some cooperatives (mostly in the infrastructure and housing sector) are mainly oriented towards their members. Those organizations' members are the most crucial reference point, and external markets or competitors are less critical.

In our view, proactivity in self-help cooperatives, primarily member-oriented and inward-looking, is demonstrated by the fact that they actively shape the relationship with their cooperative members and take the initiative. They do this by actively approaching members, identifying needs, and offering services and products before members demand them. In doing so, they create added value for members and gain market share indirectly through a good reputation and expanding services. It is, therefore, not so important to be the first in the market but to offer good services to members before they actively

demand it. This view is also in line with Morris et al. (2011), who propose that proactiveness also entails the initiation of change relative to the expectations of stakeholders.

SMEs significantly benefit from EO (Rauch et al., 2009; Strobl et al., 2022). Mainly because, compared to large firms, they focus on a differentiation strategy and generate a comparative advantage with an EO, giving them a more dynamic, flexible posture (Wiklund, 1999). In competition similar to SMEs, cooperatives must rely on a differentiation strategy (Mazzarol et al., 2014); therefore, EO could be equally beneficial for cooperatives. There are only two contributions on EO and the performance of cooperatives in the agricultural sector (Kyriakopoulos et al., 2004) and a cross-sectoral study on worker cooperatives (Guzmán et al., 2020), which both show a positive relation to financial performance. Research on the antecedents of EO in the cooperative context does not exist except for the study of Guzmán et al. (2020), which finds a positive effect of the cooperative governance principles and EO. In contrast, for SMEs, there exist a variety of literature that deals with the effect of leadership (Strobl et al., 2022), ownership (Deb & Wiklund, 2017), attitudes and resources (Wiklund et al., 2009).

3. Hypotheses

3.1 Cooperative business model and EO

There are different channels through which elements of the cooperative business model might affect the entrepreneurial orientation, such as the choice of strategy and competitive tactics, organizational resources and competencies, organizational culture, and organizational structure (Covin & Slevin, 1991). Building an integrative model of small business growth, Wiklund et al. (2009) propose several determinants of EO, such as firms' resources (financial & human capital) and network resources (internal and external network). In the cooperative business model, different additional characteristics potentially affect EO. To assess the different channels through which organizational variables might affect the EO of a cooperative simultaneously, we will use the framework of the cooperative business canvas (Mazzarol et al., 2014). Although it could be argued that some of the elements are already an expression of EO, we argue that they are “stickier” than an entrepreneurial orientation because they are hard to change within existing cooperatives and only with the acceptance of a majority of members. At the same time, EO, understood as a strategic element, is easier to change.

3.1.1 Relationship between purpose, strategy and EO

The purpose defines which needs are addressed by the members and indicates the nature of a cooperative. Depending on the cooperative, the purpose reflects the economic or social needs of members or a local community or region. In European countries, the purpose is limited by law; cooperatives must promote the economic interests of their members or non-profit objectives. It is proposed that business goals serve the objective of members or the community (Mazzarol et al., 2018) and that the management must carefully balance the different objectives to prevent mission drift and degeneration (Michaud & Audebrand, 2022).

Nevertheless, pursuing business goals is vital to surviving in competitive markets and reaching growth targets. This applies to cooperatives acting in markets and competing with other organizations and therefore have to invest resources. A high priority of financial or market goals helps cooperatives to set the right priorities and use resources for entrepreneurial activities such as market screening and research, development of new services, and investments in new and risky projects to gain market share.

A high priority of social goals might push the cooperative to focus mainly on fulfilling these goals and not on market-focussed entrepreneurial objectives. In this case, resources are directly invested in social or ecological projects rather than in EO activities. On the other hand, a social objective might push the cooperative to expand to address the mission and increase its entrepreneurial posture. The social purpose could be an additional driver to expand and act entrepreneurial(Morris et al., 2011). Innovativeness could help to improve the quality and quantity of offered social or ecological projects; process

innovations could make the production or delivery of products/services more environmentally efficient and positively affect mission achievement. Proactiveness could help to find new ways of funding projects with social and ecological objectives or help to detect new social or environmental challenges which can be addressed. Risk-taking is needed to realize new projects.

Taking high risks can negatively affect the achievement of social missions. This is problematic as an investment in risky projects is not necessarily compensated by higher rewards, as is the case in the business context. Research on the relationship between EO and social performance shows a positive relationship between EO and mission achievement (Stock & Erpf, 2022). Researching the subdimensions of EO, it is proposed that innovativeness and proactiveness are positively related to social performance, whereas there is a mixed result for risk-taking (Alarifi et al., 2019).

Cooperatives focusing on growth and putting a substantial weight on financial goals and cooperatives that mainly pursue a social and ecological mission might benefit from an entrepreneurial strategy such as EO. In contrast, traditional cooperatives, mainly oriented towards members focused on internal goals, might profit to a lesser extent from an entrepreneurial orientation but from other strategic orientations that maximize their members' value.

We, therefore, suggest that;

Hypothesis 1a: The relevance of financial goals (compared to member objectives) is positively related to EO.

Hypothesis 1b: The relevance of social objectives is positively related to EO.

Another essential feature of the strategy is whether a cooperative is growth-oriented. Some authors see growth orientation as a part of an entrepreneurial management (Brown et al., 2001; Stevenson & Jarillo, 2007). Others value an entrepreneurial orientation as fundamental if an organization aims to expand its business (Covin & Slevin, 1991). Concerning the subdimensions of EO, proactiveness allows firms to detect market opportunities and exploit them before other firms do. Innovativeness help to transform the information advantages through market screening in activities or products, which increases market shares. Process innovations help to increase the quality of products or production efficiency. Risk-taking is necessary to finance innovations and projects (Wiklund et al., 2009). Several empirical studies confirm the link between EO and growth(Moreno & Casillas, 2008; Rauch et al., 2009). Empirically, the positive EO-growth relation is also shown for the worker (Guzmán et al., 2020) and housing cooperatives (Löffel & Gmür, 2022).

Reviewing the literature, an entrepreneurial orientation is closely related to growth. It seems thus rational that cooperatives with a growth orientation invest in an EO because of possible gains (Covin & Slevin, 1989). Additionally, a growth strategy could give cooperatives the legitimacy to focus on long-term investments rather than on short-term profits for members. Because of the horizon problem, members tend to favour short-term profits over long-term growth. If growth is part of the strategic orientation, members could be convinced to restain from consumption, and the cooperative can undertake the necessary investments in EO. In contrast, an entrepreneurial orientation might not be helpful for organizations that are not oriented toward an external market and have no growth objective. In this case, it would be more rational to focus on stability (Covin & Slevin, 1991; Stevenson & Jarillo, 2007) and, in the cooperative context maximizing the members' value through kickbacks, rebates or better products.

Hypothesis 1c: Organizations with a growth objective have higher EO levels than otherwise.

3.1.2 Profit formula and EO

According to the business canvas, the profit formula defines how the cooperative most efficiently achieves their financial goals. The profit formula includes the products which are offered, if the customers are members, third-party users, or to both. Moreover the pricing strategy is crucial for cooperatives. If the membership is open, it is suggested that non-members pay higher prices or members

receive rebates in order to protect the interests of cooperative members and prevent free-riding (Dilger et al., 2017)

Cooperatives that act in external markets must know the preferences of their members and third-party users. While members' preferences might be easier to detect, screening external markets might be more challenging because they are dynamic and competitive. Therefore, it is suggested that cooperatives with third-party users have higher levels of proactiveness. Serving members and third-party users demands higher levels of innovativeness because services and products have to serve different customer groups, and external customers might be more demanding than members. Offering products and services to members and customers also includes higher risks because external markets are related to higher uncertainty than internal markets (Dilger et al., 2017). We, therefore, propose that balancing the interests of members, on the one hand, combined with a strong focus on external markets, on the other hand, demands higher entrepreneurial skills, and EO is, therefore, higher in cooperatives with third-party users compared to those which serve only members.

Third-party service might also affect EO through a higher revenue stream. These revenues could be reinvested in an EO. On the other hand, offering services to external users might undermine the advantage of membership with negative effects on the revenues from members. Differentiated pricing for members and non-members may solve this problem and lead to higher revenues. Furthermore, differentiated pricing also demands higher entrepreneurial skills:

Hypothesis 2a: Cooperatives with third-party services have higher EO levels.

Hypothesis 2b: EO levels are higher if the pricing strategy is differentiated between members and non-members.

Cooperatives which pay dividends might attract more members to invest and increase cooperative equity. The availability of resources offers degrees of freedom which can be used to invest in EO. At the same time, different types of members also bear drawbacks. Member heterogeneity could increase and result in higher decision-making and monitoring costs for cooperatives (Dilger et al., 2017). Furthermore, there is a trade-off between long-term investment in EO and short-term profits (Wiklund, 1999). Heterogeneous membership aggravates the horizon problem and could make long-term investments more difficult. We, therefore, suggest that:

Hypothesis 2c: Cooperatives with higher dividend payments have lower EO levels.

3.1.3 Key resources and EO

Resources are required to run the cooperative and are a prerequisite for an entrepreneurial posture (Covin & Slevin, 1991). Resources consist of intangible (core competencies, knowledge, skills), financial (cash, equity), human resources and other tangible assets (equipment, business systems) (Mazzarol et al., 2014).

Networking resources, such as intra-personal relations, are essential at the management level because cohesion, shared leadership, and common vision shape the processes and abilities of the whole organization (Wiklund et al., 2009). The sharing of explicit and implicit knowledge has been identified as an essential firm-level antecedent of EO (De Clercq et al., 2015). Intensive intra-firm exchange brings complementary knowledge together and increases the collective knowledge breadth and depth, resulting in entrepreneurial opportunities (De Clercq et al., 2013). Furthermore, different views on the strength and weaknesses of opportunities result in better entrepreneurial outcomes (De Clercq et al., 2015).

Including the workforce in discussions and decisions related to entrepreneurial affairs strengthens the interdependence of individual tasks. Furthermore, economic participation through ownership is an additional driver for sharing knowledge and finding entrepreneurial solutions (De Clercq et al., 2015). Another amplifying factor is cooperatives' collective identity and shared inherent values, which lead to workforce engagement and commitment (Bastida et al., 2021) and increase EO (De Clercq et al., 2010).

In the cooperative context, the positive effect of the above-described collective action is confirmed by Muñoz et al. (2020), who find evidence in Chilean cooperatives that collective action of a skilled, motivated, and committed workforce lead to innovation if there is an innovation orientation and a suiting participatory leadership style. Furthermore, Guzmán et al. (2020) show that cooperative principles which are related to the above-described antecedents of collective activity, such as "education" and "economic and democratic participation", are related to EO. Therefore, I argue that the *collective entrepreneurial capacity,* defined as the workforce's collective engagement in discussions and decisions in entrepreneurial matters, positively relates to the cooperatives' EO.

Hypothesis 3a: The collective entrepreneurial capacity is positively related to EO.

Human capital, the sum of the skills, knowledge and experience of the management and the workforce, is an essential resource for a firm's success and EO (Covin & Slevin, 1989; Wiklund et al., 2009). The skillset of the cooperative workforce is essential for technical, process, or managerial innovation (Rodríguez & Guzmán, 2013). Proactive screening of markets and finding opportunities is only possible with a trained and motivated workforce. Research also shows that an educated workforce can better deal with risks and, therefore, is more willing to take risks (Guzmán et al., 2020). EO is, therefore, higher with an educated and experienced workforce (Padilla-Meléndez et al., 2014) and the according management capabilities (Basterretxea & Martínez, 2012).

On the other hand, the number of paid employees is a proxy for the quantity of human capital. Organizations with a higher number of employees have slack resources and therefore more degrees of freedom to invest in entrepreneurial activities. For example, screening internal and external markets or engaging in process innovations are time-consuming and compete with other necessary tasks. This is also reflected by different studies where size (in fte) is positively related to EO (Wiklund & Shepherd, 2005). Quality and quantity both have thus impact on entrepreneurial orientation, and we suggest that:

Hypothesis 3b: Available human resources are positively related to EO.

The degree of *availability of a resource* is vital for entrepreneurial actions and behaviours because they are resource intense (Wiklund et al., 2009). *Financial resources* are essential because they can easily be converted into other types of resources. They allow cooperatives to explore different strategies and options, resulting in process innovations or creating new products and implementing them before others do (Wiklund et al., 2009). Investments in digital infrastructure or research and development foster innovativeness. Screening internal and external markets needs different support systems, which are costly. Furthermore, a precondition to engaging in uncertain projects and taking risks is the availability of resources, and several studies show a positive relationship between firms' financial resources and EO (Hughes et al., 2015; Wiklund et al., 2009).

Next to resources which are already available and could be reorganized if necessary, *access* to new resources is vital for SMEs (Wiklund & Shepherd, 2005). For cooperatives, this is of particular importance because they face difficulties raising enough capital (Ben-Ner, 1988; Novkovic, 2007), especially for long-term investments (Li et al., 2015): the "common property" problem encourages members to free-ride on necessary investments, and the "horizon problem" that impatient members prefer short-term investments over long-term financing. Cooperatives who manage to attract enough financial capital thus have more entrepreneurial degrees of freedom and potentially higher EO:

Hypotheses 3d &e: The availability of existing financial resources (H1d) and access to new capital (H1e) positively relate to EO.

Cooperatives can use *inter-organizational cooperation* to share resources (Menzani & Zamagni, 2010) and for entrepreneurial actions. Cook and Plunkett (2006) argue that cooperatives use networks to share knowledge and information, encourage innovation, seek opportunities, and undertake risky projects under uncertainty (e.g., collectively investing in facilities or intangible assets such as brand names).

In the context of SMEs, results show a positive relationship between the network of small business managers and EO (Wiklund et al., 2009) and between cooperation with other organizations and EO (García-Villaverde et al., 2018; Kusa et al., 2019). In the context of cooperatives, Guzmán et al. (2020) find that cooperation with other cooperatives is positively related to EO. Inter-organizational cooperation is also related to the subdimensions of EO: Novkovic (2007) propose that cooperatives with high R&D intensity can compensate for their difficulties in attracting resources necessary for innovation by creating networks and transferring knowledge and technology within these networks. Empirically, this is partially confirmed by Basterretxea and Martínez (2012) results, that industrial cooperatives more often use collaboration with technology centres and universities than investor-owned firms. Other evidence points to the positive effect of inter-organizational cooperation on innovation for cooperatives in the agricultural (Borgen & Aarset, 2016; Fiore et al., 2020) and the manufacturing sector, where knowledge spillover from partners is vital for managerial and technological innovations (Rodríguez & Guzmán, 2013).

Hypothesis 3f: Inter-organizational cooperation is positively related to EO.

3.1.4 Share structure and EO

Cooperatives can raise equity either from direct investment from members or by retaining earnings. Direct investment is generally not attractive for cooperative members because, in most countries, revenues are usually proportional to use and voting rights are restricted. Furthermore, there are restrictions on the trading of the stocks and the distribution of profits, such as the mandatory funding of reserves. Furthermore, in Switzerland, there is a policy that the interest rates on cooperative shares are not allowed to be higher than long-term bond yields. Moreover, at the investor level, Jensen and Meckling (1979) indicate different incentive problems related to the definition of property rights in cooperatives, such as the "common property" and "horizon problem." The first emerges from the collective nature of investment at cooperative formation or a later growth or expansion stage when members prefer to benefit from investment without contributing. The second is when members are impatient, i.e., the preferred investment period is shorter than the period over which revenues are generated. Both can lead to an underinvestment in general. In addition, the "horizon problem" results in the preference for short-term over long-term investments, which are both necessary to keep the cooperative efficient and competitive (Jensen & Meckling, 1979; Porter & Scully, 1987; Rey & Tirole, 2007). This does not make it attractive for cooperative members to invest directly. Therefore cooperatives generally prefer to retain earnings for reinvestment rather than paying interest on shares (Parliament & Lerman, 1993).

Cooperatives can react to these shortcomings by restructuring the cooperative business models. Chaddad and Cook (2004) describe different approaches to how ownership and control rights can be restructured, which vary in ownership restriction, redeemability and transferability of ownership shares, distribution of profits to users or investors, and allocation mechanisms of surpluses. These adaptations affect the incentives to invest for members and non-members and increase the revenues for cooperatives. The increased revenues might offer degrees of freedom which can be used for entrepreneurial activities (Benos et al., 2016). Furthermore, the restructured ownership and incentive mechanisms similar to investor-owned firms could increase the pressure on cooperatives to increase innovativeness, risk-taking, and proactiveness.

Hypothesis 4: Cooperatives that issue interest on shares have higher EO levels.

3.1.5 Governance and EO

Ben-Ner and Gui (2003) argue that non-profit organizations typically face lower monitoring costs because their interaction with members is based on trust and altruism. For cooperatives, Dilger et al. (2017) propose that personal ties between the management and members can prevent opportunistic

behaviour because the management is "socially" punished and, therefore, lower monitoring costs. Furthermore, an active member base decides faster and lowers collective bargaining costs. This increases the possibility of taking more courageous decisions and mobilizing resources used to implement innovations. The close relationship between members and the cooperatives can be a source of innovation because the knowledge flow increases (Sánchez-Hernández & Castilla-Polo, 2021), and engaged members act as promotors of change which facilitates the implementation of innovations (Massimo & Nora, 2022). Strong relationships with members help to gain a knowledge advantage over competitors (Mazzarol et al., 2022; Talonen et al., 2016). Therefore, different qualitative studies show that close relationships with members increase cooperatives' innovativeness (Borgen & Aarset, 2016; Fiore et al., 2020). Furthermore, member participation positively affects risk-taking by increasing relational trust (Kaasa, 2009).

Hypothesis 5: Member engagement is positively related to EO.

3.2 Cooperative environment (industry rivalry, dynamism, and munificence)

3.2.1 Environmental hostility, elements of the business model, and EO

Although some cooperatives are only oriented toward their members, they also act in industries where they compete with other organizational forms, as is the case in the production, housing, infrastructure, retail, financial, and service industry. Mazzarol et al. (2014) propose Porter's five forces to analyze the industry structure of cooperatives. As such competitive or industry rivalry plays an essential role for established cooperatives, especially if markets are not regulated and competitive. In other cases, although cooperatives may dominate markets through their size, competitive rivalry might play a role in the entrance of other large-scale players. Other forces which play a role, especially in the formation of new cooperatives, are the power of buyers and suppliers, which were a reason to establish new cooperatives (Boone & Özcan, 2016; Ekberg, 2012), the threat of new market entrants and the threat of substitution because of deregulated markets as is increasingly discussed for utilities.

In the literature, there are several contributions which link industry rivalry or hostility to EO (Rosenbusch et al., 2013). It is argued that SMEs benefit from EO because it gives them a comparative advantage over larger firms with an agile, dynamic and flexible orientation (Wiklund, 1999). Competition for opportunities and resources potentially negatively affects firm performance because profit margins and strategic options decrease; firms might try to avoid ruinous price wars and diversify with new products and for new markets. Therefore EO of firms is generally higher in a hostile environment (Covin & Slevin, 1991; Miller, 1983). In a competitive environment, cooperatives could be forced to concentrate on EO to gain a competitive advantage. Other scholars argue that a hostile environment requires strategic discipline and does not allow for risk-taking with potential failure (Miller & Friesen, 1983; Wiklund et al., 2009). As a reaction, firms use tried and proven action patterns, freeze resources and cut down activities related to innovativeness, proactiveness and risk-taking to overcome external challenges, also known as treat rigidity (Kreiser et al., 2020).

A meta-analysis showed no adverse effect between environmental hostility and EO for SMEs and a positive effect for large firms, which the authors explain to the more significant availability of resources of large compared to small firms (Rosenbusch et al., 2013). More recent contributions find a negative effect of environmental hostility on EO (Deb & Wiklund, 2017), but some studies show a positive effect between hostility and EO (Laskovaia et al., 2019). A more differentiated perspective brings the two arguments together. It suggests that firms in a hostile environment have higher EO levels than other firms but that EO decreases over time within firms in hostile environments because increased competition negatively affects EO from the resource side over time (Kreiser et al., 2020).

We, therefore, propose that:

H6a: Environmental hostility is positively related to the EO of cooperatives

Environmental hostility potentially moderates the relationship between the elements of the cooperative business model and EO.

Cooperatives with a growth orientation could gain from investing in EO in a competitive environment. EO, as a dynamic, flexible orientation (Wiklund, 1999), could give them a comparative advantage because it helps to reach new customers and resources and gives an advantage over competitors. Several contributions show that EO is positively related to the growth of organizations (Rauch et al., 2009) and that an attitude towards growth also increases EO in SMEs (Wiklund et al., 2009). A competitive environment increases external pressure and could push cooperatives with a growth target to reinforce activities related to EO because the latter is a good posture to reach the growth target. They, therefore, primarily concentrate on building up EO in a hostile environment rather than serving short-term members' needs. In contrast, cooperatives without a growth target would focus on proven patterns of action and on short-term returns to members compared to long-term investments into the organization.

Because EO is resource intense, the availability of resources could lead to higher EO levels when resources are available (Wiklund & Shepherd, 2005). This problem is accentuated in a hostile environment. Therefore, it is essential to mobilize all available resources (workforce, financial and networking resources) to build an EO.

The use of internal and external networks could also relate to EO. Collective mobilization of the workforce and the use of collective knowledge could help to scan the market, share knowledge, increase entrepreneurial opportunities and lead to higher EO. The effect could be exceptionally high when competitive pressure forces the team to stick together and find solutions to react to the situation. Furthermore, involving employees through collective mobilization might be especially useful in a hostile environment because it does not need additional financial resources. Environmental hostility could also moderate the relationship between interorganizational cooperation and EO. Like internal mobilization, the threat through competitive rivalry could force cooperation partners to work together and exchange ideas and resources, increasing EO. We, therefore, propose that:

Environmental hostility strengthens the relationships between growth strategy (H6b), resources (H6c) and EO.

3.2.2 Environmental dynamism, elements of the business model, and EO

Next to industry rivalry, environmental dynamism poses another challenge to small businesses and cooperatives. Environmental dynamism refers to the uncertainty and unpredictability of future market developments (Khandwalla, 1972; Miller & Friesen, 1983). For cooperatives, the demands for certain goods can be uncertain because of changing customer preferences or as an effect of increasing competition from online commerce and services, which increases the possibility of substitution. There might also be uncertainty despite several market possibilities because opportunities are hard to detect, or the management of cooperatives lacks the skills to detect market opportunities. Market development could depend on seasonal fluctuations in agriculture with more extreme weather conditions (Mazzarol et al., 2014) or macroeconomic conditions. Environmental shocks like the Covid-19 pandemic or the war in Ukraine might increase fluctuations in demand for cooperative goods. Such a dynamic environment might negatively affect cooperatives' survival and performance, but opportunities could also emerge.

Although a dynamic environment is challenging, it offers business opportunities, and with a focus on innovation, there is an advantage compared to competitors (Miller & Friesen, 1983). In contrast, firms which do not align their strategy to a dynamic environment might lose market share and customers (Wiklund & Shepherd, 2005).

Cooperatives which focus on innovation and find solutions for the challenges proposed by the dynamic environment are potentially more successful than those that stick with their strategy and propose the same services/goods. A dynamic environment also requires proactive behaviour. It is crucial to detect

market opportunities under uncertainty by screening the market or by knowing the members' needs and responding quickly to the changing environment with innovative practices or products. An innovative and proactive approach also requires human and financial resources or time investments. These investments must be made under uncertainty; therefore, risk-taking is vital to respond to a dynamic environment. Empirical studies confirm these arguments in the context of SMEs and show that EO is positively related to environmental dynamism (Ruiz-Ortega et al., 2013; Strobl et al., 2022) and moderates the EO-performance relation (Wiklund & Shepherd, 2005).

We, therefore, propose that,

H7a: Environmental dynamism is positively related to EO of cooperatives

Cooperatives with a growth target might be more flexible and used to changing environments than those without a growth target. They are more oriented towards external markets, are used to detect market changes, and adapt to customers' needs. Because they can potentially gain higher rewards in a dynamic environment, they are ready to take more risks and invest in innovative projects resulting in higher EO levels.

The availability of resources is equally important for cooperatives in a dynamic environment because the latter is associated with a high level of uncertainty. It is therefore essential to mobilize all available resources (workforce, financial and networking resources) and invest it in EO.

The collective capacity of the workforce could reduce uncertainty by gaining different perspectives on challenges posed by the dynamic environment resulting in higher EO levels. Furthermore, a challenging environment might increase the willingness to exchange and find solutions that enforce entrepreneurial endeavours. Similarly, cooperation with the external network could reduce uncertainty and increase entrepreneurial activities. We, therefore, propose that environmental dynamism moderates the relation between elements of the cooperative structure and EO:

Environmental dynamism strengthens the relationships between growth strategy (H7b), resources (H7c) and EO.

3.2.3 Environmental munificence, elements of the business model, and EO

Environmental munificence refers to the availability of opportunities and resources. EO can best exploit opportunities such as high customer demands or idle markets: through market scanning and proactiveness, existing opportunities are detected prior to competitors. Innovativeness helps to exploit existing opportunities, which also requires investments and risk-taking (Rosenbusch et al., 2013). Indirectly the availability of resources plays an essential role in EO because the latter is resource-intense (Covin & Slevin, 1991). Cooperatives operating in munificent environments have more degrees of freedom and manage to exploit the opportunities through increasing EO (Rosenbusch et al., 2013).

Empirically a meta-analysis shows a positive effect of environmental munificence on EO for SMEs (Rosenbusch et al., 2013). An analysis of the impact of munificence on the subdimensions also showed positive correlations suggesting the importance of environmental munificence for EO (Kreiser et al., 2013).

We, therefore, propose that,

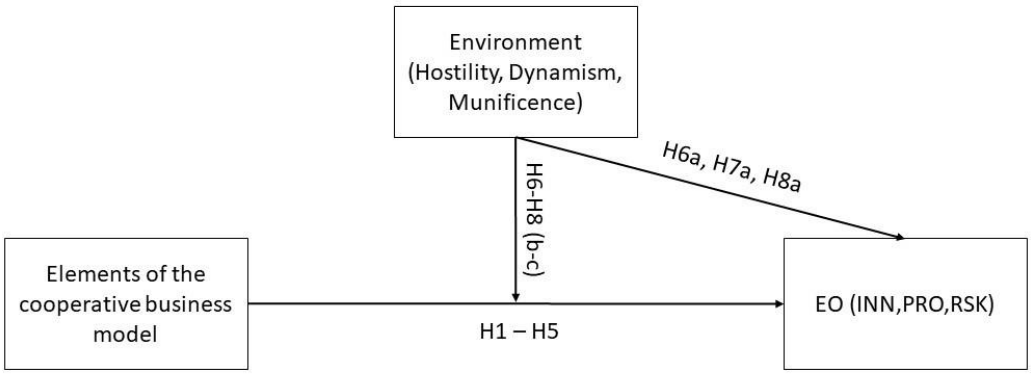
H8a: Environmental munificence is positively related to the EO of cooperatives

Expansion-oriented cooperatives could especially take advantage of available opportunities and invest in entrepreneurial activities. Because EO is resource-intense (Wiklund & Shepherd, 2005), building EO needs the availability of enough resources.

A munificent environment could also reinforce the relationship between collective entrepreneurial capacity and EO because the availability of business opportunities could make it easier to screen

markets, generate new ideas, and increase the level of risk-taking, resulting thus in higher EO levels. Cooperation with other organizations might also be more fruitful for new projects, taking risks, and proactiveness in munificent environments than otherwise. We, therefore, suggest that a munificent environment has a moderating effect between elements of the cooperative business model and EO, or:

Environmental munificence strengthens the relationships between growth strategy (H8b), resources (H6c) and EO.



<FIGURE 1>: Research model

4. Empirical strategy

4.1 Data

The total of Swiss cooperative entities with employed workers amounted to 8065 at the end of 2018.[1] Most of these are SMEs (99%), while two-thirds have less than nine full-time employees, 30% between 10 and 49, and only 4% have 50 to 249 employees.

<TABLE 2> Response rate by sector

SECTOR	**Sample share**	**Sample**	**Population***	**Response rate***
Production	13%	92	947	9.7%
Infrastructure	21%	153	1063	14.6%
Housing	29%	210	2399	8.8%
Retail Trade	13%	97	737	13.2%
Finance/Insurance	13%	96	457	21.0%
Services	11%	82	693	11.8%
TOTAL	100%	730	6296	11.6%

In the summer of 2019, we surveyed all 8154 Swiss cooperatives registered in the Swiss trade register at the end of 2017. We sent a letter including the survey plus a short link to its online version. In a second step, we collected available emails from different cooperatives by hand and sent a reminder to the remaining cooperatives in autumn 2019. The survey was developed and carried out in partnership with CooperativeSuisse,[2] an interest group and platform for social entrepreneurship. Two entrepreneurship experts first validated the survey questions, and a pretest was carried out with eight cooperatives.

[1] The statistic includes every entity which contributes to the the swiss old age and security insurance (AHV). This is only the case if the annual salary per employee exeeds 2300 CHF.
[2] Today SENSSuisse

Eight hundred thirty-nine cooperatives completed the questionnaire (45% paper and 55% online). Excluding empty returns/high amount of missings and cooperatives not operating in markets (e.g., social and political interest representation and public cooperatives), the response rate amounts to 11.6% (730 answers out of 6296 cooperatives), which is comparable to other studies in the field and considered as acceptable. To assess the share rate of different economic industries, we create six subgroups based on the General Classification of Economic Activities (NOGA). Production and housing cooperatives had a lower response rate but only slightly below 10%. Regarding regions, the response rate is higher in the German-speaking part of Switzerland (13.1%) and slightly lower in the Italian (11.6%) and French-speaking parts (9.6%) but still comparable.

The sample share differs between sectors. Cooperatives in finance (13.0% vs 7%) and infrastructure sector (21% vs 17%) are overrepresented in the sample compared to the population share, whereas production (13% compared to 15%), and housing (29% compared to 38%) were underrepresented. The lower response rates of housing cooperatives are related to the larger amount of the smaller and voluntary organization structure compared to the other sectors, which resulted in lower response rates and a higher amount of deletion because of missings. Nevertheless, the sample can be regarded as comparable to the population share, although very small and voluntary organized cooperatives are omitted.

We did a t-test within subgroups to test for a non-response bias between time and online-to-paper results. In comparing survey answers in summer 2019 to autumn 2019 and online to paper respondents, all pairwise differences of items in the sector groups were insignificant, suggesting that a systematic non-response bias is very unlikely.

4.2 Measures

4.2.1 Entrepreneurial orientation (EO)

In this study, we used the Covin & Slevin scale[3] and translated it to German, French, and Italian by slightly changing the wording to a cooperative context. Three EO experts double-checked the accuracy of the translations.

Some changes were necessary to examine the cooperative context. In contrast to the initial scale, the items were related to the organizational level rather than the firm's top management because this better suits the less hierarchical cooperative context. Furthermore, we had to consider that some cooperatives operate in economic niches and are only oriented toward members. Therefore proactiveness cannot be related to direct competitors. Therefore, we extended the proactiveness items by three additional items related to proactiveness towards the cooperative members rather than towards the leading competitors. This understanding of proactiveness embraces the definition of Lumpkin and Dess (1996) as being "active rather than passive." Furthermore, Morris et al. (2011) propose that proactiveness in the not-for-profit sector should be expanded with the relation towards main stakeholders. We measured EO as a second-order unidimensional (reflective) construct (Covin & Wales, 2012; George, 2011).

4.2.2 Elements of the cooperative business model

The purpose was measured by the self-assessed relevance of the financial mission compared to non-financial objectives of the members and social, ecological, or similar contributions. The respondents had to enter a percentage number such that the sum yielded 100%. *The growth strategy* was measured by a single dummy item where respondents could choose whether growth was a relevant target.

Concerning the building block of the *profit formula, third-party services* were assessed with a dummy variable, whether services and goods were only provided for members or if third-party users draw

[3] For the original Covin/Miller & Slevin (1989) scale see Covin & Wales (2012)

benefits out of services. The importance of third-party services was assessed by their share of yearly turnover in %. In the case of third-party services, the respondents were asked if there is *differentiated pricing* between members and non-members ("no," "yes, to a certain extent," "yes, in general"). Regarding the *share of dividends* to members, respondents had to assess how much dividends are paid to members in per cent (ranging from 0% - everything is reinvested in the cooperative, to 100% - "everything is distributed to members."

Regarding *key resources, collective entrepreneurial capacity* was measured by a filter question followed by a Likert-scaled item battery: Cooperatives were asked whether employee meetings were repeatedly held, and essential questions were collectively discussed and decided. Conditional on a positive answer and with a reflexive 7-item 5-point Likert scaled construct, we assessed whether these meetings and decisions were used for discussions and decisions related to entrepreneurial activities (i.e., to innovativeness, proactiveness, and risk-taking).

The number of employees in full-time equivalents measured the quantity of human resources. The personal expense per employee measured the quality of human resources. Although the latter is a rough proxy of education and workforce experience, it can be assumed that skilled people normally go for higher wages.

Available excess financial resources or *resource slack* were measured following Moreno and Casillas (2008) by *unused physical resources*, which were measured by the turnover of firms' assets (sales/total assets) as a measure of firms' efficiency. To control for the industry, we standardized the measure by subtracting the sector's median turnover (de Jong et al., 2021). *Available financial capital* was measured by the equity ratio (equity/total assets), which indicates an organisation's available financial resources (Moreno & Casillas, 2008). *Access to financial capita*l was measured with one item, which assessed the perceived sufficient access to capital when needed ranging from 1- not true to 5- very true.

The tendency to *inter-organizational cooperation* was measured with a single opposed statement item which asked whether organizations manage challenges alone or seek cooperation with partners when challenges arise.

To assess the *share structure, we* first measured ex-ante interest on shares by a dummy variable if the interest on shares is provided, and if yes, what nominal interest rate is issued in %.

For the building block of *governance,* we assessed *member participation/engagement* with an index of one item of the inclusion of the members beyond the mandatory general assembly (ranging from 1 - "never" to 4 – always) and to assess the attendance rate with an item the reported share of active members in %. The two items were transformed into an index ($\alpha = 0.53$, ranging from 0-1) and weighted equally.

<TABLE 3> Building blocks and measures

Pillar	**Building Blocks**	**Description**	**Regulation by Swiss law**	**Measures in our study**
Purpose	Member Value Proposition (MVP)	A cooperative's strategic reason for existing and the offer of value that it makes to members.	Restricted to "promotion of economic interests of its members" or "non-profit objective."	Relevance of economic, social and member goals.
	Target Members	The choice of members and of narrow or broad membership	Open membership	Growth strategy to assess if the cooperative wants to increase the member base.
Profit formula	Cost Structure	Monetary consequences of the means employed in the business model		Not covered
	Revenue Model	How the cooperative makes money through revenue flows		Share of third-party users/ Differentiated pricing for Members/non-members

	Profit distribution	How the profits are distributed to members	A mandatory reserve fund restricts dividends	Share of dividends redistributed to members
Key resources	Core competencies	Competencies necessary to execute the cooperative business model		Collective mobilization of the workforce
	Physical assets	Financial, human, and tangible assets is required in order to achieve the purpose		Quantity and quality of human reosurces Resource slack Access to credits
	Partner Networks	Network of co-operative agreements with other organisations		Interorganizational Cooperation
Key processes	Distribution channel	Means of coop to get in touch with members		Not analysed beyond the scope of study
	Relationship	Links between coop and its members		Member engagement
	Value configuration	Arrangement of activities and resources		
Share structure	Ownership rights	Arrangements for distribution of share capital within the coop	Interest on shares restricted by long-term bonds on the market; redeemability of shares possible if in statutes. The distribution must be enshrined in statutes and proportional to use.	Shares issued/Interest on shares
	Voting rights	Relationship between share capital ownership and ownership rights	One man, one vote. Delegation of votes (9:1) in coops with more than 1000 members at the general assembly Exception: For cooperatives with more than 300 members or mainly member cooperatives, possibility of delegates' meeting.	Not much heterogeneity and therefore not assessed
Governance	Member engagement	Arrangement for ensuring that member is engaged in the governance of the coop		Degree of member inclusion & engagement in decision-making

4.2.3 External environment of cooperatives

Environmental hostility was measured by perceived industry rivalry («In our industry, competitors leave each other alone – 1 - 7 – « There is generally tough competition in our industry) (Slater & Narver, 2000), and the number of self-reported direct competitors to capture the quantitative aspect of competition (Rosenbusch et al., 2013).

Environmental dynamism was measured by a reflective construct of three items capturing market dynamics and uncertainty (Miller & Friesen, 1983).

Environmental munificence was measured with a single item, where respondents had to state whether their relevant markets were growing, ranging from not true to very accurate (Slater & Narver, 2000).

4.2.4 Control variables

To control the external environment, we included regional geographical variables such as the *degree of urbanization* that differentiates urban, peri-urban, and rural areas (DEGRUBA). Cooperatives in urban areas generally have more entrepreneurial options for actions and a higher level of competition, which could affect the EO level. To account for *regional economic differences*, which could affect the EO level through different channels, we entered the GDP level at the regional level (NUTS-3) (FSO, 2019). To control for the effect of proximity between cooperatives which could increase the effect of cooperation with other organizations and enable more resources and, therefore, EO, we entered a variable calculating the number of cooperatives per square meter.

As organizational-specific controls, we included industry dummies and standard organizational control variables such as size (measured by the log of the number of members) and age (in log. years since founding).

5. Results

We first assessed differences in the EO level and its subdimensions because of elements/attributes of the cooperative business model. We assessed each element/attribute using ANOVA for independent samples (see 5.1). We used hierarchical regression to assess relations between the elements and the effect of environmental variables on EO (see 5.2).

5.1 Differences in EO level between cooperatives

5.1.1 Purpose and strategy

To assess the relationship between financial mission and EO, we built four groups depending on the relevance of the financial mission, compared to social or member-oriented mission from low to high. We analyzed the variance (ANOVA) between the four groups to assess differences between different groups. The results reveal a significant effect ($p < 0.01$) of financial mission on mean EO and the subdimensions INN, PRO/PROs but not for RSK (Table 4). The Levene test suggested homogeneity of variance. In comparing the different groups with post hoc tests and Bonferroni-correction, we find significant ($p < 0.05$) lower EO levels for coops with low relevance of financial mission (G1) compared to moderate to the high relevance of financial mission.

On the other hand, there is a tendency for cooperatives with very high relevance of financial mission to have lower EO levels (although the difference is not significant) and significantly lower values in innovativeness than those with the highest levels (G4 < G3). In contrast, risk-taking did not differ significantly among different groups. As a sensitivity test, we looked closely at the four groups and found that housing and infrastructure cooperatives are overrepresented in Group 1 (G1). Therefore, we did further tests within economic sectors and found similar patterns, although the differences between groups were no longer significant. The result suggests that the pattern also prevails within economic sectors.

<TABLE 4>: Relevance of financial mission and social mission, and growth strategy

Relevance of financial mission	**N**	**EO**	**N**	**INN**	**N**	**RSK**	**N**	**PRO**	**N**	**PROM**
G4 (76% - 100%)	166	3.66 (1.06)	166	3.60 (1.62)	166	3.13 (1.27)	110	3.83 (1.04)	166	4.21 (1.30)
G3 (51 – 75%)	128	3.94 (1.06)	128	4.12 (1.57)	128	3.21 (1.25)	94	4.10 (0.93)	128	4.56 (1.35)
G2 (26 – 50 %)	206	3.67 (1.13)	206	3.81 (1.63)	206	3.17 (1.23)	117	3.79 (1.10)	203	4.09 (1.38)
G1 (0 - 25 %)	214	3.30 (1.14)	214	3.34 (1.61)	214	3.00 (1.21)	89	3.65 (1.19)	214	3.56 (1.48)

Df	714	714 (3,710)	714	714 (3,710)	714	714 (3,710)	410	406 (3, 406)	711	711 (3, 707)
F		10.380		7.279		1.052		2.786		16.024
Adj. R^2		0.036		0.025		0.000		0.013		0.058
Sig. Diff. (Bonferroni)		G1 < G2, G3, G4		G1 < G2, G3 G4 < G3		-		G1 < G3		G1 < G2, G3, G4 G2 < G3
Relevance of social mission	**N**	**EO**	**N**	**INN**	**N**	**RSK**	**N**	**PRO**	**N**	**PROM**
G4 (40 – 100%)	149	3.66 (1.09)	149	3.74 (1.63)	149	3.21 (1.25)	83	3.87 (1.17)	148	4.09 (1.44)
G3 (20 – 39 %)	202	3.84 (1.11)	202	4.01 (1.56)	202	3.20 (1.24)	121	3.98 (1.07)	200	4.34 (1.32)
G2 (1 – 19%)	167	3.82 (1.00)	167	3.96 (1.60)	167	3.16 (1.15)	113	3.93 (0.93)	167	4.39 (1.21)
G1 (0 %)	196	3.51 (1.15)	196	3.49 (1.62)	196	3.13 (1.36)	96	3.83 (1.07)	196	3.93 (1.50)
Df	714	714 (3, 710)	714	714 (3, 710)	714	714 (3, 710)	410	362 (3,406)	711	711 (3,707)
F		2.831		3.200		0.15		0.332		3.546
Adj. R^2		0.009		0.011		0.004		0.006		0.013
Sig. Diff. (Bonferroni)		G1 < G3		G1 < G3		-		-		G1 < G2
Relevance of growth	**N**	**EO**	**N**	**INN**	**N**	**RSK**	**N**	**PRO**	**N**	**PROM**
Yes	489	3.84 (1.05)	489	3.97 (1.57)	489	3.25 (1.23)	339	3.92 (1.05)	489	4.35 (1.33)
No	185	3.04 (0.98))	185	2.96 (1.44)	185	2.82 (1.16)	58	3.52 (1.10)	182	3.24 (1.31)
df		672		672		672		395		669
T		8.982		7.56		4.11		2.608		9.550

For the relevance of social missions compared to the financial or economic missions, we excluded cooperatives that reported high relevance of member-oriented missions. We built four different groups of equal size. The groups differ significantly (at $p < 0.01$), except for RSK and PRO. Post hoc analysis reveals that EO and INN levels were significantly ($p < 0.05$) higher for Group 3 (moderate importance of social mission) compared to Group 1 and for PROM to group 2 (no to low relevance of social mission). A test for industries showed similar patterns with lower levels for organizations without social mission and higher levels for moderate to high levels. However, the group differences within the industries showed no significance, suggesting the cross-sectoral results' reliability.

Assessing the relevance of growth revealed significantly higher EO and subdimension levels for organizations that reported growth relevance. The differences in independent t-tests were significant ($p < 0.01$), and variance heterogeneity could be rejected. Cooperatives that reported that growth is irrelevant to their business model reported significantly lower levels of entrepreneurial posture. The results also hold for different cooperative industries.

5.1.2 Profit formula

Examining the share of third-party services on sales, we built six groups where group 1 has no third-party services. The groups differed significantly ($p < 0.01$). Post hoc analysis revealed that cooperatives without third-party services (G1) had significantly ($p < 0.05$) lowest EO, INN, RSK, PRO, and PROM levels. In contrast, those with moderate third-party services (G3; 20 -40%) had significantly the highest EO, INN, RSK, PRO, and PROM levels.

Because cooperatives have different business models, we looked closely at different industries. The differences were significant only in the financial sector. A peak in mean EO levels was observable among those cooperatives, with a share of 20 – 40% of third-party services in the production, finance, retail, and service sectors. However, it was only significant for financial services ($p < 0.05$). Interestingly the share with the highest levels of EO differed between the industries. For infrastructures, the highest levels are at a share of 20- 60% of third-party-user generated sales, whereas, for housing, it is either a low share (which means the revenues are generated only by members) or a high share, the same pattern can be observed for production, service, and retail sector but with two peaks at 20-40% and 60-80% (80-100%). These patterns might reflect the optimal share of members vs third-party revenues or whether they are oriented towards members with high entrance fees and the characteristic of a club good or the market with low entrance fees for members and the goal of generating sales outside the member base.

The insider vs outsider strategy might also affect the pricing of members or non-members. Cooperatives with differentiated pricing (permanently or for some members) have significantly higher EO and INN levels than those with equal prices for members and non-members. Regarding industry, the same pattern is revealed but with certain variances between charging all or some non-members a higher price.

<TABLE 5> Third-party services and differentiated pricing

Third-party service/ yearly turnover	**N**	**EO**		**INN**		**RSK**		**PRO**		**PROM**
G6 (80 – 100)	163	3.65 (0.97)	163	3.64 (1.59)	163	3.14 (1.17)	101	3.84 (1.03)	163	4.25 (1.28)
G5 (60 - 80)	43	3.81 (0.95)	43	3.75 (1.64)	43	3.29 (1.10)	33	3.88 (1.11)	43	4.38 (1.22)
G4 (40 – 60)	47	3.39 (1.09)	47	3.53 (1.70)	47	2.80 (1.24)	29	3.67 (1.16)	47	3.84 (1.17)
G3 (20 – 40)	66	4.26 (1.02)	66	4.35 (1.45)	66	3.53 (1.23)	44	4.39 (0.77)	66	4.89 (1.17)
G2 (0 - 20)	84	3.70 (1.08)	84	3.84 (1.48)	84	3.10 (1.17)	46	4.01 (0.85)	84	4.19 (1.40)
G1 (0)	242	3.30 (1.13)	242	3.39 (1.64)	242	2.98 (1.24)	109	3.58 (1.16)	242	3.51 (1.40)
DF		645 (5, 639)		645 (5, 639)		645 (5, 639)		362 (5, 356)		645 (5, 639)
F		10.147		4.281		3.134		4.227		14.984
Adj. R^2		0.063		0.024		0.016		0.042		0.095
Sig. Diff. (Bonferroni)		G1 < G2; G3; G6 G2; G4; G6 < G3		G1; G6 < G3		G1; G4 < G3		G1 < G3		G1 < G2; G3; G5; G6 G3> G1;G2;G4;G6
Differentiated Pricing	**N**	**EO**	**N**	**INN**	**N**	**RSK**	**N**	**PRO**	**N**	**PROM**
G3 (Always)	75	3.75 (1.20)	75	3.90 (1.85)	75	3.16 (1.30)	40	3.88 (1.15)	75	4.29 (1.51)
G2 (Partially)	118	4.05 (0.90)	118	4.27 (1.35)	118	3.40 (1.12)	88	4.04 (0.86)	118	4.54 (1.29)
G1 (NO)	291	3.66 (1.07)	291	3.65 (1.58)	291	3.13 (1.25)	178	3.90 (1.07)	291	4.23 (1.31)
N		484 (2, 481)		484 (2, 481)		484 (2, 481)		306 (2, 303)		484 (2, 481)
F		5.737		6.762		2.075		0.638		2.307
Adj. R^2		0.019		0.023		0.004		0.000		0.005
Sig. Diff. (Bonferroni)		G1 < G2		G1 < G2		-		-		-
Dividends paid to members	**N**	**EO**	**N**	**INN**	**N**	**RSK**	**N**	**PRO**	**N**	**PROM**

Yes	383	3.62 (1.13)	383	3.65 (1.65)	383	3.11 (1.24)	240	3.92 (1.05)	383	4.09 (1.41)
No	297	3.56 (1.10)	297	3.65 (1.59)	297	3.09 (1.24)	150	3.77 (1.06)	297	3.98 (1.43)
Df		678		678		678		388		678
t		0.703		0.059		0.082		1.346		1.109

Cooperatives that paid dividends to members (give the surplus in monetary terms back to members) did not have higher EO levels than those which do not pay dividends. This might be explained by the fact that the member value contains a set of refunds which could be either monetary, tangible, or intangible depending on the business model.

5.1.3 Key resources

Resources are important antecedent for EO. The collective entrepreneurial mobilization of the workforce was related to significantly higher EO and subdimension levels. Cooperatives that actively include their workforce in entrepreneurial actions (discussions on important topics and decisions) benefit from higher innovativeness, proactiveness, and risk-taking. The differences between the two groups were equally significant at $p < 0.01$.

Next to collective mobilization, the number of the workforce is vital for EO. Cooperatives with more employees in fte had higher EO, including subdimension levels. Group means differed significantly ($p < 0.05$) and suggest a positive linear relationship between the numbers of employees and EO (and subdimension) levels. The same holds for the quality of the workforce, where post hoc analysis revealed that groups with a higher quality of workforce had higher EO (and subdimension levels).

Regarding financial resources, existing idle resources measured by the equity ratio differed significantly for groups with low to high equity ratios ($p < 0.01$). We compared the different groups with posthoc tests and Bonferroni-correction ($p < 0.05$), and we find that cooperatives with very low equity ratios (9%) had the highest EO, INN and PROM levels. In contrast, cooperatives with medium equity ratios had the highest risk-taking levels, although the differences were insignificant. Robustness tests for industry showed a reversed pattern for production and retail cooperatives, with higher EO, INN, PRO, and PROM levels for higher equity ratios (although insignificant). For risk-taking, higher equity ratios were generally associated with higher levels of risk-taking, suggesting the importance of slack resources, but the differences were not significant.

The second measure for resource slack (measured by asset turnover rate), focusing on efficiency, revealed no significant difference between the groups (from low to high). The group means suggest a positive tendency between asset turnover rate and EO (and subdimension) levels. Although the asset turnover rate was corrected for mean turnover rates per industry, we checked the within-group relations. The latter revealed a different pattern for retail and production industries, where the turnover rate was related to EO and subdimension levels with an inverse U-shape pattern, suggesting that cooperatives with the lowest and highest efficiency levels had lower EO levels. Because of the heterogeneity within the industries, these differences were not significant.

Next to existing resources, credit access was relevant for cooperatives' entrepreneurial orientation. Cooperatives that reported easy access to resources reported higher EO and subdimension levels than those with difficulties getting enough credit. EO and PRO were significant ($p < 0.05$). Testing the effect within the sectors, access to credit was not crucial for cooperatives in the banking sector, which is not surprising because of their business model. The same pattern is visible for the other sectors, although

there are only significant differences in EO, INN for service and significant differences in EO, RSK, and PRO levels for retail cooperatives.

Regarding networking resources, cooperatives that reported a high level of external cooperation when challenges arose (5-7 on a Likert scale) reported significantly ($p < 0.01$) higher EO as well as subdimension levels compared to cooperatives which mainly focused on their resources rather than cooperating with others. The results reveal that external cooperation is vital for all subdimensions of EO. An industry test confirmed the result of higher EO levels for those with higher external cooperation.

<TABLE 6 > Key resources and EO

Collective entrepreneurial mobilization	**N**	**EO**	**N**	**INN**	**N**	**RSK**	**N**	**PRO**	**N**	**PROM**
High 4-5	274	4.01 (1.02)	274	4.21 (1.54)	274	3.36 (1.27)	200	4.03 (1.09)	274	4.48 (1.31)
Low 1-3	405	3.37 (1.08)	405	3.35 (1.57)	405	2.99 (1.19)	197	3.68 (0.98)	404	3.77 (1.42)
Df		677		677		677		395		676
T		7.792		7.178		3.810		3.336		6.633
Availabilty of HR (Employee quantity)	**N**	**EO**	**N**	**INN**	**N**	**RSK**	**N**	**PRO**	**N**	**PROM**
G7 (>100 fte)	14	4.23 (0.96)	14	4.57 (1.42)	14	3.52 (1.22)	12	4.31 (0.98)	14	5.17 (1.01)
G6 (50-99 fte)	28	4.60 (0.55)	28	4.57 (1.05)	28	3.83 (0.90)	24	4.65 (0.84)	28	5.33 (0.73)
G5 (20-49 fte)	71	4.45 (0.74)	71	4.75 (1.26)	71	3.54 (1.17)	59	4.27 (0.82)	71	5.15 (0.93)
G4 (10-19 fte)	57	4.16 (0.82)	57	4.48 (1.29)	57	3.32 (1.22)	49	4.17 (0.82)	57	4.68 (0.95)
G3 (4-9 fte)	67	3.92 (0.88)	67	4.13 (1.44)	67	3.25 (1.11)	51	3.73 (1.07)	66	4.48 (1.24)
G2 (1-3 fte)	187	3.52 (1.04)	187	3.52 (1.52)	187	3.07 (1.25)	102	3.61 (1.12)	187	4.02 (1.31)
G1 (0 fte)	299	3.18 (1.12)	299	3.17 (1.69)	299	2.91 (1.26)	117	3.54 (1.11)	297	3.43 (1.41)
N	723		723		723		414		720	
F		20.781		17.549		5.170		8.202		30.843
DF		716		216		216		407		713
Adj. R^2		0.18		0.12		0.03		0.09		0.20
Sig. Diff. (Bonferroni)		G7;G6;G5;G4 > G1;G2 G5 > G3 G3;G2 > G1		G7>G1 G6;G5; G4>G2; G1 G3>G1		G6 > G2;G1 G5 > G1		G6 > G3;G2;G1 G5;G4 > G2;G1		G7;G6;G4 > G2;G1 G5 > G3;G2;G1 G3;G2 > G1
Availabilty of HR (Employee quality)	**N**	**EO**	**N**	**INN**	**N**	**RSK**	**N**	**PRO**	**N**	**PROM**
G3 (4.9822)	161	4.14 (1.01)	161	4.38 (1.46)	161	3.38 (1.20)	121	4.11 (0.98)	160	4.80 (1.29)
G2 (4.2580	179	3.83 (0.94)	179	3.87 (1.49)	179	3.24 (1.12)	129	3.94 (1.03)	179	4.36 (1.15)
G1 (0)	306	3.18 (1.12)	306	3.16 (1.68)	306	2.91 (1.26)	119	3.54 (1.11)	304	3.43 (1.43)
N	646		646		646		369			640
F		50.098		33.847		9.030		9.422		63.847

DF		643		643		643		366		643
Adj. R^2		0.13		0.09		0.02		0.04		0.16
Sig. Diff. (Bonferroni)		G3>G2> G1		G3>G2 >G1		G3;G2> G1		G3;G2> G1		G3>G2> G1
Availability of existing resources (equity ratio)	**N**	**EO**	**N**	**INN**	**N**	**RSK**	**N**	**PRO**	**N**	**PROM**
G4 (>58%)	146	3.52 (1.11)	146	3.45 (1.68)	146	3.17 (1.20)	58	3.75 (0.96)	146	3.98 (1.31)
G3 (25.6-58%)	146	3.66 (1.08)	146	3.68 (1.59)	146	3.29 (1.24)	86	3.85 (1.19)	146	4.07 (1.50)
G2 (9.7 - 25.6%)	147	3.52 (1.12)	147	3.61 (1.64)	147	2.96 (1.18)	90	3.73 (1.14)	147	3.95 (1.45)
G1 (<9.7%)	145	3.91 (1.05)	145	4.13 (1.59)	145	3.15 (1.22)	107	3.94 (1.03)	145	4.54 (1.34)
N	584		584		584		341		584	
F		4.237		4.682		1.798		0.720		5.558
DF		580		580		580		337		581
Adj. R^2		0.02		0.02		0.004		-0.002		0.02
Sig. Diff. (Bonferroni)		G1 > G2;G4		G1 > G2;G4		-		-		G1 > G2;G3;G 4
Availability of existing resources (asset turnover)	**N**	**EO**	**N**	**INN**	**N**	**RSK**	**N**	**PRO**	**N**	**PROM**
G4 (high)	163	3.78 (1.09)	163	3.76 (1.59)	163	3.34 (1.19)	96	3.83 (1.11)	159	4.27 (1.39)
G3 (medium)	165	3.64 (1.14)	165	3.69 (1.61)	163	3.02 (1.20)	100	3.93 (1.09)	159	4.27 (1.48)
G2 (low)	160	3.57 (1.19)	160	3.66 (1.77)	154	3.09 (1.27)	70	3.84 (0.99)	155	3.97 (1.44)
G1 (very low)	164	3.57 (1.11)	164	3.68 (1.68)	160	3.19 (1.25)	80	3.72 (1.23)	162	3.90 (1.36)
N	652		646		640		346			
F		1.260		0.103		2.149		0.538		3.080
DF		648		642		636		342		631
Adj. R^2		0.00		0.00		0.01		0.00		0.10
Sig. Diff. (Bonferroni)		-			-			-		-
Availability of *new* resources (Access to credits)	**N**	**EO**	**N**	**INN**	**N**	**RSK**	**N**	**PRO**	**N**	**PROM**
Easy access (3 – 5)	500	3.68 (1.12)	500	3.78 (1.64)	500	3.17 (1.24)	301	3.93 (1.07)	497	4.09 (1.40)
Not easy 1 - 2	149	3.49 (1.08)	149	3.56 (1.62)	149	2.98 (1.26)	84	3.66 (1.04)	149	4.01 (1.48)
Df		647		647		647		383		644
t		1.874		1.404		1.649		2.011		.627
Inter-organizational cooperation	**N**	**EO**	**N**	**INN**	**N**	**RSK**	**N**	**PRO**	**N**	**PROM**
High (5-7)	324	3.99 (1.02)	324	4.12 (1.54)	324	3.35 (1.19)	207	4.05 (1.04)	324	4.49 (1.28)
Low (1-4)	341	3.28 (1.05)	341	3.28 (1.57)	341	2.90 (1.23)	188	3.62 (1.01)	340	3.65 (1.39)
Df		686		686		686		396		674

T		8.965		7.082		4.820		4.168		8.224

5.1.4 Share structure

Assessing interest on cooperative shares, cooperatives that issued shares with interest had significantly ($p < 0.01$) higher EO, PRO, and PROM levels. This could reflect the fact that financial incentives are essential to attract new investors, which in turn can be reused to engage in projects related to entrepreneurial activities.

<TABLE 7> Share structure and EO

Interest on shares	**N**	**EO**	**N**	**INN**	**N**	**RSK**	**N**	**PRO**	**N**	**PROM**
Yes	203	3.76 (1.05)	203	3.82 (1.63)	203	3.17 (1.20)	145	3.97 (0.91)	203	4.31 (1.39)
No	487	3.52 (1.14)	487	3.60 (1.62)	487	3.10 (1.26)	247	3.75 (1.14)	484	3.88 (1.43)
df		688		688		688		390		685
t		2.612		1.626		0.671		2.054		3.661

5.1.5 Governance

Regarding member participation, cooperative groups differed significantly ($p < 0.01$) in EO, INN, and PROM levels. Post hoc tests revealed that cooperatives with deficient participation levels (G1) had significantly ($p < 0.05$) higher EO and innovativeness levels than cooperatives with low levels. On the other hand, EO levels increased at the other side of the scale with very high participation levels, although these were not significant. It seems that cooperatives benefit from either low participation levels where members are not too strongly included or from high participation levels. Tests within the industries showed increasing EO levels with participation for the service and finance sector, although not significant. For the service sector, high levels of participation (G4, G5) had significantly higher INN levels than those with low levels (G2).

<TABLE 8> Governance and EO

Participation of members	**N**	**EO**	**N**	**INN**	**N**	**RSK**	**N**	**PRO**	**N**	**PROM**
G5 (0.70 – 1)	98	3.45 (1.14)	98	3.68 (1.53)	98	3.29 (1.17)	42	3.88 (1.16)	98	3.23 (1.47)
G4 (0.41 -0. 69)	138	3.44 (1.20)	138	3.55 (1.64)	138	3.09 (1.30)	76	3.84 (1.03)	136	3.69 (1.54)
G3 (0.21 – 0.40)	149	3.68 (1.06)	149	3.80 (1.62)	149	3.12 (1.22)	89	3.83 (1.16)	149	4.19 (1.30)
G2 (0.03 – 0.20)	152	3.48 (1.12)	152	3.35 (1.66)	152	3.00 (1.29)	85	3.66 (1.13)	151	4.12 (1.37)
G1 (0-0.02)	189	3.84 (1.01)	189	3.92 (1.59)	189	3.18 (1.18)	122	3.98 (0.94)	189	4.49 (1.22)
DF		726 (4,721)		726 (4,721)		726 (4,721)		414 (4,409)		723 (4,718)
F		4.232		3.162		1.030		1.124		17.143
Adj. R^2		0.017		0.011		0.000		0.001		0.079
Sig. Diff. (Bonferroni)		G1 > G2 ; G4; G5		G1 > G2		-		-		G1 > G4; G5 G2 > G5 G3 > G4 ; G5

5.2 Measurement model

Before we did a hierarchical regression, we used structural equation modelling (SEM) to assess the measurement model. In a two-step approach, the reliability, convergent, and discriminant validity of the measurement model using exploratory (EFA) and confirmatory factor analysis (CFA) was assessed (Anderson & Gerbing, 1988; Fornell & Larcker, 1981). The estimations were done using the *lavaan* package in R (Rosseel, 2012). We used full information maximum likelihood estimation (fiml) with robust 'Huber-White' standard errors, which is most efficient for dealing with non-normality and missing's (Newman, 2014).

EFA and CFA show the dimensionality of the constructs. Because of low reliability, we had to delete two items (i.e., PRO3 and PROM3). Both items emphasized competitive aggressiveness and did not load on the proactiveness dimension. This can be explained by the view that aggressiveness is not necessarily part of proactiveness but instead of competitive aggressiveness and that it is not a necessary condition for entrepreneurial orientation (Lumpkin & Dess, 1996).

Confirmatory factor analysis (CFA) indicates a satisfactory fit with the data (Chi-square= 436.876, df =153, CFI = 0.935, SRMR = 0.052). The composite reliability of the latent constructs is acceptable (EO: CR = 0.86; CEC: CR = 0.93, Dyn = 0.70)) according to Hair Jr et al. (2014). The reliability of the subdimensions of EO is acceptable for INN (CR: 0.75), PRO (CR = 0.67), PROM (CR = 0.65), RSK (CR = 0.67). EO was modelled as a second-order reflective construct (George, 2011); therefore, cross-loadings between the sub-dimensions are expected to influence the sublevel's reliability.

<TABLE 9> Reliability, convergent, and discriminant validity of the measurement model

	EO	**INN**	**PRO**	**PROM**	**RSK**	**CEC**	**Dyn**
Innovativeness (INN)	-	**0.72**	(0.452)	(0.645)	(0.757)	(0.305)	(0.276)
Proactiveness (PRO)	-	0.456	**0.79**	(0.406)	(0.411)	(0.193)	(0.081)
Proactiveness 2 (PROM)	-	0.651	0.330	**0.700**	(0.497)	(0.239)	(0.116)
Risk-taking (RSK)	-	0.772	0.439	0.563	**0.650**	(0.146)	(0.188)
CEC	0.331	0.320	0.226	0.263	0.179	**0.877**	(0.132)
Env. Dynamism	0.375	0.289	0.124	0.118	0.198	0.127	**0.663**
AVE		0.52	0.63	0.49	0.42	0.77	0.44
CR	0.866	0.75	0.62	0.65	0.67	0.93	0.70

Diagonal elements are the square root of the average extracted variance of the construct (AVE). Off-diagonal elements are the correlations between the constructs. Above the diagonal in brackets are the HTMT values.

Following the approach of Fornell and Larcker (1981), convergent validity (AVE ≥ 0.5) was given except for risk-taking, member proactiveness, and environmental dynamism. Because all have reliability levels above 0.60, this could still be regarded as acceptable. Discriminant validity with the HTMT procedure was also given (HTMT < I0.85I) (Henseler et al., 2015).

A test for a common method bias where a model with all items loaded on one common factor (Podsakoff et al., 2003) revealed a poor fit (Chi-square=2341.701, df = 151, CFI=0.592, SRMR=0.155). We, therefore, conclude that the presence of a common method bias is unlikely.

5.2.1 Hypothesis testing

To assess the internal influence factors of cooperatives together and compare them with environmental influence factors, we used hierarchical ordinary least squares (OLS) in SPSS 26, which allows for

assessing multilevel influences on entrepreneurial orientation. Because of missing data, we used the pairwise option for missings.

In Table 10, we regress all independent and control variables on EO, which was calculated as an index of the four dimensions (INN, PRO, PROM, RSK). The variance inflation factors (VIFs) showed no indication of multicollinearity (VIF < 5) with higher but still acceptable values for hostility and munificence in model 3 (VIF < 10).

The organization-specific CV services ($\beta = 0.40$, $p < 0.01$) had a positive effect on EO next to size ($\beta = 0.32$, $p < 0.001$). The control variables together explained the most considerable variance of the model (14.7%). Regarding the environmental variables, in Model 1 we found significant effects of environmental hostility ($\beta = 0.03$, $p < 0.001$), dynamism ($\beta = 0.13$, $p < 0.05$), and munificence ($\beta = 0.13$, $p < 0.05$) on EO, we, therefore, support H6a, H7a & H8a. Together the environmental variables explained 6.4% of the variance, with environmental hostility as the most critical determinant (Std-$\beta = 0.23$, $p < 0.001$) compared to dynamism and munificence (Std-$\beta = 0.11$, $p < 0.05$).

In Model 2, the variables that described the business model were included. The growth strategy ($\beta = 0.34$, $p < 0.01$) was significant from the building block *purpose (support of H1c)*. Concerning the *resources* of cooperatives, collective entrepreneurial capacity ($\beta = 0.09$, $p < 0.05$), the number of employees ($\beta = 0.25$, $p < 0.05$), and inter-organizational cooperation ($\beta = 0.13$, $p < 0.001$) had a positive and significant effect on EO (support of H3a, H3b, H3f). The elements of the cooperative business model together explained 9.6% of the variance in EO. Inter-organizational cooperation (Std-$\beta = 0.20$, $p < 0.001$) explained the highest share of variance, followed by the number of employees ($\beta = 0.15$, $p < 0.05$), growth strategy ($\beta = 0.13$, $p < 0.01$), and collective entrepreneurial capacity ($\beta = 0.10$, $p < 0.05$).

I tested the moderating effects of the environment between selected elements of the business model and EO. A first model where we included all interaction terms together explained a share of variance of 34.8%. Model 3 shows the relevant interactions of a reduced model (only coefficients significant at $\alpha = 10\%$). The reduced model explained an additional share of 4.1 % of variance to EO compared to model 2 and an equal share of variance compared to the model with all interaction terms.

I found significant moderating effects of environmental hostility on the resource-EO relation. However, in contrast to our hypotheses, there was an adverse effect on collective entrepreneurial capacity ($\beta = -0.012$, $p < 0.05$) and interorganizational cooperation ($\beta = -0.01$, $p < 0.10$. Therefore, hypothesis H6c on the positive moderating effect of environmental hostility on the relation between elements of the business model and EO must be rejected.

Furthermore, a moderating effect of environmental dynamism on the growth EO relation was found ($\beta = 19$, $p < 0.10$) and the equity ratio and EO ($\beta = 0.40$, $p < 0.05$).

Environmental munificence moderated the growth-EO relation ($\beta = 0.39$, $p < 0.01$); thus, we can accept hypothesis H8b.

<TABLE 10> Main model (N = 730) (DV = Entrepreneurial Orientation)

	Model 1					Model 2					Model 3			
	β	S.D.	Std-β	t	VIF	β	S.D.	Std-β	t	VIF	β	S.D.	t	VIF
Constant	1.87	2.23		.84		1.05	2.16		.49		.65	2.13	.31	
urban	.17^{+}	.10	.08	1.67	1.25	.10	.10	.05	1.04	1.30	.10	.10	1.05	1.31
cooperative density	.44	1.24	.01	.35	1.05	1.03	1.18	.03	.87	1.08	1.42	1.16	1.22	1.09
GDP p. cap.	.24	.46	.02	.54	1.16	.24	.43	.02	.55	1.21	.32	.43	.75	1.22
hostility	.03***	.01	.23	4.91	1.35	.02**	.01	.14	2.95	1.50	.03***	.01	3.79	2.93
dynamism	.13*	.05	.11	2.52	1.17	.10*	.05	.08	2.01	1.22	-.19^{+}	.11	-1.71	6.29
munificence	.13*	.05	.11	2.49	1.22	.08	.05	.07	1.57	1.33	-.22*	.10	-2.29	5.23

housing	-.29+	.17	-.12	-1.75	2.76	-.01	.18	.00	-.05	3.63	-.11	.18	-.64	3.69
infrastructure	.01	.17	.00	.05	2.31	.11	.18	.04	.62	2.96	.07	.18	.41	3.01
retail	.17	.19	.05	.93	1.93	.05	.18	.01	.26	1.99	-.01	.18	-.06	2.02
financial	-.32	.22	-.10	-1.44	2.68	-.18	.22	-.05	-.80	3.12	-.19	.22	-.86	3.23
services	.40*	.19	.11	2.06	1.81	.31	.19	.09	1.62	1.96	.18	.19	.98	2.00
age (log)	-.08	.12	-.03	-.69	1.19	-.18	.12	-.06	-1.41	1.43	-.19	.12	-1.57	1.48
size (log member)	.32**	.07	.25	4.58	1.89	.04	.09	.04	.49	3.53	.07	.09	.79	3.66
financial mission						.002	.00	.07	1.36	1.59	.00+	.00	1.66	1.61
social mission						.004+	.00	.08	1.77	1.52	.00+	.00	1.88	1.57
growth strategy						.34**	.11	.13	3.00	1.39	.33**	.11	2.87	1.47
third party services						.00	.00	.00	-.07	1.55	-0.00	.00	-.03	1.56
dividends						.00	.00	-.04	-1.02	1.11	.00	.00	-.45	1.13
collective entrepreneurial capacity						.09*	.04	.10	2.37	1.34	.09*	.04	2.38	1.42
Availability of HR (Number of employees in log fte)						.25*	.12	.15	2.15	3.26	.32*	.12	2.59	3.62
Availability of HR (personal costs/fte)						.03	.03	.07	1.20	2.53	.02	.03	.71	2.62
Availability of financial resources (sales turnover)						-.08	.06	-.05	-1.28	1.16	-.06	.06	-1.06	1.28
Availability of financial resources (equity ratio)						.19	.18	.05	1.07	1.64	.19	.18	1.06	1.65
Access to new resources (access to credits)						.05+	.03	.07	1.71	1.22	.06+	.03	1.77	1.24
interorganizational cooperation						.13**	.03	.20	4.76	1.24	.13**	.03	4.95	1.25
interest on shares						.01	.02	.03	.59	1.33	.01	.02	.72	1.36
member participation						-.28	.19	-.07	-1.47	1.69	-.23	.19	-1.23	1.71
growth * dynamism											.19+	.11	1.73	3.78
growth * munificiency											.39**	.11	3.53	5.03
CEC * hostility											-.01*	.00	-2.23	1.39
HR (fte) * hostility											-.01+	.01	-1.59	3.80
Availability of financial resources (equity) * dynamism											.40*	.16	2.44	2.87
Cooperation * hostility											-.01+	.00	-1.85	1.23
F-value	10.934***					8.931***					8.825***			
F-change	10.748					5.561					5.085			
R^2	.232					.346					.393			
Adj. R^2	.211					.307					.348			
+ p < 0.10, * p < 0.05, ** p < 0.01, *** p < 0.001														

5.2.2 Sensitivity analysis

As a sensitivity test, we split the sample into cooperatives with third party-services (N =483)[4] and those without third-party services and replicated the same regressions as above. The reason was that, in theory, third-party user coops are more oriented toward markets, are more directly involved in the competition (Purtschert, 2005), and benefit more from an entrepreneurial orientation. In contrast, member-oriented cooperatives are more inward-looking and concentrate on their members' needs rather than on competitors.

The results revealed a higher explained variance of the model for third-party user coops (Adj. R^2 =.318) compared to member-only coops (Adj. R^2 =.248). The environmental variables explained more variance of the model for cooperatives with third-party users (Adj. R^2 =.07 vs .042). At the same time, environmental hostility, dynamism, and munificence were significant third-party coops; only environmental hostility was significant for the group with non-member users.

More variance in EO was explained by the elements of the business model for non-third-party coops (Adj. R^2 =.11 vs 0.09), the use of the collective network consisting of collective entrepreneurial capacity ($\beta = 0.28$, $p < 0.01$) and interorganizational cooperation were most important ($\beta = 0.13$, $p < 0.01$) for cooperatives without third party users. For coops with third-party users, growth strategy ($\beta = 0.37$, $p < 0.05$), the number of employees ($\beta = 0.32$, $p < 0.05$) and interorganizational cooperation ($\beta = 0.137$, $p < 0.01$) were most important for EO.

Including environmental moderation variables, the results from the primary model did not change significantly. However, explained share of variance was smaller for third-party user coops (Adj. R^2 =.01) compared to coops without third-party users (Adj. R^2 =.06). For coops without third-party service, the moderating effect of the environmental dynamism was positive on growth EO relationship ($\beta = 0.36$, $p < 0.10$) and on the equity-EO relationship ($\beta = 0.66$, $p < 0.10$) and negative on the efficiency EO relationship ($\beta = -0.38$, $p < 0.10$) although not significant. For third-party user coops, the moderating effect of environmental munificence persisted for the growth EO relationship ($\beta = 0.35$, $p < 0.05$).

6. Discussion

6.1 Environment and EO

Cooperatives in a competitive environment exhibit higher EO levels (*support of H6a*). This is in line with the proposition that competition forces SMEs to invest in EO to gain a competitive advantage (Wiklund, 1999) and that EO is higher in a hostile environment (Covin & Slevin, 1991; Laskovaia et al., 2019). On the other hand, several studies suggest that EO is negatively related to environmental hostility because it forces organizations to freeze resources, cut down activities related to innovativeness and proactiveness, and avoid risk-taking behaviour (Kreiser et al., 2020; Wiklund et al., 2009). The fact that hostility had a positive rather than negative effect on EO could be explained by the fact that a certain level of rivalry has a positive effect on EO. Because we measured hostility by industry rivalry, the results suggest that cooperatives in competitive markets react by increasing EO and consequentially benefit from EO in competition. However, the results have to be set into relation with the level of competitiveness since with increasing levels of competition, the availability of market opportunities and resources is affected and the negative effect kicks in (Kreiser et al., 2020). This was confirmed by studies which found a negative effect of hostility on EO by taking a broader focus and including resource availability (Rosenbusch et al., 2013).

A comparison of cooperatives with an external (third-party users) and internal focus showed a comparable impact of hostility on EO. This suggests that even member-oriented cooperatives that do not compete directly with other organizations on markets are exposed to competition and react with an EO. This finding could be interesting for the question whether EO is beneficial for non-profit

[4] Both regression tables can be found in the annex

organizations in general and would be empirical support that also purely self-help organizations react to competition with an EO.

The results showed a positive relationship with EO (support of H7a) regarding environmental dynamism. Like SMEs, cooperatives react to an uncertain, unpredictable and dynamic environment with EO as a strategic orientation. The results are in line with other findings on SMEs (Ruiz-Ortega et al., 2013; Strobl et al., 2022) and suggest that cooperatives similarly benefit from EO in a dynamic environment. A comparison of cooperatives active on external markets (third-party users) and traditional cooperatives revealed a significant positive effect on EO only for cooperatives with external markets. This could reflect that cooperatives with member-users face less uncertainty and dynamism because they can rely on their members and therefore do not have to react with EO. The finding would be in line with observations that cooperatives can, to a certain extent, stay out of external turbulences (Núñez-Nickel & Moyano-Fuentes, 2004). Another explanation would be that when facing uncertain and dynamic markets, self-help cooperatives react with other strategies, such as maximizing member value rather than using the resource to invest in an EO.

EO is also related to a munificent environment *(support of H8a)*. Similarly to SMEs, cooperatives benefit from a munificent environment through the availability of opportunities which can be exploited with an EO. Cooperatives react to growing relevant markets by investing in EO, allowing them to reap the opportunities. Again, the positive effect was only persistent for cooperatives with third-party users; for the other group, environmental munificence was not significantly related to EO, suggesting member-only cooperatives do not react to growing markets by building an EO but by following other strategies.

6.2 Purpose/strategy

Examining the first building block *of purpose or strategy* independently by ANOVA, we found that cooperatives with a high financial mission have higher EO and subdimension levels than cooperatives with low relevance of a financial mission. Interestingly the group with the highest relevance of financial mission had slightly lower EO and INN levels than those with moderate to high relevance (although only significant for INN).

The result seems to align with the hypothesis that a financial purpose drives an entrepreneurial orientation. Cooperatives with a financial mission give weight to an entrepreneurial orientation, including the investment of necessary resources: they focus on actions related to innovation and undertake investments in new projects. They also screen the relevant external and internal markets, which raises proactivity levels. In contrast, cooperatives which are only oriented toward their members and with a focus on internal goals have lower EO levels, suggesting that they benefit to a lesser extent from an EO.

The decline in EO levels for groups with very high relevance of financial mission could indicate that cooperatives with a one-sided focus on the financial mission might neglect member-related or common interest goals. The issue is also discussed in the literature, and it is proposed that cooperatives should, at least, to a certain extent, balance their goals to prevent degeneration (Michaud & Audebrand, 2022; Novkovic et al., 2022).

The relevance of social missions showed that cooperatives with a certain importance of social goals (20 -39% of relevance) have significantly higher EO and INN levels than cooperatives without social goals. The result indicates that a certain extent of social goals could increase cooperatives' EO, or at least higher social mission levels are not negatively associated with EO levels. The finding is interesting for NPO scholars because a social mission seems not to contradict an entrepreneurial orientation.

Because with the questionary design relevance of financial, social, and member-oriented missions were interrelated (they together add up to 100%), the finding on lower levels for the highest values of financial mission could also reflect that a specific balancing of goals seems to be necessary not only for cooperative success as suggested by Novkovic et al. (2022) but also for the entrepreneurial orientation.

The pattern revealed by ANOVA was also confirmed with hypothesis testing with hierarchical regression. Both variables were weakly related to EO but not significantly (*rejecting thus H1a & H1b*); this may reflect the inverted U-shaped relation between the dominance of one mission and EO. This raises further questions on the optimal combination of different elements of cooperative mission and, more specifically, on the mechanisms of how cooperatives' management can balance different and conflicting goals.

Regarding *growth strategy,* cooperatives that perceive growth as relevant reported significantly higher levels of EO (including subdimensions). This was also supported by hypothesis testing by hierarchical regression, where the presence of a growth target was significantly related to EO *(support of H1c)*. The results suggest that EO benefits cooperatives when they want to expand their business and focus on a growth target (Covin & Slevin, 1991; Moreno & Casillas, 2008). Furthermore, building an EO needs valuable resources which cannot be used for other purposes. Generally, cooperatives face a tension between the member preference for short-term benefits over long-term growth-related investments. Cooperatives which give relevance and weight to growth could therefore be more willing to focus on EO, which is beneficial to reach growth-related performance measures (Guzmán et al., 2020; Rauch et al., 2009).

On the other hand, this implies that cooperatives are primarily oriented toward members' needs and are unwilling to grow, building an EO is not a priority: Instead they should prioritise stability (Stevenson & Jarillo, 1990). The finding is also interesting to answering the question whether EO is a valuable tool for organizations in the non-profit sector (Stock & Erpf, 2022) and would suggest that EO is helpful as long as the organization focuses on growth.

Analyzing the moderating effect of the environment revealed that environmental hostility did not moderate the growth-EO relation significantly. Therefore, we cannot suggest that growth is especially beneficial in a hostile environment. The absence of the moderating effect could also be explained by different adverse effects of hostility on EO through the resource channel.

In contrast, a munificent environment moderated the relation between growth strategy and EO *(support of H8b)*, suggesting that cooperatives with a growth strategy reap available resources and opportunities to build up EO, which potentially gives them higher growth opportunities. The result holds for third-party user coops, with a lower significant level for those without third-party users. The result also means that cooperatives without a growth target use strategies other than EO to reap the available opportunities.

A dynamic environment had a positive but insignificant moderating effect on the growth-EO relationship. Regarding subgroups, for third-party user coops, dynamism was not crucial for the relation. For member-oriented cooperatives, the effect was persistent but not significant in a dynamic environment, suggesting that member-oriented cooperatives with a growth strategy primarily invest in EO. An explanation could be that in a dynamic environment, the pressure to invest in EO is higher, which helps to decide on long-term investments over short-term member benefits or that the reward of an EO is much higher in a dynamic environment encouraging activities related to EO.

6.3 Profit formula, environment and EO

The *profit formula* defines how cooperatives achieve financial goals (Mazzarol et al., 2018). The results reveal that cooperatives with no third-party services and which are only oriented towards members have lower EO levels. Comparing different groups, those cooperatives with a 20-40% share of sales generated by third-party services reported the highest EO levels, but it also depends on the industry. At the same time, cooperatives that charge higher prices to non-members have higher levels of entrepreneurial orientation. Compared to other business model attributes through hierarchical regression, both variables had a subordinate effect on EO (rejection of H2a & H2b).

The results suggest different strategies for dealing with members and non-members but that adopting a differentiated pricing strategy is beneficial. Selling goods to non-members might be an excellent strategy

to increase revenues and expand. At the same time, differentiated pricing might be a protection against the free-riding of non-members (Dilger et al., 2017). Cooperatives that use such a mixed revenue strategy generate more resources which can be reinvested in EO. Another explanation is that a mixed strategy with services to members and non-members needs flexibility and an entrepreneurial mindset.

Paying dividends to members does not impact EO (rejection of H2c). An explanation could be that the share of paid dividends of profits is generally not high to impact the resources negatively, as proposed.

6.4 Key resources, EO and environment

Key Resources are essential for the success of the cooperative business model (Mazzarol et al., 2018). According to the hypothesis testing result, the workforce's *collective entrepreneurial capacity* (voluntary or paid) for discussions and decisions related to entrepreneurial activities is crucial. Collective mobilization of the workforce led to higher levels of innovativeness, proactiveness, and risk-taking and, thus, EO. The results point towards the importance of networking resources of organizations for entrepreneurial activities (Stevenson & Jarillo, 1990; Wiklund et al., 2009)

The results are in line with findings by Muñoz et al. (2020) that collective engagement of the cooperative workforce leads to higher levels of innovation and that cooperative principles (including education and democratic and economic participation) lead to higher EO levels (Guzmán et al., 2020). Cooperatives could use the collective entrepreneurial capacity or intensive intra-firm exchange to increase knowledge breadth and depth, resulting in more and better entrepreneurial opportunities (De Clercq et al., 2013, 2015). Furthermore, cooperatives could use close social ties between employees and external partners could help cooperatives access and integrate knowledge and increase the effectiveness of the search for opportunities and the levels of innovativeness (Parra-Requena et al., 2022). Social interactions with trust and knowledge sharing could also impact the risk-taking of cooperatives because more complementary views decrease uncertainty and lower risk aversion (Kaasa, 2009).

The collective design with economic and democratic participation further offers opportunities to increase the effectiveness of collaboration. Cooperatives favour horizontal leadership styles such as stewardship (Cornforth, 2004). This could shape the whole organization and lead to generally more horizontal leadership styles. Research showed that horizontal leadership styles enable intra-organizational cooperation and are positively related to innovation (Muñoz et al., 2020) and EO (Strobl et al., 2022). Furthermore, the economic participation of employees is another driver for employees' collective engagement and commitment (Bastida et al., 2021), which fosters EO (De Clercq et al., 2010).

Analyzing the moderating effect of the environment revealed that the CEC-EO relation was slightly negatively moderated by environmental hostility, suggesting that a hostile environment hinders the effect of collective mobilization. This could be due to fewer available resources in a hostile environment.

Regarding *human capital*, our results showed that higher quantity (number of employees) and quality (expenses per full-time position) were positively related to higher EO and subdimension levels. This was also confirmed by hypothesis testing, which showed a positive effect for quantity but not quality. The positive, but non-significant effect for quality might be related to the use of a broad measurement instrument. Further studies could focus more directly on the different components of human resource quality. Nevertheless, our findings align with the proposition that the workforce is vital for the EO of an organization (Wiklund et al., 2009). A higher number of employees gives cooperatives more degrees of freedom which can be transformed into an entrepreneurial orientation. Our findings also confirm other studies which found a positive relationship between the size of the workforce and EO (Wiklund & Shepherd, 2005). The results are also in line with research that shows the quality cooperative workforce is key for the innovativeness (Muñoz et al., 2020; Rodríguez & Guzmán, 2013), proactiveness and risk-taking of cooperatives and thus for an entrepreneurial orientation (Guzmán et al., 2020).

Regarding the *availability of financial resources*, our findings show that the availability of existing resources is not related to EO. Nevertheless, the results show that the availability of resources (measured by the equity ratio) becomes important in a dynamic environment. An explanation is that a dynamic environment with a high level of uncertainty forces cooperatives to increase activities such as market screening, shaping demand through innovation and taking more risks. This is only feasible if there are enough reserves which can be mobilized. The finding is in line with Hughes et al. (2015), who argue for the importance of the resources EO interaction in a dynamic environment.

Regarding *access to new financial resources,* cooperatives with easy access to resources have higher EO and subdimension levels but compared to other influential factors in the regression model, the effect on EO remains small. The first finding relates that EO is costly and needs resources (Wiklund & Shepherd, 2005). The availability of enough resources gives cooperatives degrees of freedom about investments in innovation, market screening activities, and entrepreneurial endeavours. However, as the results of the regression model suggest, the importance of easy access to credits seems not to be a big problem in Switzerland, and the result did not change when accounting for the moderating effect of the environment.

Cooperation with other organizations when challenges arise is also related to higher EO and subdimension levels. As Cook and Plunkett (2006) suggest, cooperatives benefit from inter-organizational cooperation for resources and knowledge, information sharing, and together undertaking entrepreneurial endeavours. Our findings are in line with empirical findings of a positive effect of external collaboration and EO in SMEs (García-Villaverde et al., 2018; Kusa et al., 2019) as well as in the cooperative context (Guzmán et al., 2020). The findings also align with studies in cooperative sectors where inter-organizational cooperation fosters innovation of cooperatives (Fiore et al., 2020; Rodríguez & Guzmán, 2013).

6.5 Share structure

Cooperatives that issue interests on shares have higher EO levels, but the effects are insignificant compared to other influence factors. The finding could be explained by the facts that interest rates are moderate in Switzerland because of legal restrictions and do not reflect the real risk of the investment. Furthermore, among other factors adding to member value, interests are only one benefit dimension next to kickbacks, rebates, or intangible benefits.

6.6 Governance

Concerning the *governance* of cooperatives, those with very low member participation have significantly higher EO levels than those with moderate to high levels. On the other hand, INN, RSK, and PRO levels increase again for those with very high participation levels (although not significantly). This pattern could reflect that member participation has benefits but also potentially bears costs. Cooperatives that keep the members close and include them in decisions can benefit from knowledge advantages compared to competitors (Talonen et al., 2016) and increased knowledge flow from members (Sánchez-Hernández & Castilla-Polo, 2021). Furthermore, member engagement could better implement innovations (Massimo & Nora, 2022). Member engagement could also facilitate raising the necessary funds to invest in long-term objectives, convince members to abandon short-term goals in favour of long-term goals and reach decisions on necessary investments. On the other hand, cooperatives might overcome potential costs of collective decision-making, such as slow decision-making and the choice of half-hearted and risk-averse decisions (Van der Krogt et al., 2007) by keeping the member base at a certain distance. Hierarchical regression showed a negative relation between member participation and EO (although not significant), suggesting that the adverse effects override the positive ones. For further research, it would be interesting to look deeper into the relationship between participation, EO, and performance.

<TABLE 11> Test of hypotheses

Hypotheses	Description	Test
H1a	The relevance of financial goals is positively related to EO	Rejected
H1b	The relevance of social objectives is positively related to EO	Rejected
H1c	**Growt objective is positively related to EO**	**Supported**
H2a	Third-party services are positively related to EO	Rejected
H2b	Differentiated pricing is positively related to EO	Rejected
H2c	Dividend payment is negatively related to EO	Rejected
H3a	**Collective entrepreneurial Capacity is positively related to EO**	**Supported**
H3b	**Availability of HR (workforce quantity** and quality) are positively related to EO	**Partially supported**
H3c & H3d	Resource slack (equity ratio, efficiency) is pos. related to EO	Rejected
H3e	Access to capital is pos. related to EO	Rejected
H3f	**Inter-organizational cooperation is positively related to EO**	**Supported**
H4	Interest on shares is positively related to EO	Rejected
H5	Member engagement is positively related to EO	Rejected
H6	**Environmental hostility is positively related to EO**	**Supported**
H6b&H6c	*Environmental hostility strengthens the relationships between growth strategy (H6b), resources (H6c) and EO.*	All Rejected
H7	**Environmental dynamism is positively related to EO.**	**Supported**
H7b&H7c	*Environmental dynamism strengthens the relationships between growth strategy (H7b), resources (H7c) and EO.*	Available resources (equity) is pos. related to dynamism
H8	**Environmental munificence is positively related to EO.**	**Supported**
H8b&H8c	*Environmental munificence strengthens the relationships between growth strategy (H8b), resources (H8c) and EO.*	**H8b supported**

6.7 Practical implications

The result that elements of the cooperative business model explain variance in EO are relevant for practitioners. Cooperatives might adjust certain elements to increase EO, which affects economic performance (Guzmán et al., 2020).

Our study shows that EO is most important for cooperatives which value growth as relevant. Entrepreneurial orientation is, therefore, not a one size fits all tool for all cooperatives but is dependent on strategic orientation. Furthermore, the growth EO relation is vital in a munificent or dynamic environment, suggesting a growth strategy's usefulness in such an environment. Building EO is more manageable in a munificent environment. Environmental dynamism might be challenging for cooperatives, but those with a growth target could significantly benefit by building up EO. This particularly holds for cooperatives that are only oriented towards their members. For cooperatives without a growth target, it might be more suitable to invest the resources into the provided goods/services and return surpluses to members rather than investing in EO.

Entrepreneurial orientation is highest if not one mission dominates too strongly, which asks for balancing different missions. Although this might be a difficult task, the reward is potentially a well-managed cooperative resulting in higher entrepreneurial orientation.

Cooperatives with third-party users are suggested to adopt differentiated pricing strategies for different customer groups. This generates higher revenues and protects the incentive to be a member. It also allows using the degrees of freedom to invest in EO.

Concerning *key resources*, cooperatives with more financial and human resources have more freedom for entrepreneurial actions because EO is a resource and time-consuming. The good news for cooperatives is that the collective mobilization of the workforce and the network is even more important than the availability of financial and human resources: the inclusion of workers (paid and unpaid) into actions related to entrepreneurial activities and the use of collective skills of the workforce is positively related to EO. Research from related literature suggests that the outcomes of collective action are highest

with a skilled, motivated, and engaged workforce, which demands cooperative leadership styles and the building of mutual trust. Using internal resources and cooperation with other cooperatives or organizations when challenges arise can be an important driver to save costs, exchange ideas and information, and launch joint projects. Cooperatives could therefore focus on building collaborations with different stakeholders.

Regarding *governance* and participation of members, cooperatives can have advantages and disadvantages. From a long-term perspective, it is essential that the member base is active and included. Strong ties with members result in a loyal clientele and might be a competitive advantage. At the same time, an involved member base might slow down decisions and prevent necessary long-term investments. Therefore, the management must create transparency and persuade members of necessary changes. This demands high communication skills and knowledge of the member base.

6.8 Limitations

The study analyzed the relationship between several elements of the business model and EO. Although *key processes and board composition* are potentially related to EO, they were not included in the analysis because it was beyond the scope of this study. For a follow-up study, it would be interesting to see how key processes, management, and board are related to EO.

The study also has some limitations determined by the study design. First, although cooperatives are similar among countries, the analyzed business model is shaped by Swiss regulations. The degree of freedom to adapt the business model elements could differ among countries. Therefore, applying the research question to cooperatives with different legal preconditions would be interesting.

Second, the questionary relies on single respondents. Although this is quite common for this kind of research, it would be interesting to replicate such a study with a multidimensional view. Next to the increased robustness of the results, this could give more insights into the functioning of a cooperative.

The study also has methodological limitations. As EO is not in every case distinguishable from the elements of the cooperative business model (they could be an expression of EO themselves), we cannot rule out feedback mechanisms. However, we argue that the independent variables as a strategic element are generally stickier than the dependent variable. Furthermore, like many studies in this research field, reversed causality cannot be ruled out with the study design. Longitudinal studies could solve this problem and help to answer how EO varies over time and in different environmental settings.

7. Conclusions

The study investigates if elements of the cooperative business model affect the entrepreneurial orientation of cooperatives. Examining the influence of different elements of the cooperative business model and putting them into relation with environmental influence factors, we extend existing work and close the gap in the cooperative research field on the relationship between elements of the cooperative business model and EO.

Using the conceptual framework of a cooperative-specific business canvas developed by Mazzarol et al. (2014) for our examination, we show how purpose, strategy, organizational resources and competencies, governance, and organizational structure together affect EO and how the environment moderates this relation. We expand existing research on the relationship between governance (principles/values of cooperatives) and EO (Guzmán et al., 2020). This is important because EO is discussed as a factor explaining the economic success of cooperatives (Guzmán et al., 2020; Kyriakopoulos et al., 2004), and by researching the missing link between structure, strategy, resources, and governance, we give answers to the question how cooperative manage to be more entrepreneurial and potentially more successful compared to other organizations.

The findings that structural elements explain variation in EO suggest that cooperatives might adjust different elements of their business model to increase EO. Among the elements, growth strategy, collective entrepreneurial capacity, human resources, and interorganizational cooperation are the most important. The finding that growth strategy is essential for EO raises the question of whether EO is a valuable strategy for organizations that are not growth oriented and suggests that member-only oriented organizations without a growth target instead invest in the provision of their mission than in entrepreneurial orientation. This finding could be interesting for NPO scholars and practitioners.

The result suggests that financial mission, share structure, and profit formula are less critical than the collective mobilization of the workforce (paid and unpaid) and the external network for EO. The finding could shift the orthodox economic view of the disadvantages of the cooperative business model towards the advantages through collective mobilization. This could also help to explain the puzzle that despite the ascribed disadvantages, the cooperative business model persists in competition with corporations (Boone & Özcan, 2016) and that hybrid organizational forms could have an advantage under certain conditions (Berti & Pitelis, 2022).

Examining environmental variables such as hostility, dynamism, and munificence shows that the environment drives EO, as observed with different types of SMEs (Strobl et al., 2022; Wiklund & Shepherd, 2005) and closes this research gap for cooperatives. By researching the moderating effect of environmental variables between the elements of the business model and EO, we answer the call for research on EO, which can be influenced by managers of firms (Wales et al., 2011). The finding that environmental munificence and dynamism moderate the growth strategy EO relation, especially for cooperatives without third-party users, suggests that such an environment especially forces cooperatives to invest in EO and is an indication that its beneficial to reach the growth targets (Guzmán et al., 2020) also for cooperatives which are only oriented towards their members. The second finding that a high equity ratio is essential, especially in a dynamic environment, strengthens the call for more research on the interdependence of EO and resources in different environments (Hughes et al., 2015).

Applying the *cooperative business canvas* as an analysis framework, we offer an analysis of the cooperative business model which goes beyond the neo-institutional approach (ownership and control) and expand the understanding of the cooperative business model in general. Using the framework proposed by Mazzarol et al. (2014) could be fruitful in answering other research questions in the field, such as the determinants of efficiency and performance of cooperatives, bringing different theoretical approaches together and thereby potentially helping to gain a more holistic and realistic view on cooperatives and their interrelation with their environment.

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9. Appendix

<TABLE 12A> Descriptive statistics and correlations of the constructs/indicators

	Construct/Indicator	***1***	***2***	***3***	***4***	***5***	***6***	***7***	***8***	***9***	***10***	***11***	***12***	***13***	***14***	***15***	***16***	***17***	***18***	***19***	***20***	***21***	***22***	***23***	***24***	***25***	***26***	***27***	***28***
1	EO	1.0																											
2	INN	.83*	1.0																										
3	PRO	.59*	.32*	1.0																									
4	PROM	.77*	.46*	.25*	1.0																								
5	RSK	.75*	.55*	.29*	.37*	1.0																							
6	urban	.11*	.12*	.03	.11*	.03	1.0																						
7	cooperative density	-.01	.03	.03	-.01	-.03	-.03	1.0																					
8	GDP p. cap.	.00	.00	-.05	-.01	.01	.31*	-.06	1.0																				
9	hostility	.35*	.29*	.16*	.34*	.16*	.08*	-.07	-.04	1.0																			
10	dynamism	.16*	.20*	.07	.08*	.12*	-.16*	-.06	-.16*	.17*	1.0																		
11	munificence	.14*	.12*	.14*	.13*	.03	.19*	.12*	.11*	.10*	-.16*	1.0																	
12	age (log)	.03	.01	-.01	.12*	-.06	-.03	-.08*	-.01	.13*	-.02	-.04	1.0																
13	size (log member)	.32*	.24*	.09	.41*	.10*	.13*	-.03	-.07	.39*	.03	.22*	.30*	1.0															
14	financial mission	.12*	.08*	.00	.17*	.03	-.02	-.09*	-.08*	.24*	.08*	.02	.21*	.17*	1.0														
15	social mission	.07	.04	.10*	.03	.05	.07	.12*	.07	-.05	-.01	.12*	-.28*	-.08*	-.47*	1.0													
16	growth strategy	.35*	.31*	.06	.33*	.18*	.01	-.08	-.07	.30*	.23*	.03	.08	.26*	.22*	-.09*	1.0												
17	third party services	.12*	.05	.06	.16*	.05	-.04	-.02	-.09*	.11*	.14*	.00	-.05	-.11*	.11*	.17*	.14*	1.0											
18	diff. pricing	.16*	.15*	.05	.15*	.09*	-.04	.03	-.11*	.14*	.04	.07	.05	.25*	.16*	-.12*	.13*	.12*	1.0										
19	dividends	-.01	-.02	-.06	-.02	.01	.05	-.04	-.07	.07	.02	-.03	.00	.04	.10*	-.08*	.04	-.04	.00	1.0									
20	collective entrepreneurial capacity	.31*	.30*	.17*	.22*	.17*	.13*	-.06	.00	.26*	.12*	.07	.02	.29*	.07	.03	.30*	.02	.15*	.06	1.0								
21	employees (log fte)	.40*	.34*	.17*	.38*	.21*	.15*	-.12*	-.05	.47*	.14*	.13*	.29*	.59*	.27*	-.10*	.34*	.18*	.26*	.05	.35*	1.00							
22	costs/fte (log)	.37*	.30*	.17*	.38*	.17*	.15*	-.09*	-.05	.40*	.13*	.10*	.31*	.48*	.29*	-.14*	.38*	.21*	.28*	.10*	.35*	.68*	1.0						
23	sales turnover	.01	.00	-.10	.03	.02	.04	-.11*	.02	.00	.03	-.03	-.01	-.05	.02	.01	.03	.17*	-.08	.01	.09*	.12*	.16*	1.0					
24	equity ratio	-.08	-.12*	-.01	-.08	.03	-.19*	.03	-.02	-.22*	.01	-.23*	-.07	-.25*	-.16*	.09*	-.11*	.13*	-.12*	-.01	-.16*	-.27*	-.26*	.10*	1.0				
25	access credits	.11*	.08*	.12*	.10*	.05	.14*	.00	.04	.05	-.14*	.17*	.14*	.12*	.04	-.03	.13*	-.09*	-.06	.04	.06	.09*	.03	-.05	-.13*	1.0			
26	interorganizational cooperation	.33*	.29*	.15*	.22*	.24*	.00	-.07	-.04	.17*	.07	.00	.09*	.25*	-.03	.00	.18*	-.06	.13*	.01	.23*	.29*	.29*	.03	.00	-.01	1.0		
27	member participation	-.09*	.02	.05	-.30*	.07	-.01	-.03	-.04	-.09*	.09*	-.10*	-.07	-.41*	-.05	-.07	-.02	-.09*	.02	.03	.07	.03	-.04	.03	.02	-.05	.04	1.0	
28	interest on shares	.11*	.09*	.05	.15*	.00	.07	.01	-.05	.26*	.00	.07	.13*	.26*	.12*	-.02	.09*	.05	.12*	.22*	.08	.23*	.18*	-.05	-.16*	.09*	0.03	-.10*	1.0

29	housing	-.20*	-.15*	-.08	-.19*	-.15*	.21*	.04	.20*	-.17*	-.28*	.19*	-.05	-.17*	-.14*	.05	-.27*	-.25*	-.26*	.03	-.20*	-.31*	-.25*	-.07	-.32*	.21*	-.18*	-.07	-.03
30	infrastructure	-.06	-.08*	-.05	-.03	.01	-.20*	.08*	-.09*	-.21*	-.04	-.01	-.06	-.07	-.20*	.16*	-.10*	.08*	-.02	-.07	-.06	-.31*	-.31*	.05	.41*	-.08*	.05	-.19*	-.07
31	production	-.06	-.07	-.03	-.07	.01	-.15*	-.09*	-.08*	-.03	.16*	-.20*	.07	-.22*	.15*	-.13*	.05	.01	.10*	.08*	-.02	.00	.06	.03	.15*	-.06	-.05	.22*	-.09*
32	retail	.12*	.09*	.13*	.07	.07	-.05	.03	-.02	.19*	.11*	-.17*	-.02	.03	.16*	-.07	.15*	.13*	-.09*	-.02	.12*	.22*	.23*	-.08	.04	-.02	.04	.08*	-.04
33	financial	.16*	.16*	-.04	.25*	.01	.06	-.05	-.09*	.35*	.08*	.17*	.26*	.60*	.18*	-.14*	.19*	-.11*	.27*	.07	.20*	.43*	.31*	-.06	-.27*	-.06	.17*	-.13*	.39*
34	services	.13*	.13*	.10	.05	.11*	.09*	-.04	.03	-.04	.09*	-.05	-.18*	-.10*	-.07	.07	.09*	.22*	.11*	-.08*	.04	.15*	.12*	.16*	.06	-.07	.02	.14*	-.13*
	Mean	3.68	3.68	4.08	4.20	3.12	0.46	0.06	4.89	6.85	2.64	2.48	1.64	2.13	47.28	21.28	0.73	34.94	0.26	13.66	2.28	0.47	2.58	0.13	0.36	3.24	4.03	0.32	1.09
	SD	1.13	1.63	1.10	1.64	1.24	0.50	0.04	0.11	8.70	0.94	0.99	0.41	0.89	31.62	23.47	0.45	38.91	0.44	25.32	1.26	0.66	2.46	0.78	0.30	1.49	1.82	0.30	2.56
	Min.	1.00	1.00	1.00	1.00	1.00	0.00	0.00	4.73	0.00	1.00	1.00	0.30	0.48	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	-2.08	0.00	0.00	1.00	0.00	0.00
	Max.	6.50	7.00	7.00	7.00	7.00	1.00	0.32	5.31	42.0	5.00	4.00	2.18	5.71	100	100	1.00	100.	1.00	100.	5.00	3.89	5.64	4.12	1.00	5.00	7.00	1.00	10

<TABLE 13A> Third party services, differentiated pricing and EO by industry

Third party service/ yearly turnover		**Infrastructure**	**Housing**	**Production**	**Retail**	**Finance**	**Services**
G6 (80 – 100)		3.40 (0.91)	3.19 (0.99)	3.67 (0.72)	4.36 (0.66)	3.37 (0.98)	4.03 (1.01)
G5 (60 - 80)		3.45 (1.05)	3.62 (0.88)	3.78 (0.55)	3.78 (1.01)	4.09 (0.57)	4.53 (1.43)
G4 (40 – 60)		3.71 (1.39)	2.73 (0.79)	3.19 (0.62)	3.84 (1.17)	4.39 (0.70)	3.25 (0.89)
G3 (20 – 40)		3.98 (1.26)	2.94 (1.49)	3.85 (0.97)	4.32 (0.74)	4.47 (0.70)	5.05 (1.36)
G2 (0 - 20)		3.46 (1.13)	3.58 (1.28)	3.27 (0.96)	3.61 (0.70)	4.39 (0.62)	3.47 (1.41)
G1 (0)		3.29 (1.16)	3.24 (1.10)	3.22 (1.08)	3.63 (1.34)	3.52 (1.11)	3.48 (1.25)
N		153 (104, 49)	219 (74, 145)	83 (56,27)	81 (66,15)	80 (61, 19)	60 (51,9)
F		1.11	1.081	1.361	1.780	4.653	2.291
Adj. R^2		0.004	0.002	0.022	0.047	0.19	0.058
Sig. Diff. (Bonferroni)		-	-	-	-	G1 < G2;G3	-

Differentiated Pricing	N	Infrastructure	Housing	Production	Retail	Finance	Services
G3 (Always)		3.30 (0.99)	3.89 (1.35)	3.20 (1.10)	4.48 (1.06)	4.58 (0.52)	4.10 (1.48)
G2 (Partially)		3.74 (1.14)	3.18 (1.01)	3.72 (0.84)	4.00 (0.62)	4.41 (0.54)	4.23 (1.19)
G1 (NO)		3.60 (1.13)	3.18 (1.08)	3.49 (0.75)	3.99 (1.04)	3.94 (0.99)	3.97 (0.95)
N		114	83	114	83	80	71
F		0.933	1.610	1.389	0.468	4.454	0.298
Adj. R^2		0.001	0.015	0.012	0.000	0.080	0.000
Sig. Diff. (Bonferroni)		-	-	-		-	-

<TABLE 14A> Regression with cooperatives that reported third-party services (N = 483)

	Model 1				Model 2				Model 3			
	β	S.D.	t	VIF	β	S.D.	t	VIF	β	S.D.	t	VIF
Constant	1.14	2.74	.41		-.10	2.67	-.04	1.34	-.29	2.66	-.11	
urban	.15	.12	1.29	1.25	.05	.12	.40	1.09	.06	.12	.48	1.39
cooperative density	1.68	1.49	1.13	1.03	1.91	1.44	1.32	1.21	2.06	1.43	1.45	1.10
GDP p. cap.	.39	.56	.70	1.16	.56	.54	1.04	1.46	.60	.53	1.12	1.24
hostility	.02***	.01	3.60	1.34	.02*	.01	2.33	1.17	.03**	.01	2.72	3.39
dynamism	.18**	.06	2.81	1.12	.15*	.06	2.56	1.37	.00	.17	.02	9.09
munificence	.15*	.06	2.47	1.27	.12*	.06	2.01	2.59	-.18	.14	-1.26	7.88
housing	-.31	.21	-1.48	2.00	-.05	.22	-.22	2.89	-.06	.22	-.28	2.65
infrastructure	.00	.19	.01	2.23	.04	.21	.21	2.12	.07	.20	.34	2.95
retail	.21	.20	1.06	2.02	.08	.19	.39	3.72	.05	.19	.26	2.14
financial	-.23	.25	-.92	3.08	-.27	.26	-1.02	2.07	-.19	.26	-.71	3.89
services	.45*	.21	2.19	1.92	.34+	.20	1.68	1.52	.28	.20	1.39	2.10
age (log)	-.04	.14	-.28	1.22	-.20	.15	-1.35	3.71	-.25+	.15	-1.66	1.61
size (log member)	.28	.08	3.50	2.04	.02	.10	.24	1.80	.04	.10	.35	3.88
financial mission					.00	.00	.60	1.73	.00	.00	.50	1.86
social mission					.01+	.00	1.78	1.49	.00	.00	1.13	1.81
growth strategy					.37*	.15	2.49	1.63	.38*	.15	2.52	1.55
third party services					.00	.00	-.75	1.17	.00	.00	-.20	1.69
Differentiated pricing					0.07	0.12	0.56	1.345	0.91	0.12	0.79	1.38
dividends					.00	.00	-.26	1.38	.00	.00	.05	1.18
collective entrepreneurial capacity					.04	.05	.76	3.35	.03	.05	.69	1.52
Availability of HR (number of employees in log fte)					.32*	.13	2.44	2.45	.34*	.13	2.56	3.63
Availability of HR (personnel costs/fte)					.02	.03	.74	1.18	.02	.03	.51	2.55
Availability of financial resources (sales turnover)					-.09	.06	-1.39	1.77	-.08	.06	-1.30	1.27
Availability of financial resources (equity ratio)					.12	.22	.53	1.21	.12	.22	.53	1.78
Access to new resources (access to credits)					.03	.04	.69	1.34	.02	.04	.68	1.23
interorganizational cooperation					.13***	.03	3.97	1.42	.15*	.03	4.40	1.39
interest on shares					.01	.02	.62	1.70	.01	.02	.47	1.45
member participation					-.37	.23	-1.65	1.34	-.31	.23	-1.37	1.75
growth * dynamism									.00	.15	-.02	5.99
growth * munificiency									.35*	.15	2.30	7.80
CEC * hostility									-.01	.00	-1.40	1.45
fte * hostility									-.01	.01	-.81	4.19
equity * dynamism									.32+	.20	1.61	3.07
Cooperation * hostility									.05+	.06	.85	1.16
F-value	7.467***				5.874***				5.299***			
F-change	7.467***				3.654***				2.282*			
R^2	.239				.358				.392			
Adj. R^2	.207				.297				.318			
+ p < 0.10, * p < 0.05, ** p < 0.01, *** p < 0.001												

<TABLE 15A> Regression with cooperatives that reported no third-party services (N = 247)

	Mod. 1				Mod.2				Mod. 3			
	β	S.D.	t	VIF	β	S.D.	t	VIF	β	S.D.	t	VIF
Constant	3.34	4.02	.83		1.94	4.03	.48		.36	3.92	.09	
urban	.21	.21	.99	1.37	.20	.21	.95	1.49	.18	.20	.90	1.55
cooperative density	-1.20	2.39	-.50	1.17	-.73	2.32	-.31	1.24	-.36	2.31	-.16	1.33
GDP p. cap.	-.04	.82	-.05	1.16	-.08	.82	-.09	1.29	.28	.79	.35	1.32
hostility	.04**	.01	2.73	1.26	.03*	.01	2.07	1.72	.03^{+}	.02	1.88	2.67
dynamism	.07	.10	.68	1.23	.03	.10	.31	1.41	-.35^{+}	.20	-1.69	6.14
munificence	.07	.10	.69	1.31	.06	.10	.62	1.40	-.20	.17	-1.21	4.16
housing	-.22	.36	-.60	3.98	.11	.41	.27	5.72	-.17	.41	-.41	6.24
infrastructure	-.01	.38	-.01	2.74	.22	.43	.52	3.85	.16	.43	.36	4.17
retail	.08	.48	.16	1.63	.04	.50	.08	1.99	-.21	.50	-.41	2.11
financial	-.47	.49	-.96	1.89	-.16	.55	-.28	2.66	-.22	.54	-.42	2.83
services	-.19	.54	-.34	1.40	-.27	.53	-.50	1.52	-.67	.52	-1.27	1.60
age (log)	-.18	.25	-.72	1.26	-.20	.26	-.79	1.57	-.21	.26	-.80	1.75
size (log member)	.34*	.16	2.18	1.57	.10	.21	.49	3.26	.13	.21	.64	3.44
financial mission					.00	.00	1.44	1.40	.01^{+}	.00	1.83	1.44
social mission					.00	.00	-.10	1.61	.00	.00	.30	1.77
growth strategy					.28	.20	1.42	1.31	.29	.20	1.49	1.42
dividends					.00	.00	-1.16	1.18	.00	.00	-.71	1.24
collective entrepreneurial capacity					.28**	.09	3.16	1.54	.25**	.09	2.84	1.62
Availability of HR (number of employees in log fte)					-.04	.33	-.13	2.68	.15	.37	.40	3.68
Availability of HR (personnel costs/fte)					.00	.06	.08	2.25	.00	.06	-.07	2.38
Availability of financial resources (sales turnover)					.04	.18	.23	1.58	-.05	.18	-.30	1.68
Availability of financial resources (equity ratio)					.55	.39	1.39	1.97	.44	.38	1.15	2.02
Access to new resources (access to credits)					.09	.07	1.29	1.46	.09	.07	1.26	1.55
interorganizational cooperation					.13***	.05	2.67	1.23	.12*	.05	2.39	1.38
interest on shares					.00	.04	-.04	1.33	.03	.04	.60	1.64
member participation					-.01	.38	-.03	1.94	.07	.38	.19	2.05
growth * dynamism									.36^{+}	.19	1.92	2.71
growth * munificiency									.35^{+}	.20	1.71	3.88
CEC * hostility									-.01	.01	-1.12	1.88
fte * hostility									-.02	.02	-.84	3.93
equity * dynamism									.66^{+}	.36	1.83	3.57
Efficiency *dynamism									-.38^{+}	.20	-1.95	1.41
Cooperation * hostility									.00	.01	-.64	1.54
F-value	2.034*				2.348**				2.542***			
F-change	2.034*				2.400**				2.531*			
R^2	.158				.323				.409			
Adj. R^2	.08				.185				.248			
+ p < 0.10, * p < 0.05, ** p < 0.01, *** p < 0.001												

4 Paper 2b: Determinants of entrepreneurial orientation in cooperatives: organizational resources and the double-edged sword of member participation

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Determinants of entrepreneurial orientation in cooperatives: organizational resources and the double-edged sword of member participation.

Ueli Löffel

Entrepreneurial Orientation, Organizational Resources, Member Participation, Cooperatives

Unternehmerische Orientierung, Ressourcen, Mitgliederpartizipation, Genossenschaften

Entrepreneurial Orientation (EO) is vital for the economic performance of cooperatives. However, research on cooperatives has yet to explore how EO depends on organizational factors. This study theoretically and empirically examines the relationship between organizational resources, the participative structure of cooperatives and EO. The survey results of 615 Swiss cooperatives (mainly SMEs) reveal that organizational resources explain some variance of EO, with the mobilization of internal- and external network resources being the most important determinants. Furthermore, it is shown that member participation is negatively related to EO. The results contribute to the research question of how cooperatives become more entrepreneurial by adapting organizational factors.

Unternehmerische Orientierung (EO) ist für den wirtschaftlichen Erfolg von Genossenschaften von entscheidender Bedeutung. Bisher wurde in der Genossenschaftsforschung jedoch nicht untersucht, wie EO von organisationalen Faktoren abhängt. Die vorliegende Studie untersucht den Zusammenhang zwischen Ressourcen, partizipativer Struktur und EO von Genossenschaften. Die Ergebnisse einer Umfrage mit 615 Schweizer Genossenschaften (hauptsächlich KMU) zeigen, dass Ressourcen eine gewisse Varianz der EO erklären, wobei die Mobilisierung interner und externer Netzwerkressourcen den stärksten Einfluss hat. Darüber hinaus zeigt sich, dass die Mitgliederpartizipation in einem negativen Zusammenhang mit EO steht. Die Ergebnisse tragen zu der Forschungsfrage bei, wie Genossenschaften durch die Anpassung von organisationalen Faktoren unternehmerischer werden können.

Ueli Löffel is a PhD candidate at the University of Fribourg/CH. His research focuses on cooperatives and entrepreneurship in the Third sector.

Contact: Institute for Research on Management of Associations, Foundations and Cooperatives, University of Fribourg (CH), Bd de Pérolles 90, 1700 Fribourg, Switzerland, Tel: +41 26 300 84 00, ueli.loeffel@unifr.ch

1. Introduction

Cooperatives promote economic, social and community goals for their members and beyond, embedded within their unique democratic governance structure. They have a long history and are non-neglectable in different economic sectors. Worldwide, the 300 most important cooperatives had a turnover of 2.180 billion USD and 280 million jobs in 2019 (ICA, 2021). Swiss cooperatives play an equally important role, e.g., in the housing, retail, banking, and insurance industries and represented at least 2.7% of the Swiss workforce (in full-time equivalent, FTE) in 2018 (FSO, 2019b). Next to economic importance, they are seen as a means for a sustainable economy and to reach the 2030 Sustainable Development Goals (SDGs) (UN, 2021), including improving living and working conditions and providing services and infrastructure in underdeveloped areas (ILO, 2021).

However, there has been a long-lasting debate on how cooperatives manage to be innovative and entrepreneurial and how they succeed in economic niches and direct competition with other organizational forms (Berti & Pitelis, 2022; Boone & Özcan, 2016; Mazzarol et al., 2018). An entrepreneurial orientation (EO) is seen as a vital feature in reaching the financial performance objectives of cooperatives (Guzmán et al., 2020; Kyriakopoulos et al., 2004). EO is used to transform the advantages of their business model into economic success (Guzmán et al., 2020) and gives a counterweight to a "conservative, defensive, operation-oriented corporate culture" (Cook, 1994, p. 46). Thereby, EO might help to overcome disadvantages alleged to the cooperative business model, such as incentive problems (Jensen & Meckling, 1979; Porter & Scully, 1987; Rey & Tirole, 2007), collective decision-making costs, and the incentive to free ride (Dilger et al., 2017; Hart & Moore, 1996).

There is a lack of research on the antecedents of EO in cooperatives. Prior research proposes different antecedents, such as organizational resources and competencies, organizational culture, and organizational structure influencing EO (Covin & Slevin, 1991). Several of these antecedents were empirically examined in the context of for-profit and, to a lesser extent, non-profit organizations, focusing on the explanatory effect of, e.g. team and management characteristics, human resource management, leadership, organizational features, and resources (Stock & Erpf, 2022; Wales et al., 2011). In the cooperative context, a contribution by Kyriakopoulos et al. (2004) examines the impact of EO and different structural elements of cooperatives on performance without assessing the antecedents of EO. Another contribution by Guzmán et al. (2020) investigates how cooperative values and governance principles relate to EO. However, there is a research gap on other determinants of EO in cooperatives.

Among the determinants, resources are vital for the EO of SMEs and, thus, for cooperatives (Covin & Slevin, 1991; Wiklund et al., 2009). Building an integrative model of small business growth, Wiklund et al. (2009) propose several resource types affecting EO, such as firm (financial and human capital) and network resources (internal and external network). Access to financial resources is a particular issue for cooperatives because, from a neoclassical point of view, the cooperative business model lacks economic incentives. At the investor level, heterogeneous member preferences and the lack of opportunity to trade cooperative shares freely result in fewer investments in future projects. The problem is exacerbated by free-riding, as members benefit from the investment, but even more so if they do not contribute, leading to insufficient investment (Dilger et al., 2017). Therefore, the availability of existing and future financial resources needs special attention. In addition, human resources have been identified as an essential antecedent of entrepreneurial outcomes because the capability and capacity of the workforce foster the level of innovativeness, risk-taking and proactiveness of cooperatives (Muñoz et al., 2020; Padilla-Meléndez et al., 2014).

In contrast to the neoclassical view, which focuses on the weaknesses of cooperatives, a strength of the collective and member-based business model is to create and leverage the internal and external network (Menzani & Zamagni, 2010), and members' solidarity and commitment can create a competitive advantage (Núñez-Nickel & Moyano-Fuentes, 2004). The external network allows access to valuable resources and information necessary to detect and exploit opportunities (Wiklund et al., 2009) and is thus an overarching resource related to innovation and EO of cooperatives (Guzmán et al., 2020;

Rodríguez & Guzmán, 2013). Furthermore, the internal network is an organizational-level competency strongly associated with entrepreneurial behaviour because business opportunities can be detected through informal networks and exploited through employees' capabilities (Stevenson & Jarillo, 1990). Although previous work has examined the relationship between certain types of resources and EO, there is a gap in research regarding how the relevant resources affect cooperatives' EO. A complementary view is necessary to assess the relative importance of different resource types for cooperatives. With this paper, I close this gap and show that network-related resources are particularly important for cooperatives.

Next to resources, the collective mobilization of members, including member participation and engagement, is another characteristic of the cooperative business model and a highly debated research topic. On the one hand, problematic aspects of member participation are raised, highlighting collective decision-making and agency costs due to asymmetric information between members and the board (Österberg & Nilsson, 2009) increasing with member heterogeneity (Höhler & Kühl, 2018), and the optimal level of member participation (Pozzobon & Zylbersztajn, 2013). On the other hand, it is argued that a high level of member participation is associated with the success of cooperatives (Bhuyan, 2007), and several contributions claim close ties to members offer a competitive advantage (Mazzarol et al., 2022; Talonen et al., 2016). However, there is a research gap in the relationship between member participation and EO. The results of this paper provide evidence on the relationship between member participation and EO and closes this gap.

The paper contributes to how cooperatives manage to act more entrepreneurially. It shows they can adjust internal variables to increase EO, which is vital for their performance (Guzmán et al., 2020; Kyriakopoulos et al., 2004). It expands existing knowledge on the antecedents of EO in cooperatives (Guzmán et al., 2020) by including member participation and resources and assessing them simultaneously.

2. Entrepreneurial orientation of cooperatives

EO captures the essence of an entrepreneurial firm. The initial unidimensional measure with strategic aspects, managerial practices, and firm behaviour contains the dimensions of *innovativeness, proactiveness, and risk-taking* (Miller, 1983). SMEs significantly benefit from EO (Rauch et al., 2009; Strobl et al., 2022). Mainly because, compared to large firms, they focus on a differentiation strategy and generate a comparative advantage with an EO, giving them a more dynamic, flexible posture (Wiklund, 1999). In competition, like SMEs, cooperatives need to rely on a differentiation strategy (Mazzarol et al., 2014); therefore, EO is equally beneficial. There are only two contributions on EO and the performance of cooperatives in the agricultural sector (Kyriakopoulos et al., 2004) and a cross-sectoral study on worker cooperatives (Guzmán et al., 2020), which both show a positive relation to financial performance. Research on the antecedents of EO in the cooperative context does not exist except for the study of Guzmán et al. (2020), which finds a positive effect of the cooperative governance principles and EO.

EO is mainly used with the operationalization of Covin and Slevin (1989) (Rauch et al., 2009). Nevertheless, variations of the EO construct evolved (Anderson et al., 2015; Lumpkin & Dess, 1996), including adaptations of the scale to the NPO sector (Kraus et al., 2017; Lurtz & Kreutzer, 2017). The latter results from ongoing debates about the nature of social entrepreneurship and the implications for the EO scale. Although cooperatives are a subset of social enterprises (Defourny & Nyssens, 2008; Gonin & Gachet, 2014), they have unique features like member and market orientation (hybridity) and democratic governance. To date, there are no adaptations of the EO scale to cooperatives, and there are only two contributions which refer to the scale developed by Deshpandé et al. (1993) (Kyriakopoulos et al., 2004) as well as Covin and Slevin (1989) (Guzmán et al., 2020).

I believe different necessary adaptations must be made to apply the construct of Covin and Slevin (1989) to the cooperative context. The first is that the measure of EO on the top management level (Covin & Slevin, 1989; Lumpkin & Dess, 1996) does not fit the cooperative context because of the democratic decision-making mechanisms with small teams and horizontal hierarchies. I, therefore, asked for EO on the firm level rather than at the top management level.

The second is the measure of proactivity. Lumpkin and Dess (1996) argue that a proactive organization takes the initiative, seizes market opportunities, and actively shapes the (external) field of activity. Although most cooperatives are oriented towards external markets and compete with other organizations, they are equally oriented towards their members. For some cooperatives (mainly in the infrastructure and housing sector), members are the most crucial reference point, and external markets or competitors are less critical.

In my view, the proactivity of cooperatives, particularly of self-help cooperatives (member-oriented and inward-looking), is demonstrated by the fact that they actively shape the external field of activity *and* the relationship with their members. They actively approach members, identify needs, and offer services and products before they demand them. In doing so, they create added value for members and gain market share indirectly through a good reputation and expanding services. Especially for self-help cooperatives, it is, therefore, not so important to be the first in the market but to offer good services to members before they actively demand it. This view aligns with Morris et al. (2011), who propose that the proactiveness of non-profit organizations additionally entails initiating change relative to stakeholders' expectations.

3. Hypotheses

3.1. Resources and EO

Resources, consisting of intangible (core competencies, knowledge, skills), financial (cash, equity), human resources and other tangible assets (equipment, business systems), are required to run cooperatives (Mazzarol et al., 2014) and are a prerequisite for EO (Covin & Slevin, 1991).

Networking resources, such as intra-personal relations, are essential at the management level because cohesion, shared leadership, and common vision shape the processes and abilities of the whole organization (Wiklund et al., 2009). The sharing of explicit and implicit knowledge has been identified as an essential firm-level antecedent of EO (De Clercq et al., 2015). Intensive intra-firm exchange brings complementary knowledge together and increases the collective knowledge breadth and depth, resulting in entrepreneurial opportunities (De Clercq et al., 2013). Furthermore, different views on the strengths and weaknesses of opportunities result in better entrepreneurial outcomes (De Clercq et al., 2015).
Including the workforce in discussions and decisions related to entrepreneurial affairs strengthens the interdependence of individual tasks. Furthermore, economic participation through ownership is an additional driver for sharing knowledge and finding entrepreneurial solutions (De Clercq et al., 2015). Another amplifying factor is cooperatives' collective identity and shared inherent values, which lead to workforce engagement and commitment (Bastida et al., 2021) and increase EO (De Clercq et al., 2010).

In the cooperative context, the positive effect of the above-described collective action is confirmed by Muñoz et al. (2020), who find evidence in Chilean cooperatives that collective action of a skilled, motivated, and committed workforce leads to innovation if there is an innovation orientation and a suiting participatory leadership style. Furthermore, Guzmán et al. (2020) show that cooperative principles which are related to the above-described antecedents of collective activity, such as "education" and "economic and democratic participation", are related to EO. Therefore, I argue that the *collective entrepreneurial capacity,* defined as the workforce's collective engagement in discussions and decisions in entrepreneurial matters, positively relates to the cooperatives' EO.

Hypothesis 1a: The collective entrepreneurial capacity is positively related to EO.

Human capital, the sum of the skills, knowledge and experience of the management and the workforce, is an essential resource for a firm's success and EO (Covin & Slevin, 1989; Wiklund et al., 2009). The skillset of the cooperative workforce is essential for technical, process, or managerial innovation (Rodríguez & Guzmán, 2013). Proactive screening of markets and finding opportunities is only possible with a trained and motivated workforce. Research also shows that an educated workforce can better deal with risks and, therefore, is more willing to take risks (Guzmán et al., 2020). EO is, therefore, higher with an educated and experienced workforce (Padilla-Meléndez et al., 2014) and the according management capabilities (Basterretxea & Martínez, 2012).

Hypothesis 1b: HR skills positively relate to EO.

The degree of *availability of a resource* is vital for entrepreneurial actions and behaviours because they are resource intensive (Wiklund et al., 2009). *Financial resources* are essential because they can be easily converted into other types of resources. They allow cooperatives to explore different strategies and options, resulting in process innovations or creating new products and implementing them before others do (Wiklund et al., 2009). Investments in digital infrastructure or research and development foster innovativeness. Screening internal and external markets needs different support systems, which are costly. Furthermore, a precondition to engaging in uncertain projects and taking risks is the availability of resources, and several studies show a positive relationship between firms' financial resources and EO (Hughes et al., 2015; Wiklund et al., 2009).

Next to resources which are already available and could be reorganized if necessary, *access* to new resources is vital for SMEs (Wiklund & Shepherd, 2005). For cooperatives, this is of particular importance because they face difficulties raising enough capital (Ben-Ner, 1988; Novkovic, 2007), especially for long-term investments (Li et al., 2015): the "common property" problem encourages members to free-ride on necessary investments, and the "horizon problem" that impatient members prefer short-term investments over long-term financing. Cooperatives who manage to attract enough financial capital thus have more entrepreneurial degrees of freedom and potentially higher EO:

Hypotheses 1c&d: The availability of existing financial resources (H1c) and access to new capital (H1d) positively relate to EO.

Cooperatives can use *inter-organizational cooperation* to share resources (Menzani & Zamagni, 2010) and for entrepreneurial actions. Cook and Plunkett (2006) argue that cooperatives use networks to share knowledge and information, encourage innovation, seek opportunities, and undertake risky projects under uncertainty (e.g., collectively investing in facilities or intangible assets such as brand names).

In the context of SMEs, results show a positive relationship between the network of small business managers and EO (Wiklund et al., 2009) and between cooperation with other organizations and EO (García-Villaverde et al., 2018; Kusa et al., 2019). In the context of cooperatives, Guzmán et al. (2020) similarly find that cooperation with other cooperatives is positively related to EO. Inter-organizational cooperation is also related to the subdimensions of EO: Novkovic (2007) propose that cooperatives with high R&D intensity can compensate for their difficulties in attracting resources necessary for innovation by creating networks and transferring knowledge and technology within these networks. Empirically, this is partially confirmed by Basterretxea and Martínez (2012) results, that industrial cooperatives more often collaborate with technology centres and universities than investor-owned firms. Other evidence points to the positive effect of inter-organizational cooperation on innovation for cooperatives in the agricultural (Borgen & Aarset, 2016; Fiore et al., 2020) and the manufacturing sector, where knowledge spillover from partners is vital for managerial and technological innovations (Rodríguez & Guzmán, 2013).

Hypothesis 1e: Inter-organizational cooperation is positively related to EO.

3.2 Member participation and EO

Ben-Ner and Gui (2003) argue that non-profit organizations typically face lower monitoring costs because their interaction with members is based on trust and altruism. For cooperatives, Dilger et al. (2017) propose that personal ties between the management and members can prevent opportunistic behaviour because the management is "socially" punished and, therefore, reduce monitoring costs. Furthermore, an active member base decides faster and lowers collective bargaining costs. This increases the possibility of making more courageous decisions and mobilizing resources to implement innovations. The close relationship between members and cooperatives can be a source of innovation as the flow of knowledge increases (Sánchez-Hernández & Castilla-Polo, 2021), and engaged members act as promotors of change, facilitating the implementation of innovations (Massimo & Nora, 2022). Strong relationships with members help to gain a knowledge advantage over competitors (Mazzarol et al., 2022; Talonen et al., 2016). Therefore, different qualitative studies show that close relationships with members increase cooperatives' innovativeness (Borgen & Aarset, 2016; Fiore et al., 2020). Furthermore, member participation positively affects risk-taking by increasing relational trust (Kaasa, 2009).

Hypothesis 2: Member participation positively relates to EO.

3.3 Measures[1]

3.3.1 Entrepreneurial orientation (EO)

The Covin & Slevin scale translated into German, French, and Italian by slightly changing the wording to a cooperative context was used. Three EO experts double-checked the accuracy of the translations. Some adaptations to the cooperative context were necessary. In contrast to the initial scale, the items were related to the organizational level rather than the firm's top management, which better suited the less hierarchical cooperative context. Furthermore, I had to consider that some cooperatives operate in economic niches and are oriented toward members. Therefore, proactiveness cannot be related only to direct competitors. To solve this issue, I included three additional items referring to the proactiveness towards cooperative members rather than towards the leading competitors. This understanding of proactiveness embraces the definition of Lumpkin and Dess (1996) as being "active rather than passive." Furthermore, Morris et al. (2011) propose that proactiveness in the non-profit sector should be expanded with the relation towards main stakeholders. EO was measured as a second-order unidimensional (reflective) construct (Covin & Wales, 2012; George, 2011).

3.3.2 Organizational antecedents of EO

Collective entrepreneurial capacity was measured by a filter question followed by a Likert-scaled item battery which was developed to capture the *collective* aspect of entrepreneurship *(Diaz-Foncea & Marcuello, 2013; Stevenson & Jarillo, 1990)*, asking whether employee meetings were repeatedly held and essential questions were collectively discussed and decided. The personal expense per employee measured *HR skills*, standardized by the industry's median expenses. Although this is a rough proxy of education and workforce experience, it can be assumed that skilled people usually go for higher wages. *Availability of financial resources* was measured following Moreno and Casillas (2008) by *efficiency,* as the turnover of firms' assets (sales/total assets), where inefficient firms have more unused resources or slack. The measure was standardized by subtracting the sector's median turnover to control for industry differences (de Jong et al., 2021). The second indicator was *financial capital,* measured by the equity ratio (equity/total assets), which indicates the organization's available financial resources (Moreno & Casillas, 2008). *Access to (new) financial capital* was measured with one item, which assessed the perceived access to capital when needed. The tendency to *inter-organizational cooperation*

[1] Measures are available in the appendix in Table 5A, descriptive statistics in Table 3A.

was measured with a single opposed statement asking whether organizations manage challenges alone or seek cooperation with partners.

Member participation was assessed with an index of one item measuring the inclusion of the members beyond the mandatory general assembly and a second measure assessing the share of active members in %. The two items were transformed into an index ($\alpha = 0.53$), ranging from 0-1 with equal weights.

3.3.3. Control variables (CV)

A dummy for *urban areas* controlled the economic environment. Urban areas generally offer more entrepreneurial options (influencing EO). *Regional economic differences* were controlled by the regional GDP level (NUTS-3) (FSO, 2019a). The cooperative density (entities/m^2) controlled for the density of the cooperative network, facilitating cooperation with other organizations.

Environmental hostility, dynamism and munificence have been identified as essential influence factors in EO research and are included as CVs (Rosenbusch et al., 2013; Wiklund & Shepherd, 2005). *Environmental hostility* was measured by a combined measure of perceived industry rivalry (Slater & Narver, 2000) and the number of self-reported direct competitors to capture the quantitative aspect of the competition (Rosenbusch et al., 2013). *Environmental dynamism* was measured by a reflective construct of three items capturing market dynamics and uncertainty (Miller & Friesen, 1983). *Environmental munificence* was measured with a single item, where respondents had to state whether their relevant markets were growing (Slater & Narver, 2000).

As organizational-specific controls, I included industry dummies and standard organizational control variables such as size (number of FTE) and age (in log. years since founding). Furthermore, I controlled the self-assessed relevance of the financial and social mission (compared to the member-oriented mission) in %. The number of third-party services (i.e. services to non-members) was assessed by their share at the yearly turnover in %. The share of dividend payment to members assessed the accumulation of reserves.

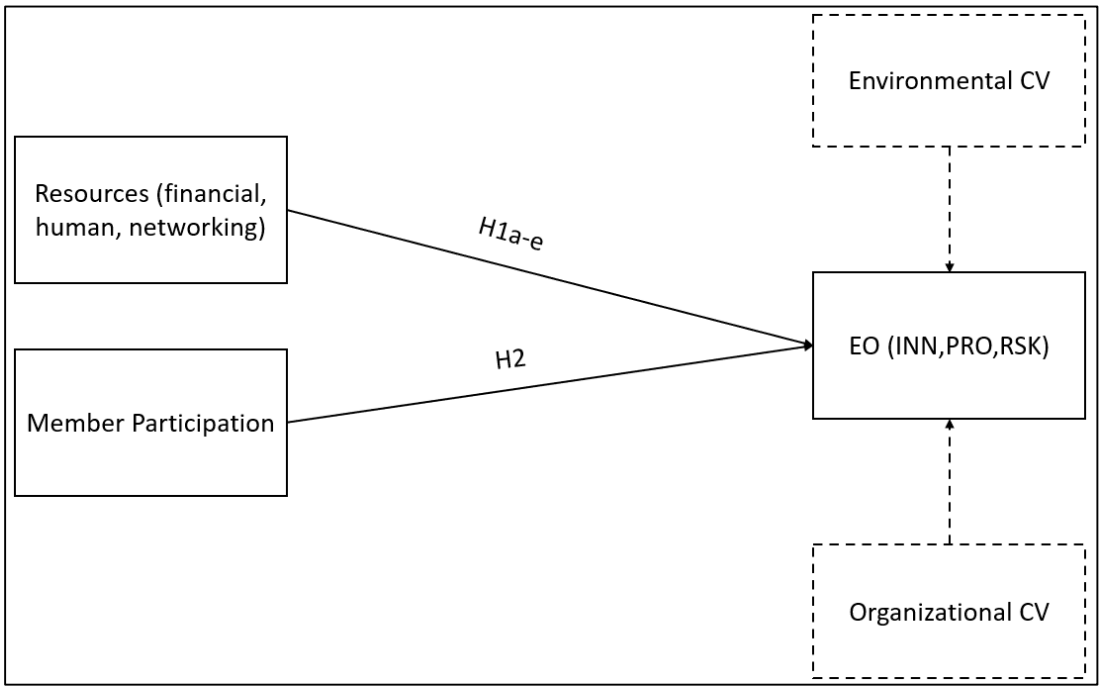

FIGURE 1: Research Model

4. Results

4.1 Data

In the summer of 2019, all 8154 Swiss cooperatives registered in the Swiss trade register at the end of 2017 were surveyed. A letter including the survey plus a short link to its online version was sent to the management/board. In a second step, I collected available emails from cooperatives which didn't answer and sent a reminder in the autumn of 2019. The survey was developed and carried out in partnership with CooperativeSuisse, [2] an interest group and platform for social entrepreneurship. Two entrepreneurship experts first validated the survey questions, and a pretest was carried out with eight cooperatives.

839 cooperatives completed the questionnaire (45% paper and 55% online). Excluding empty returns/high amount of missings and those not operating in markets (e.g., social and political interest representation and public cooperatives), the response rate amounts to 10% (615 answers out of 6296), which is comparable to other studies in the field and considered as acceptable. I created six subgroups based on the General Classification of Economic Activities (NOGA) to assess the share of different economic industries. Production, housing, and service cooperatives had a lower response rate but only slightly below 10%. The response rate is higher in the German-speaking part of Switzerland (13.1%) and slightly lower in the Italian (11.6%) and French-speaking parts (9.6%) but still comparable. Cooperatives in the sample are relatively old, with variations between the sectors. 99.3% are SMEs (less than 250 employees in FTE). Typically, cooperatives in infrastructure and housing have fewer paid employees because voluntary work dominates their business model.

TABLE 1: Sample and response rate

Sector	**Sample characteristics**					**Sample share**	**Sample**	**Population**	**Response rate**
	Mean age (base-year 2018)	Size (FTE < 10)	Size (FTE 10 – 49)	Size (FTE 50 – 249)	Size (FTE > 250)				
Production	66.3	78.3 %	18.8 %	1.5 %	1.4 %	12%	75	947	8%
Infrastructure	59.7	97.5 %	2.5 %	0 %	0 %	21%	134	1063	13%
Housing	51.6	92.2 %	7.1 %	0.7 %	0 %	28%	174	2399	7%
Retail Trade	68	60.8 %	24.3 %	12.2 %	2.7 %	13%	77	737	10%
Finance/ Insurance	87.6	23.6 %	60.7 %	15.7 %	0 %	15%	90	457	20%
Services	45.4	59.7%	24.2 %	14.5 %	0.6 %	11%	65	693	9%
TOTAL	62	72.8 %	20.4%	6.1 %	0.7%	100%	615	6296	10%

I did a t-test within subgroups to test for a non-response bias for survey time and online-to-paper results. In comparing survey answers from summer 2019 to autumn 2019 and online to paper respondents, all pairwise differences of items in the sector groups were insignificant, suggesting a systematic non-response bias is very unlikely.

4.2 Measurement model

Before applying hierarchical regression, I used structural equation modelling (SEM) to assess the measurement model. In a two-step approach, reliability, convergent, and discriminant validity were assessed (Anderson & Gerbing, 1988; Fornell & Larcker, 1981). Exploratory (EFA) and confirmatory factor analysis (CFA) show the dimensionality of the constructs. Because of low reliability, I had to

[2] Today SENSSuisse

delete two items (i.e., PRO3 and MPRO3). Both items emphasized competitive aggressiveness and did not load on the proactiveness dimension, which can be explained by the view that aggressiveness is not necessarily part of proactiveness but instead of competitive aggressiveness and not a necessary condition for EO (Lumpkin & Dess, 1996).

CFA indicates a good fit with the data (Chi-square = 377.187, df = 128, CFI = 0.938, SRMR = 0.051). EO is defined by innovativeness (INN) ($\beta = 0.95$, $p < 0.01$), risk-taking (RSK) ($\beta = 0.77$, $p < 0.01$), the additional dimension of member proactiveness (MPRO) ($\beta = 0.66$, $p < 0.01$), and proactiveness (PRO) ($\beta = 0.53$, $p < 0.01$) (see Table 5A).

The composite reliability of the latent constructs is acceptable (EO: CR = 0.86; CEC: CR = 0.93, Dyn = 0.71)) according to Hair Jr et al. (2014). The reliability of the subdimensions of EO is acceptable for INN (CR = 0.77), PRO (CR = 0.63), MPRO (CR = 0.65), and RSK (CR = 0.67). EO was modelled as a second-order reflective construct (George, 2011); therefore, cross-loadings between the sub-dimensions are expected to influence the sublevel's reliability.

Convergent validity (AVE $\geq$ 0.5) was given except for risk-taking and environmental dynamism (Fornell & Larcker, 1981). Because all reliability levels are above 0.60, this is still regarded as acceptable. Discriminant validity with the HTMT procedure was given (HTMT < I0.85I) (Henseler et al., 2015) (see Table 4A).

A test for a common method bias where a model with all items loaded on one common factor (Podsakoff et al., 2003) revealed a poor fit (Chi-sq. = 2341.701, df = 151, CFI = 0.592, SRMR = 0.155). Therefore, I conclude that a common method bias is unlikely.

4.3 Hypothesis testing

To assess the influence of the variables of interest and compare them with organizational and environmental influence factors, I used hierarchical ordinary least squares (OLS) in SPSS 26, which allows for assessing multilevel influences on EO. Because of missing data, I used the pairwise option for missings[3].

Table 2 shows the regression of the independent and control variables on EO (as an index of the four dimensions, INN, PRO, MPRO, RSK). The variance inflation factors (VIF) showed no indication of multicollinearity (VIF < 4).

The control variables (Model 1) together explained the most considerable variance (adj $R^2 = 23.9\%$). From the environmental CVs, environmental hostility ($\beta = 0.20$, $p < 0.001$) and dynamism ($\beta = 0.13$, $p < 0.01$) had a significant effect on EO. The organization-specific CV size ($\beta = 0.28$, $p < 0.001$) positively affected EO. Other CVs remained insignificant, suggesting regional economic differences, location, sector, and age did not influence EO.

In Model 2, the variables of interest were included. The CVs, hostility, dynamism, and size remained significant, although the latter's importance decreased. Other CVs did not change significantly. The included variables significantly increased the explained variance in EO (F-Change = 7.584***) to 30.6%. Among the variables, *collective entrepreneurial capacity* ($\beta = 0.13$, $p < 0.01$), *access to capital* ($\beta = 0.09$, $p < 0.05$), and *inter-organizational cooperation* ($\beta = 0.20$, $p < 0.001$) had a positive and significant effect on EO. In contrast, the other financial resource variables were not significant. Therefore, hypothesis *H1a*, *H1d*, *H1e* are supported and *H1b*, *H1c* are rejected. *Member participation* was negatively related to EO ($\beta = -0.10$, $p < 0.05$), and hypothesis *H2* is therefore rejected.

[3] In average less than 4% are missing and less than 10% for each single variable.

TABLE 2 : Main model (N = 615) (DV = Entrepreneurial orientation)

	Model 1				Model 2		
	Std- β	t - value	VIF		Std- β	t - value	VIF
urban	.05	1.06	1.30		.03	.62	1.35
cooperative density	.00	.02	1.05		.02	.43	1.07
GDP p. cap.	.02	.44	1.17		.02	.40	1.18
hostility	.20***	4.21	1.52		.18***	3.77	1.54
dynamism	.13**	3.12	1.18		.13**	3.06	1.22
munificence	.08^{+}	1.84	1.26		.07^{+}	1.70	1.30
housing	-.03	-.46	3.04		-.05	-.69	3.60
infrastructure	.09	1.35	2.57		-.01	-.15	2.86
retail	.08	1.51	1.91		.05	.94	1.98
finance / insurance	.00	-.08	2.32		-.03	-.53	2.67
services	.08	1.49	1.92		.08	1.52	1.93
age (log)	-.03	-.66	1.28		-.05	-1.25	1.33
size (log FTE)	.28***	4.97	2.10		.18**	3.06	2.42
financial mission	.05	1.06	1.58		.07	1.50	1.61
social mission	.09^{+}	1.81	1.55		.09^{+}	1.86	1.57
third party services	-.05	-1.03	1.29		-.01	-.27	1.37
dividend share to members	-.04	-.87	1.05		-.04	-1.10	1.07
collective entr. capacity					.13**	2.96	1.31
HR skills					.06	1.54	1.10
availability of resources (efficiency)					-.04	-.94	1.14
availability of resources (financial reserves)					.04	.82	1.60
availability of resources (easy access to capital)					.09*	2.22	1.21
inter-organizational cooperation					.20***	4.95	1.19
member participation					-.10*	-2.47	1.23
F-value	10.014***				9.998***		
F-change	10.014***				7.584***		
R^2	.265				.340		
Adj. R^2	.239				.306		

+ p < 0.10, * p < 0.05, ** p < 0.01, *** p < 0.001

5. Discussion

5.1 Contribution to theory

This paper investigates the impact of resources on cooperatives' EO using an EO measure adapted to the cooperative context. The additional dimension of member proactiveness well fitted Covin and Slevin's (1989) (slightly adapted) measurement instrument. The higher loading of member proactiveness compared to the original proactiveness measure suggests that proactivity towards stakeholders is essential for cooperatives. The finding is consistent with Morris et al. (2011), who suggested adapting the EO construct to non-profit organizations, which opens up further research possibilities.

The results on the resource-EO relationship show that networking resources are crucial for the entrepreneurial activities of cooperatives (Stevenson & Jarillo, 1990; Wiklund et al., 2009). The workforce's *collective entrepreneurial capacity* is positively related to EO *(support of H1a)*. The result compares to findings by Muñoz et al. (2020) that collective engagement of the cooperative workforce leads to higher levels of innovation and that cooperative principles are related to EO (Guzmán et al., 2020). Cooperatives could take advantage of this finding because their culture with horizontal leadership styles, participation, commitment, and workforce engagement is a good breeding ground for entrepreneurial outcomes (De Clercq et al., 2010; Muñoz et al., 2020; Strobl et al., 2022). Surprisingly, the *workforce's quality* was less critical for the EO than the collective mobilization of the workforce *(rejection of H1b)*. The positive (although not significant) relationship aligns with the proposition that the quality of the cooperative workforce is critical for innovativeness (Muñoz et al., 2020; Rodríguez & Guzmán, 2013), proactiveness and risk-taking and thus for an EO (Guzmán et al., 2020) but the small effect suggests workforce quality is not that an issue for Swiss cooperatives.

Cooperation with other organizations when challenges arise was most important for cooperatives' EO *(support of H1e)*, which supports the proposition that the external network is crucial for cooperatives' entrepreneurship (Mazzarol et al., 2014). The findings are comparable to empirical findings of a positive effect of external collaboration and EO or subdimensions for SMEs (García-Villaverde et al., 2018; Kusa et al., 2019) and the cooperative context (Guzmán et al., 2020).

The *availability of financial resources (H1c)* was not significantly related to EO, which could be explained by the fact that equity mainly serves the purpose of cooperatives rather than being used for risky investments. An alternative explanation would be that some cooperatives already invested in infrastructure in the past and have fewer available financial resources but are well-positioned and entrepreneurial.

In contrast, cooperatives with perceived *easy access to new capital* have higher EO levels *(support of H1d)*, suggesting the importance of venture capital. Because EO is costly and needs resources (Wiklund & Shepherd, 2005), the availability of new capital gives degrees of freedom for investments in innovation, market screening activities, and entrepreneurial endeavours.

Member participation and engagement can bear costs for cooperatives. Although there is the view that keeping members close and including them in decisions can result in knowledge advantages compared to competitors (Talonen et al., 2016) and increased knowledge flow from members (Sánchez-Hernández & Castilla-Polo, 2021), the results suggest the costs of member participation override the benefits *(rejection of H2)*. The result aligns with the literature claiming member engagement comes at certain costs (Österberg & Nilsson, 2009; Pozzobon & Zylbersztajn, 2013). Consequently, cooperatives might overcome potential costs of collective action, such as slow decision-making and the choice of half-hearted and risk-averse decisions (Van der Krogt et al., 2007) by keeping the member base at a certain distance. An alternative explanation for the result would be that I did not control for the degree of member heterogeneity which is an essential factor in explaining the costs of member participation and offers opportunities for future research.

Next to the above-discussed antecedents of EO, the importance of the external environment for EO is crucial. That hostility had a positive rather than negative effect on EO could be explained by the fact that I measured hostility by industry rivalry. The results suggest that cooperatives in competitive markets react by increasing EO. The finding aligns with the proposition that competition forces SMEs to invest in EO to gain a competitive advantage (Wiklund, 1999), and EO is higher in a hostile environment (Covin & Slevin, 1991; Laskovaia et al., 2019). The second finding suggests that cooperatives, like SMEs, react to an uncertain, unpredictable, and dynamic environment with an EO. The results are comparable to other findings on SMEs (Ruiz-Ortega et al., 2013; Strobl et al., 2022) and indicate that cooperatives may also benefit from EO in a dynamic environment.

5.2 Contribution to practice

The findings are interesting for practitioners because they might adjust resources or member participation to increase EO, positively affecting economic performance (Guzmán et al., 2020). Cooperatives with more financial and human resources have more freedom for entrepreneurial actions because EO is resource and time-consuming. The good news for cooperatives is that the collective mobilization of the workforce and the network is more important than the availability of financial and human resources: the inclusion of workers (paid and unpaid) into actions related to entrepreneurial activities and the use of collective skills of the workforce is positively related to EO. Research from related literature suggests that outcomes of collective action are highest with a skilled, motivated, and engaged workforce, which demands cooperative leadership styles and the building of mutual trust. Using internal resources and cooperation with other cooperatives or organizations when challenges arise can be an important driver to save costs, exchange ideas and information, and launch joint projects. Cooperatives could, therefore, focus on building collaborations with different stakeholders.

In contrast, the participation and engagement of members are a double-edged sword. From a long-term perspective, the member base must be active and included. Strong ties with members result in a loyal clientele and create a competitive advantage. At the same time, an involved member base might slow down entrepreneurial decisions and prevent necessary long-term investments. Therefore, the management must create transparency and persuade members of necessary changes. This demands high communication skills and knowledge of the member base.

5.3 Limitations and future research

The discussed relationships must be considered under the limitations imposed by the study design. Although cooperatives are similar among countries, the analyzed business model is shaped by Swiss regulations. The degree of freedom for cooperative business types differs among countries. Therefore, applying the research question to cooperatives with different legal preconditions would be interesting.

The study also has methodological limitations. First, the questionaire relies on single respondents. Although this is quite common for this kind of research, it would be interesting to replicate the study with a multidimensional view. Next to the increased robustness of the results, this could give more insights into the functioning of a cooperative. Second, like many studies in this research field, reverse causality cannot be ruled out with the study design. Longitudinal studies or including some historical data could solve this problem and help to answer how EO varies over time and in different environmental settings.

6. Conclusions

With my work, I expand existing research on the antecedents of EO in cooperatives. This is relevant because EO is discussed as a factor explaining their economic success (Guzmán et al., 2020; Kyriakopoulos et al., 2004). By researching antecedents of EO, I give answers to the question of how cooperatives manage to be more entrepreneurial and potentially more successful.

Similar to Wiklund et al. (2009), the findings of this study suggest that different types of resources are positively related to EO. In contrast to the latter, I find evidence that networking resources are more critical for the EO of cooperatives than financial or human resources. The results are interesting because they could shift the orthodox economic view of the imperfection of the cooperative business model with difficulties attracting enough financial resources towards the advantages through collective mobilization of the internal and external network. A closer look at networking resources could help explain the puzzle that despite the disadvantages, the cooperative business model persists in competition with corporations (Boone & Özcan, 2016), and that hybrid organizational forms have an advantage under certain conditions (Berti & Pitelis, 2022). Examining the relationship between member participation and EO, I add evidence to the ambiguity of member participation for EO. Further research could dig deeper into whether member heterogeneity plays a role in this relationship and how cooperatives could manage their members to reap the potential benefits for entrepreneurial actions.

Although the EO of cooperatives depends on factors such as resources and member participation, which the management can directly or indirectly influence, I show that environmental variables such as hostility and dynamism are significant factors to consider. In this respect, cooperatives are no different from other SMEs, but this offers opportunities for further research along the interaction between environment, EO and performance of cooperatives.

7. Appendix

	Construct/Indicator	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*16*	*17*	*18*	*19*	*20*	*21*	*22*	*23*	*24*
1	EO	1.00																							
2	INN	.83*	1.00																						
3	PRO	.60*	.32*	1.00																					
4	PROM	.76*	.44*	.27**	1.00																				
5	RSK	.73*	.55*	.30*	.34*	1.00																			
6	collective entrepreneurial capacity	.32*	.30*	.17*	.22*	.18*	1.00																		
7	HR skills	.37*	.29*	.18*	.37*	.17*	.34*	1.00																	
8	available resources (efficiency)	.01	.00	-.07	.03	.02	.11*	.16*	1.00																
9	available resources (financial reserves)	-.09*	-.12*	.00	-.09*	.02	-.16*	-.26*	.10*	1.00															
10	easy access to credit	.11*	.09*	.12*	.09*	.05	.10*	.03	-.05	-.13*	1.00														
11	inter-organizational cooperation	.32*	.28*	.14*	.21*	.23*	.22*	.28*	.03	.00	.01	1.00													
12	member participation	-.08*	.03	.03	-.29*	.06	.08	-.05	.04	.04	-.02	.02	1.00												
13	urban	.09*	.10*	.02	.09*	.01	.12*	.14*	.03	-.20*	.17*	-.03	-.02	1.00											
14	cooperative density	-.02	.01	.01	.00	-.04	-.07	-.07	-.11*	.04	.00	-.09*	-.02	-.06	1.00										
15	GDP p. cap.	.00	-.01	-.03	-.01	.01	.00	-.05	.01	-.03	.05	-.04	-.01	.31*	-.05	1.00									
16	hostility	.38*	.33*	.18*	.35*	.18*	.27*	.41*	-.01	-.22*	.05	.15*	-.06	.07	-.04	-.04	1.00								
17	dynamism	.21*	.22*	.12*	.12*	.16*	.18*	.16*	.02	0.01	-.17*	.09*	.07	-.15*	-.02	-.16*	.22*	1.00							
18	munificence	.14*	.12*	.09	.14*	.04	.06	.11*	-.02	-.23*	.17*	.02	-.10*	.17*	.09*	.10*	.11*	-.12*	1.00						
19	age (log)	.06	.04	.02	.14*	-.04	.03	.30*	-.01	-.07	.13*	.12*	-.12*	.00	-.08	-.02	.15*	.00	-.04	1.00					
20	size (log FTE)	.42*	.34*	.19*	.39*	.22*	.34*	.67*	.12*	-.28*	.10*	.29*	-.03	.16*	-.10*	-.04	.49*	.14*	.16*	.31*	1.00				
21	financial mission	.13*	.08*	.04	.17*	.02	.08	.29*	.00	-.17*	.03	.00	-.03	-.01	-.05	-.09*	.26*	.06	.06	.22*	.28*	1.00			
22	social mission	.05	.02	.06	.01	.04	.00	-.15*	.01	.07	-.06	-.03	-.06	.04	.11*	.06	-.05	.00	.11*	-.26*	-.11*	-.50*	1.00		
23	third party services	.11*	.04	.11	.17*	.01	.03	.21*	.17*	.13*	-.12*	-.04	-.07	-.04	.01	-.09*	.11*	.13*	.01	-.06	.18*	.09*	.19*	1.00	
24	Share of dividends to members	-.03	-.02	-.08	-.03	.00	.07	.08*	.00	-.02	.05	-.01	.05	.04	-.03	-.08	.06	.06	-.06	.01	.05	.11*	-.10*	-.04	1.0
25	housing	-.22*	-.16*	-.14*	-.19*	-.16*	-.22*	-.23*	-.07	-.33*	.22*	-.18*	-.05	.25*	.01	.18*	-.18*	-.28*	.14*	-.06	-.30*	-.11*	.06	-.26*	.03
26	infrastructure	-.09*	-.10*	-.06	-.05	-.02	-.06	-.32*	.05	.41*	-.08	.04	-.17*	-.23*	.09*	-.07	-.24*	-.03	.00	-.07	-.33*	-.20*	.16*	.09*	-.09*
27	production	-.04	-.05	-.02	-.07	.04	-.01	.04	.04	.16*	-.06	-.03	.24*	-.18*	-.08	-.08*	-.01	.16*	-.20*	.03	-.01	.13*	-.13*	.03	.10*
28	retail	.16*	.11*	.17*	.11*	.10*	.12*	.24*	-.11*	.03	-.01	.06	.06	-.06	.06	-.01	.22*	.08*	-.14*	.01	.21*	.14*	-.07	.15*	-.02
29	finance / insurance	.18*	.16*	-.02	.26*	.02	.19*	.30*	-.06	-.27*	-.07	.16*	-.18*	.07	-.05	-.10*	.35*	.09*	.18*	.27*	.43*	.19*	-.15*	-.12*	.06

30	services	.10*	.12*	.11*	.01	.11*	.04	.10*	.17*	.06	-.06	.00	.17*	.10*	-.05	.05	-.05	.09*	-.05	-.17*	.14*	-.09*	.09*	.22*	-.08
	Mean	3.73	3.73	4.10	4.28	3.15	2.33	4.92	0.13	0.36	3.24	4.08	0.27	0.47	0.06	4.89	7.32	2.60	2.50	1.66	0.50	47.86	21.21	35.11	14.35
	SD	1.12	1.65	1.10	1.64	1.23	1.27	34.2	0.78	0.30	1.50	1.80	0.29	0.50	0.04	0.11	8.96	0.92	0.98	0.40	0.67	31.12	22.94	38.85	26.24
	Min.	1.00	1.00	1.00	1.00	1.00	1.00	-50	-2.08	0.00	0.00	1.00	0.00	0.00	0.00	4.73	0.00	1.00	1.00	0.48	0.00	0.00	0.00	0.00	0.0
	Max.	6.50	7.00	7.00	7.00	7.00	5.00	70	4.12	1.00	5.00	7.00	1.00	1.00	0.32	5.31	42.0	5.00	4.00	2.18	3.89	100	100	100	100

TABLE 3A: Descriptive statistics and correlations of the constructs/indicators

	EO	INN	PRO	MPRO	RSK	CEC	Dyn
Innovativeness (INN)	-	**0.73**	(0.47)	(0.61)	(0.74)	(0.31)	(0.30)
Proactiveness (PRO)	-	0.48	**0.75**	(0.44)	(0.46)	(0.22)	(0.15)
Proactiveness 2 (MPRO)	-	0.63	0.40	**0.70**	(0.44)	(0.22)	(0.15)
Risk-taking (RSK)	-	0.74	0.47	0.50	**0.65**	(0.16)	(0.23)
Collective entr. capacity (CEC)	0.33	0.33	0.24	0.25	0.18	**0.88**	(0.20)
Env. Dynamism (Dyn)	0.32	0.32	0.19	0.15	0.24	0.19	**0.66**
AVE		0.53	0.56	0.50	0.42	0.77	0.45
CR	0.86	0.77	0.63	0.65	0.67	0.93	0.71

Diagonal elements are the square root of the average extracted variance of the construct (AVE). Off-diagonal elements (below) are the correlations between the constructs. Above the diagonal in brackets are the HTMT values.

TABLE 4A: Reliability, convergent, and discriminant validity of the measurement model

Dependent and independent variables[1]	**Loadings[3]**	**z-value**
Entrepreneurial orientation (EO)[2] (CR = 0.86) (Covin & Slevin, 1989)		
Innovativeness (1 -7 opposing statements) (CR= 0.77, AVE= 0.53)	**0.953**	
We place particular emphasis on proven products/services / We place particular emphasis on new or further development in our products/services. (INN1)	0.652	
We have not changed anything in our products/services in the last five years. / Over the past five years, we have made many changes to our products/services. (INN2)	0.772	10.596
There have been only minor changes in our products/services over the last five years. / There have been fundamental and far-reaching changes in our products/services over the past five years. (INN3)	0.761	13.723
Proactiveness (1 -7 opposing statements) (CR= 0.63, AVE = 0.56)	**0.531**	**3.488**
Typically, we respond to the activities of our competitors. / Typically, we launch activities to which our competitors then respond. (PRO1)	0.567	
It hardly ever happens that we are the first to appear on the market with new products/services or ways of working. / It happens very often that we are the first to appear on the market with new products/services or ways of working. (PRO2)	0.836	4.864
In dealing with our competitors, we follow the principle of "live and let live". / We are challenging and combative towards our competitors.		
Member Proactiveness (1 -7 opposing statements) (CR= 0.65, AVE = 0.50) (Morris et al., 2011)	**0.662**	**5.603**
Typically, we respond to the concerns of our members. / Typically, we launch activities with which we then approach our members. (MPRO1)	0.635	
We do not change our range of services without a mandate from our members. / Even without a mandate from our members, we often make suggestions for new or changed services. (MPRO2)	0.767	8.583

In negotiations, we look first and foremost at ourselves and our strengths. / In negotiations, we behave in a combative and assertive manner. (MPRO3)		
Risk-taking (1 -7 opposing statements) (CR= 0.67, AVE = 0.42)	**0.773**	**8.232**
We prefer projects with a decent return but low risks. / We prefer projects with particularly high returns, even if they involve major risks. (RSK1)	0.568	
We are convinced that in our industry, it is better to act cautiously and move forward in small steps. / We are convinced that in our industry, it is necessary to pursue one's goals courageously and in big steps. (RSK2)	0.672	9.902
In an uncertain decision-making situation, we tend to wait so that we can avoid expensive wrong decisions. / In an uncertain decision-making situation, we dare to act so that we can achieve great success afterwards. (RSK3)	0.664	8.915
Organizational resources		
Collective entrepreneurial capacity (CEC) (CR= 0.93, AVE = 0.77) Do staff meetings always take place in your organization where important issues are discussed and decided collectively? If yes, these meetings take place primarily to ensure that... (1 - "strongly disagree" 5- "strongly agree")		
… we can realize important innovations in our products and services. (CEC1)	0.871	
… we identify and meet future expectations of our members. (CEC2)	0.902	30.795
…we encourage each other to take greater risks. (CEC3)	0.685	19.085
… our employees can get new impulses and start initiatives. (CEC4)	0.885	31.508
... we are combative and assertive in our environment. (CEC5)	0.928	31.746
HR-skills Measured by personal cost/FTE in CHF	n/a	
Available financial resources Measured as (in)efficiency by the asset turnover rate (turnover/total assets) Measured as financial resources by the equity ratio (equity/assets) Access to capital: If we needed additional capital, we could get it immediately. (1- “not true, 5 “strongly agree”)	n/a	
Inter-organizational cooperation (1-7 opposing statements) We master challenges alone / We cooperate with partners (to master challenges) (EC)	n/a	
Member participation (0-1) Index of: - Share of active members in %. - Participation (Does the membership base participate in important decisions (outside the general assembly)? (1 “no” to 4 “always”)		
External control variables		
- Urban location (DEGRUBA) compared to non-urban (0-1) - Cooperative density (cooperative entities/m^2) (FSO, 2019b) - Cantonal GDP per cap. (FSO, 2019a)		
Environmental hostility		

Index of: - Number of competitors (Rosenbusch et al., 2013) - Perceived competition (In our industry, competitors leave each other alone. /Competition is generally fierce in our industry (1-7) (Slater & Narver, 2000)		
Environmental dynamism (CR= 0.71, AVE = 0.45) (1- "not true" – 5 "very true") (Miller & Friesen, 1983) - The (market) development for our important services and offers is extremely difficult to estimate. - The (market) development for our important services and offers is characterised by strong fluctuations in demand. - The market development for our important services and offerings offers many opportunities, but they are difficult to oversee.	0.688 0.694 0.623	 9.514 9.619
Environmental munificence (Slater & Narver, 2000) In recent years, the markets relevant to us have... (1 – «rather shrunken» - 5 «grown significantly»		
Organizational control variables		
Size (log FTE), age (log age since foundation), financial mission (compared to non-financial) in %, social mission (compared to non-social mission) in %, the share of third party services (to non-members) in % of yearly turnover, the share of dividends paid to members (compared to retained) in %		

[1]All items are translated from German/French/Italian

[2] The retranslated items are based on the Miller/Covin and Slevin (1989) EO scale, which was first translated to German and slightly adapted to the cooperative context. **N/a** indicates single-item measure/non-reflective construct

[3] The loadings refer to the measurement model after the exclusion of items (PRO3, MPRO3)

TABLE 5A: Measures

8. References

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5 Paper 3: Similar but different – a comparison of entrepreneurial orientation and goal attainment in non-profit and for-profit homecare services

Löffel, U. & Gmür, M. (2024)

Ueli Löffel: Conceptualization, Methodology, Investigation, Data curation, Software, Analysis, Project administration, Validation, Writing – original draft, Writing – review & editing.

Markus Gmür: Conceptualization, Project administration, Resources, Feedback on the Manuscript

Similar but different – a comparison of entrepreneurial orientation and goal attainment in non-profit and for-profit homecare services

Home-care services are essential to face the challenges of an ageing society and the associated higher healthcare costs. Healthcare reforms aim at creating a better and more efficient healthcare system by increasing transparency, flexibility, and competition. Consequently, non-profit homecare services increasingly compete with for-profit service providers, and questions of strategy and competitive advantage are gaining relevance. Entrepreneurial Orientation (EO) is discussed as a strategic orientation beneficial in a competitive and dynamic environment. Furthermore, it is a debated research question whether non-profit and for-profit organizations have comparable EO levels and benefit to the same degree from EO as for-profit organizations. A survey of 168 for-profit and 37 non-profit homecare organizations in Switzerland shows an overall positive relationship between EO and performance. Furthermore, a comparative view reveals that for-profit organizations have higher EO levels than non-profit organizations, mainly due to differences in proactiveness and risk-taking. Finally, testing differences in the EO-performance relationship shows that these differences are not transformed into higher performance levels of for-profit homecare organizations, which is explained by the regulatory environment. The paper contributes to the debate on whether EO is a beneficial strategy for healthcare organizations and if for-profit and non-profit organizations differ concerning EO and performance.

Ueli Löffel & Markus Gmür

Ueli Löffel* (ueli.loeffel@unifr.ch)

Markus Gmür*

*Institute for Research on Management of Associations, Foundations and Cooperatives, University of Fribourg (CH), Bd de Pérolles 90, 1700 Fribourg, Switzerland

1. Introduction

Due to market reforms, non-profit organisations in healthcare are forced to shift the focus from the delivery of public goods to their marketisation and the previously undisputed service mandate is questioned by competition from for-profit organizations. Market reforms are seen as a remedy to create a better and more efficient healthcare system through transparency, flexibility, and competition, targeting various challenges linked to the healthcare system. They address demographic change with a multimorbid population, rising complexity, and lack of transparency regarding the quality and costs of services, resulting in constantly rising healthcare costs.

As a result, non-profit healthcare providers must deal with strategic positioning issues. In this context, an entrepreneurial orientation (EO) is relevant for non-profit healthcare providers as it allows them to expand the range of services and increase revenues. Innovative approaches help find new solutions to healthcare challenges, resulting in better healthcare quality and lower costs (Brandt & Znotka, 2021). Furthermore, an EO helps to gain a strategic advantage over competitors in a dynamic environment (Wiklund & Shepherd, 2005).

Entrepreneurial orientation refers to the degree of innovativeness in the range of services, the take of business risks and proactiveness in shaping markets compared to competitors (Lumpkin & Dess, 1996; Miller, 1983). Research on EO in the healthcare sector is generally scarce, and the few existing studies are focusing on the influence of EO on the well-being of employees (Grabowski et al., 2009; Kearney et al., 2020), on hospitals (Bhuian et al., 2005; Chahal et al., 2019; Hinz & Ingerfurth, 2013), and nursing homes performance (Davis et al., 2013; Vecchiarini & Mussolino, 2013). However, no EO studies exist on homecare organisations that offer care for sick and elderly patients in their familiar home environment. Homecare is gaining relevance as a cost-effective alternative to stationary treatment in the context of increasing costs due to demographical change (Bundesrat, 2019). Our study adds to this scarce literature by asking the research question of whether homecare organizations benefit from an entrepreneurial orientation and offers empirical evidence on then EO – performance link of homecare organizations.

In addition, we take a comparative stance and discuss whether there are differences in EO levels between for-profit and non-profit homecare organizations and whether these differences translate into a competitive advantage. The question is relevant for Swiss homecare organizations because the regulatory reform of care financing in Switzerland in 2011 has led to legal equality between public and private homecare organizations. Consequently, non-profit homecare providers have lost around 10% of their market share to for-profit homecare providers. Whether EO offers a competitive advantage is relevant for research in the non-profit sector, as public reforms pose similar challenges for organisations outside the healthcare sector.

While there is a variety of comparative studies on the difference in the quality of for-profit and non-profit homecare services (Geraedts et al., 2016; Wang et al., 2017) and on organizational differences (Ben-Ner & Ren, 2015; Schmid, 2001) the aspect of strategy has not yet received much attention (Helmig et al., 2014). Moreover, despite the ascribed potential of EO for healthcare organizations, only two comparative studies are treating the difference between for-profit and non-profit organizations with a focus on EO. However, there remains a gap in the literature on the differences between the EO-performance relation in for-and non-profit organizations (Davis et al., 2011; Hinz & Ingerfurth, 2013). We add to this second research gap by discussing, whether organizational features and market position of non-profit and for-profit homecare organizations have a different influence on EO and whether non-profit and for-profit homecare organizations benefit equally from EO regarding financial and non-financial performance measures.

We make two contributions to the literature with our comparative study in the Swiss healthcare sector. First, in discussing the determinants and outcomes of EO in healthcare, we provide evidence on the positive relationship between EO and organizational growth and, to a lesser extent, the subjective

performance of for-profit organizations and non-profit homecare services. We thereby give evidence of the potential of entrepreneurial orientation in healthcare (Brandt & Znotka, 2021). Second, by examining the differences in EO and the EO-performance link between non-profit and for-profit organizations, we add comparative evidence on organizations operating in the same business field. Using theoretical approaches focusing on organizational differences between non-profit and for-profit organizations (agency and stakeholder theory) and accounting for the specific regulatory environment using theories of strategic positioning (Porter's generic strategies and Miles and Snows strategic typology), we explain differences in the EO level and EO-performance relationship between for-profit and non-profit organizations. Our research shows that differences in EO between for-profit and non-profit organizations exist, such that for-profit organizations exhibit higher EO levels but that the profit status does not significantly affect the strength of the relationship between EO and performance. The results suggest that due to the strategic position of profit-oriented organizations as market entrants, they increase their EO level, but this does not (yet) payout regarding performance. The finding sketches the importance of the regulatory environment and degrees of freedom in a regulated market environment, where entrepreneurial intentions do not necessarily transform into superior performance levels. The finding is not only interesting for policymakers in the field of healthcare and the ongoing claims for further regulatory reforms but also provides further evidence to the ongoing debate on whether EO is different and equally beneficial for for-profit and non-profit organizations (Lumpkin et al., 2013; Morris et al., 2011; Stock & Erpf, 2022).

2. Theoretical framework

2.1 EO in healthcare

EO captures the essence of an entrepreneurial organization and is an established construct in management research (Covin & Slevin, 1989; Miller, 1983; Rauch et al., 2009). According to Miller (1983), entrepreneurial organizations focus on innovations, take the necessary risks and are the first to introduce innovations. *Innovativeness* is the firm's propensity to constantly create or change products or services (Covin & Slevin, 1989; Miller, 1983). *Proactiveness* describes an active rather than a passive attitude towards competitors (Lumpkin & Dess, 1996) or "the anticipatory development and implementation of innovations in advance of others" (Morris et al., 2011, p. 959). *Risk-taking* is the propensity to be involved in bold and high-risk projects under uncertainty (Zahra & Covin, 1995). EO was initially understood as an unidimensional measure, meaning that all three dimensions have to be present (Covin & Slevin, 1989; Miller, 1983). Since then, variations of the EO construct evolved: multidimensional, with the additional dimension of competitive aggressiveness and autonomy (Lumpkin & Dess, 1996) and mixed models with a separation of risk-taking from the other dimension of EO (Anderson et al., 2015). Although there are good reasons to use EO as a multidimensional construct, especially to examine configurations of EO and interrelations of these with other variables (Lechner & Gudmundsson, 2014; Miller, 2011), using an unidimensional measure has the advantage that the impact of EO on other variables such as performance can be assessed and results can be compared among organizations. Taking an empirical approach the EO dimensions have shown to be closely related in most studies, pointing towards an unidimensional use (Rauch et al., 2009). Therefore, since we focus in our paper on (i) assessing the impact of EO on performance and (ii) on comparing the EO as well as its impact on performance between for-profit and non-profit organizations the use of an unidimensional measure seems appropriate.

There is an ongoing debate about the nature of EO in social enterprises and the implications for the EO scale (Lumpkin et al., 2013; Morris et al., 2011). The debate implies several questions, among others, the optimal combination of innovativeness, proactiveness, and the optimal level of risk-taking (see Morris et al. (2020) for the debate). Furthermore, adaptations of the scales have been proposed, such as the inclusion of an additional dimension of collaboration with the external network (Lurtz & Kreutzer, 2017), or more generally speaking of reciprocal interactions or reciprocity (M. Lacerda et al., 2020;

Stock & Erpf, 2022). Applying the EO scale to the healthcare sector, asking whether EO differs in the healthcare field and whether additional dimensions should be considered is essential.

Research in healthcare claims that coordination between employees, patients, and involved agents is crucial for the quality of care, with higher perceived quality by employees and clients and lower rates of unplanned healthcare use by patients (Möckli et al., 2023). Haase and Franco (2020) argue that cooperation is of great importance for entrepreneurship in healthcare and that working effectively between and within healthcare units is crucial for the quality of healthcare services. Other research shows that aspects of collective entrepreneurial action, such as collective decision-making, are essential for non-profit and for-profit healthcare organizations (Ben-Ner & Ren, 2015; Schmid, 2001) and that participative governance leads to higher levels of innovation (Guzmán et al., 2024). Therefore, reasonable arguments exist that internal exchange or cooperation is an additional dimension of entrepreneurial orientation in healthcare organizations. The use of internal networks and internal exchanges has been shown to be an organizational competency strongly associated with entrepreneurial behaviour. As Stevenson and Jarillo (1990) argue, informal networks help detect business opportunities, which are exploited through employees' capabilities. Although it is expected to assign ideas or actions of an entrepreneurial nature to a single person or "the entrepreneur", there is the view that it is instead a collective action where the creation of ideas and business opportunities is embedded in "a social process of discussion and interpretation" (Dimov, 2007, p. 714). Several researchers have examined the relationship between internal exchange processes, knowledge sharing and EO, and a close relationship was shown empirically (De Clercq et al., 2015; De Clercq et al., 2010). Going beyond the mere usefulness of collective exchange or interaction as an EO antecedent, authors claim that entrepreneurial intentions and actions have a collective nature (Ribeiro-Soriano & Urbano, 2010; Yan & Sorenson, 2003; Yan & Yan, 2016). Based on the importance of the collective characteristic for entrepreneurial intentions, especially in healthcare, we will include the aspect of collective mobilization as a dimension in the established EO scale to account for the collective dimension of entrepreneurship.

Entrepreneurial orientation is generally associated with organizations' superior performance (Covin & Slevin, 1991; Miller, 1983). The positive link has been suggested for different organizational types, such as SMEs (Wiklund & Shepherd, 2005), family businesses (Strobl et al., 2022), and large firms (Gupta & Gupta, 2015). The positive relationship is empirically confirmed by many studies showing a positive relationship between EO and financial and organizational performance measures (Rauch et al., 2009). In the non-profit sector, conceptual contributions discuss whether non-profit organizations benefit from EO and whether the dimensions differ from for-profit organizations (Lumpkin et al., 2013; Morris et al., 2011). Several quantitative studies empirically confirm EO's positive effect on different organizational performance measures (Stock et al., 2024).

In the healthcare sector, a few studies focused on the effect of entrepreneurial orientation on performance. Guo (2006) proposes that the healthcare system demands entrepreneurial management to achieve growth and survival with increasing competition between for-profit and non-profit organizations through deregulation and rising complexity. Based on a qualitative study in the German healthcare sector, Brandt and Znotka (2021) suggest that EO is a means to increase the efficiency and quality of the healthcare system and to face the challenge of constantly rising healthcare expectations.

The proposed relationships are empirically partially confirmed by quantitative studies (see Table 1): Bhuian et al. (2005) find a positive relationship between a moderately entrepreneurial orientation and organizational success among not-for-profit hospitals in the United States. Their results suggest that EO is positively related to performance, but the inverted U-shaped relationship suggests that non-profit hospitals may have an excess of entrepreneurial posture (as measured by hospital innovation, proactivity, and risk-taking). Chahal et al. (2019) did not differ between ownership types and found a positive relationship between EO and financial (net profits, ROI, ROA) and non-financial performance (clinical quality, client satisfaction, complaint management) of US hospitals. The positive relationship persists over all EO dimensions, but innovativeness and proactiveness had the most substantial impact.

<TABLE 1 > EO studies in healthcare

Authors	Context	Study type	Summary of findings
Bhuian et al. (2005)	Non-profit hospitals in the US	Survey (N=231)	EO is positively related to performance. The relationship was most substantial at a moderate level of EO. Long-term competitive threats and demand uncertainty were negatively related to performance.
Davis et al. (2011)	For-profit and non-profit nursing homes in Florida	Survey (N=134)	There are no significant differences in EO levels between non-profits and for-profits, but NPOs engage in environmental scanning more often.
Davis et al. (2013)	For-profit (78%) and non-profit (22%) nursing homes in Florida	Survey (N=104)	Innovativeness is negatively correlated with financial performance, risk-taking is positively related, and there is no relation to proactiveness.
Hinz and Ingerfurth (2013)	For-profit, non-profit, and public hospitals in Germany	Survey (N=152)	EO is positively related to hospital performance. Private for-profit hospitals had the highest EO levels.
Chahal et al. (2019)	Private hospitals in US	Survey (N=152)	EO is positively related to hospitals' financial and non-financial performance.

The remaining studies additionally consider the differences between for-profit and non-profit-oriented organizations when examining EO and its relationship to performance: Hinz and Ingerfurth (2013) find a positive relationship for both groups independent of environmental conditions, examining the impact of entrepreneurial orientation on organizational success in non-profit and for-profit hospitals. Davis et al. (2011) find equally high levels of entrepreneurial orientation among for-profit and non-profit nursing homes in Florida. In a follow-up study, they also assessed the impact of EO on the performance of for-profit and non-profit nursing homes and found a significant negative effect of innovativeness on financial performance and a positive effect of risk-taking.

2.2 Differences between for-profit and non-profit organizations' performance, organizational features, and strategy

There is empirical evidence of a difference in performance between for-profit and non-profit healthcare organizations, which must be analyzed concerning the services offered and the national context (degree of liberalization of the healthcare system, managed competition, and the like). A meta-analysis (50 US studies) finds that for-profit nursing homes have better financial performance than non-profits, but the latter is associated with better employee and client well-being (Bos et al., 2017). A german study with 10,168 nursing homes reveals that non-profit nursing homes had better quality but also charged higher prices, proposing that quality is price dependent (Geraedts et al., 2016). A similar picture was shown for homecare where the analysis of the US Medicare database found that for-profit homecare was more profitable than non-profit, was more expensive per patient, had higher administrative costs, and had lower overall quality indicator levels than non-profit providers (Cabin et al., 2014). Another study among all Medicare-certified agencies in the US between 2011 to 2015 find a higher probability of low quality-performance scores among for-profit homecare services and a more significant improvement in the quality of non-profit homecare over time (Wang et al., 2017). The differences in the quality and performance of healthcare organizations raise the question of differences in organizational characteristics of non-profit and for-profit healthcare services.

Schlesinger and Gray (2006) propose that non-profit nursing homes focus less on revenue maximization than for-profit nursing homes. The results are confirmed by findings from Swiss homecare organizations where for-profit homecare organizations had more paid minutes per client and, consequently, a lower share of unbillable costs (25% vs 50%) than non-profit organizations (Möckli, 2023).

Furthermore, Schlesinger and Gray (2006) find that non-profit organizations are more trustworthy regarding service delivery and are typically incubators of innovation. In contrast, for-profit organizations are faster to react to changes in demand by increasing, lowering or changing their services. The variation between for- and non-profits increased with the competitiveness of the markets, suggesting that for-profit and non-profits serve different needs.

In contrast to the abovementioned studies, which propose persisting differences between for-profit and non-profit healthcare services, a survey by Schmid (2001) with 41 profit and non-profit homecare agencies in Israel from 1990 to 1998 showed that differences in service offerings, clients, and organizational features declined with for-profit and non-profit organizations operating in the same market. The study was conducted in the context of a healthcare liberalisation strategy, aiming for more economic efficiency, consumer sovereignty, flexibility and reduced state activity in the welfare domain. The following legal reform in 1988 created a niche for for-profit and non-profit organizations to enter a subsidized market. While public funds financed non-profit organizations, traditionally following a social mission and serving minorities and economically disadvantaged clients, for-profit targeted wealthy clients who afforded exclusive services. After some time, the market showed a decline in the share of non-profit organizations (from 70 per cent in 1988 to 41 per cent in 2001), while for-profit organizations increased their market share (18 per cent to 57 per cent within the same period). The decline of the non-profit market share was also persistent regarding regional distribution and services range, with for-profit organizations offering more products and services beyond the services mandated by law.

Furthermore, a convergence was found in the organizational structure between for-profit and non-profit organizations. While Schmid (2001) found evidence that non-profit homecare organizations are more formalized (number of formal procedures) and decentralized (how staff is included in the decision-making process), the difference was significantly reduced with the growing spread of for-profit organizations in the market. The same decline in the difference was found concerning the intensity of monitoring the quality of services, with for-profits gaining ground with time. Furthermore, the level of staff education has converged: While non-profit organisations had a clear lead at the beginning of the observation period, for-profit organisations gained ground over time. The author explains the convergence between non-profit and for-profit organizations with isomorphism (DiMaggio & Powell, 1983): coercive isomorphism through the legal requirements, mimetic isomorphism to serve the quality standards and normative isomorphism because of the necessary professionalization within the sector. The finding can also be interpreted within the discussion of whether isomorphism leads non-profit organizations to become increasingly "business-like" (Maier et al., 2016).

<TABLE 2 > Empirical differences in performance, organizational features and strategy between non-profit and for-profit healthcare organizations

Differences	**Context**	**Non-profit**		**For-profit**
Performance	Meta-analysis with 50 US studies on nursing homes (Bos et al., 2017)	Better employee and client well-being		Higher financial performance
	German study with 10,168 nursing homes (Geraedts et al., 2016).	Better quality and higher prices		
	2010/2011 US Medicare home health database (7249 FP/1291 NP) (Cabin et al., 2014)	Higher overall quality indicator levels, less expensive, lower administrative costs		More profitable, more expensive per patient, higher administrative cost
	All Medicare-certified agencies in the US between 2011 to 2015 (11462 homecare	More significant improvement in quality over the observation period		Higher probability of low quality-performance scores

	agencies) (Wang et al., 2017)			
Organizational features	Analysis of 275 empirical studies in the US (hospital, psychiatric, homecare, etc.) (Schlesinger & Gray, 2006)	Less revenue maximization more trustworthy at service delivery, incubators of innovation		Faster to react to changes in demand by increasing, lowering or changing their services
	Study with 105 Minnesota nursing homes (Ben-Ner & Ren, 2015)	Delegated more decision-making authority. higher efficiency wages recruitment through networks		More performance-based incentives for employees
	41 profit and non-profit homecare agencies in Israel from 1990 to 1998 (Schmid, 2001)	In the beginning, it was more formalized (number of formal procedures) and decentralized (how staff is included in the decision-making process) More training for employees		Differences declined over time.
	62 NP and 26 FP homecare organizations in Switzerland (Möckli, 2023)	A higher share of qualified personnel (registered nurses), lower personnel turnover rate, higher overtime work per week, recruiting of staff easier, higher rate of perceived employee coordination, higher rate of unbillable costs		Focus on primary care, higher number of billed hours, higher rate of uncovered costs, more share of employees with temporary contracts, lower average time for coordination and administrative work per day.
Strategy	173 German hospitals (Helmig et al., 2014)	Above-average prospector strategy		Above-average defender strategy
	134 nursing homes in Florida (Davis et al., 2011)	FP and NP have no significant differences in entrepreneurial strategy (EO). Higher environmental scanning (more externally oriented)		No significant differences in entrepreneurial strategy (EO) between FP and NP
	152 hospitals in Germany (Hinz & Ingerfurth, 2013)	Lower EO-levels Equal impact of environment (competition, complexity, and turbulence) on EO-performance relationship		Higher EO-levels

2.3 Explaining differences in EO between for-profit and non-profit organizations

There is little theory-based thinking and comparative research on whether and why EO should differ between for-profit and non-profit organizations in direct competition. Davis et al. (2011), citing *neo-institutionalist theory* (DiMaggio & Powell, 1983), argue that for-profit and non-profit organizations will converge in their strategies and organizational structure where they face the exact legitimacy requirements. Nevertheless, the strategic focus might differ depending on the organisation's stakeholder group or environment. Empirically, they found no significant differences in EO between for-profit and non-profit nursing homes, but there were some differences regarding environmental scanning and seeking relevant information. They conclude that non-profit-oriented organizations score higher in terms of external information gathering while their counterparts focus more on competitors' tactics. Using property rights theory, Hinz and Ingerfurth (2013) argue that lacking incentives to maximize profits in non-profit organizations translates into organizational differences affecting entrepreneurial orientation. They found differences in the levels of EO of for-profit compared to non-profit organizations (both significantly higher than public hospitals). Using *neo-institutional theory* (DiMaggio & Powell, 1983),

they argue that non-profit organizations converge in their management and strategies to gain the legitimation of stakeholders and that the organizational environment is decisive on their entrepreneurial orientation. Empirically, they do not find differences in how the environmental conditions (competition, complexity, and turbulence) affect the EO and EO-performance relation of non-profit and for-profit organizations, suggesting that the environment has the same impact on for-profit and non-profit organizations, supporting the hypothesized isomorphism.

Furthermore, using *contingency theory,* they put forward that environmental conditions influence the relationship between EO and performance but find no moderating effect on the relationship between EO and performance. Reviewing the literature on social entrepreneurship, Lumpkin et al. (2013) propose differences between for-profit and non-profit organizations based on social motivation and mission, opportunity identification, access to resources and multiple stakeholders. However, they do not focus on how these differences transform into competitive advantages or disadvantages.

To explain the differences between for-profit and non-profit entrepreneurial orientation, we will use different theoretical approaches, such as *agency* and *stakeholder theory,* which deal with differences between for-profit and non-profit organizations. Furthermore, to account for the external influence factors and the regulatory environment which impacts the choice of strategy and thus EO, we will use theories of competitive positioning following a *market-based* view on strategy using Porter (1985a) generic strategies, as well as the strategic positioning by Miles and Snow (1978) taking a *resource-based* view on strategy. In doing so, we provide theoretical inputs to explain the differences between for-profit and non-profit organizations' EO and follow Millers' (2011) claim of linking EO to theory.

2.3.1 Differences between for-profit and non-profit organizations explained by organizational characteristics

2.3.1.1 Agency theory

Differences between for-profit and non-profit organizations can emerge from their nature. While for-profit organizations follow a market logic, non-profit organizations focus on their mission, which entails delivering goods and services to members or third-party users (Gmür et al., 2023) and serving the community (Laville & Nyssens, 2001).

For-profit-oriented organizations focus on profit maximization, which is accordingly reflected in their organizational structure. It is visible in corporate governance with separation of control by shareholders from decision-making by the management and the according monitoring systems (Fama & Jensen, 1983), a strong market orientation with customer focus and coordinated marketing (Kohli & Jaworski, 1990), and a professionalized management with according economic incentive systems.

In contrast, non-profit organizations are governed by multiple stakeholders, often represented on the board, while decision-making is delegated to the management. In contrast to for-profit organizations boards, members of non-profit boards fulfil their tasks voluntarily, and the effective monitoring of the management relies on their motivation (Fama & Jensen, 1983); therefore, social capital and trust are essential assets to prevent opportunistic behaviour (Laville & Nyssens, 2001). The organizational mission shapes the organizational identity and practices and behaviours (Thornton et al., 2012). It is, therefore, likely that the organizational design of non-profit organizations in healthcare differs from that of for-profit organizations regarding strategy, human capital, management characteristics, organizational structure and monitoring, incentives and collaboration between employees (Ben-Ner & Ren, 2015). Since EO interacts with organizational identity, business practices, top management values and philosophies, organizational competencies and culture and organizational structure (Covin & Slevin, 1991; Stock & Erpf, 2022), it can be argued that consequentially, EO differs between for-profit and non-profit organizations.

Following *agency theory,* Ben-Ner and Ren (2015, p. 343) argue that for-profit boards are more likely to act as "demanding principals towards top managers" than for-profit boards since they have a financial

interest and are thus more motivated to control the top management. In contrast, non-profit boards' control over the management is weaker since boards work voluntarily and are less motivated to exhibit pressure on the top management. Also, the heterogeneity of non-profit boards, often composed of people from outside the organization (Fama & Jensen, 1983), prevents a clear stance towards the management. Furthermore, non-profit organizations' objectives are hard to measure, reinforcing the difficulty of monitoring. The link between the board and entrepreneurial orientation was examined in different contexts, showing that the board had a substantial impact on EO in non-profit organizations (Coombes et al., 2011), while the impact of the board was weaker compared to the CEO in small profit-oriented businesses (Deb & Wiklund, 2017).

To face the agency problem, Ben-Ner and Ren (2015) argue that these differences translate into differences in the organizational design regarding the allocation of decision-making, monitoring, incentives, and recruitment. They argue that non-profit organizations delegate more decision-making to employees since the quality of treatment is hard to monitor for superiors and managers, thus shifting the responsibility to lower-level employees. Such behaviour by the management is encouraged because it is possible to shirk responsibility due to the weak board of directors. Furthermore, non-profit organizations attract intrinsically motivated employees who are ready to take responsibility and receive the trust of superiors, resulting in more autonomy. In contrast to for-profit organisations, non-profit orientation leads to a reward system that lacks financial incentives and does not provide variable remunerations.

In contrast, non-profit organizations pay above-market compensations or fringe benefits to motivate employees to work harder or to attract better employees (Ben-Ner & Ren, 2015). Because of agency problems, monitoring should be more critical in non-profit organizations. However, as Ben-Ner and Ren (2015) argue, a high degree of motivation and trust might prevent the necessity of monitoring in non-profit organizations, which requires dedicated, well-trained employees who are susceptible to the norm of reciprocity and likely return the gift of higher wages with higher motivation (Akerlof, 1982; Fehr & Goette, 2007). Research showed that performance-based incentives, primarily present in for-profit organizations, are essential for EO (Kuratko et al., 2005) and that a supporting leadership style leads to entrepreneurial outcomes (Muñoz et al., 2020). Nevertheless, it is argued that the organizational structure of non-profit organizations with participative governance, decentralized decisionmaking, horizontal leadership style and high intrinsic motivation of employees is potentially positively associated with entrepreneurial orientation and subdimensions (De Clercq et al., 2013; Guzmán et al., 2024; Löffel, 2023; Muñoz & Kimmitt, 2019).

Empirical differences between for-profit and non-profit organizations in healthcare partially confirm the proposition by Ben-Ner and Ren (2015) that non-profit organizations delegated more decision-making authority and had higher fixed payments than for-profit-oriented homes (lower fixed payments but higher variable compensations). In contrast, another study in the hospital sector finds that private for-profit hospitals used significantly higher rewards in the form of bonuses paid to managers than non-profit hospitals (Roomkin & Weisbrod, 1999). Regarding HRM strategies, non-profit nursing homes recruit employees through networks, while for-profit nursing homes use performance-based incentives (Ben-Ner & Ren, 2015). Findings from Swiss homecare services (62 NP, 26 FP) show similar mean organizational differences regarding recruitment with non-profit organizations, in general, having better-qualified employees (30-40% are registered nurses in NP vs 22% in FP) working on fixed contracts (NP: 60-90%, FP 39%), having a higher rate of perceived employee coordination, and higher share of employees with overtime work (65% vs. 40%) pointing towards a higher motivation and coordination between employees in non-profit organizations. In contrast, for-profit organizations focused on primary care (including 24-hour assistance and night shifts) rather than specialized care (psychiatric care or others), invested less time in coordination and administration per day and had a higher amount of less qualified personnel working with temporary contracts.

<TABLE 3 > An agency theory perspective on differences between non-profit and for-profit organizations' EO dimensions

Theoretical approach	***EO-Dimensions***	***Non-profit organizations***		***For-profit organizations***
Agency Theory	*Innovativeness*	*Governance structure leads to a weak position of the board, ineffective monitoring and low incentives to innovate; responsibilities are shifted to lower-level employees. If there is a configuration of participative governance and qualified, motivated employees, this can result in innovativeness (Guzmán et al., 2024; Muñoz et al., 2020) (+/-)*		*Governance structure leads to incentives for the board to monitor effectively and accordingly to incentive-based performance systems throughout the organization, which is related to innovativeness (Kuratko et al., 2005; Muñoz et al., 2020). (+)*
	Proactiveness	*NP organizations reward the quality of goods and services (Roomkin & Weisbrod, 1999). This demands the screening of external stakeholders and clients rather than competitors. (-)*		*Managers have incentives to screen external markets actively (Kuratko et al., 2005), resulting in higher levels of proactiveness compared to competitors (+)*
	Risk-taking	*Risk-taking is not rewarded since employees are paid on fixed terms, and quality is rewarded (Roomkin & Weisbrod, 1999). Self-selection of employees fitting the organizational culture (Roomkin & Weisbrod, 1999)(Ben-Ner & Ren, 2015) leads to low levels of organizational risk-taking. (-)*		*Performance-based incentives lead to higher levels of risk-taking at the whole organizational level (Correia et al., 2023; Kuratko et al., 2005) (+)* *A risk-taking culture leads to self-selection of employees with according values (Roomkin & Weisbrod, 1999) (+)*
	Collective Mobilization	*Collective Mobilization is higher in NP (Ben-Ner & Ren, 2015). Horizontal leadership styles with the delegation of decision-making power and including employees in entrepreneurial actions have been associated with higher innovative capabilities (Guzmán et al., 2024; Muñoz et al., 2020; Verschuere et al., 2014) and EO (De Clercq et al., 2013) (+)*		
+ (-) indicates higher (lower) levels than the other organizational form (NPO resp. PO)				

2.3.1.2 Stakeholder theory

Stakeholder theory states that organizations must balance and shape the relationship with stakeholders to succeed and survive. Since stakeholders' interests are not necessarily aligned, organizations' management must find compromises to maximize stakeholders' benefits (Parmar et al., 2010). In contrast to for-profit organizations, non-profit organizations typically have multiple stakeholders. Having multiple stakeholders increases the probability of diverging interests and, thus, the need to find compromises. Therefore, it is argued that non-profit organizations have more difficulty aligning different stakeholder interests. Lumpkin et al. (2013) argue that multiple stakeholders influence the entrepreneurial orientation of organizations such that multiple stakeholders are a source of innovativeness through their multiple backgrounds, leading to more innovativeness and proactiveness and generating more opportunities, but on the other hand, imped innovativeness through diverging expectations regarding novelty, and hinder risk-taking through heterogeneity in risk preferences and through difficulties of assessing risks. Examining the relationship between stakeholders and EO, Giraud Voss et al. (2005) find that different stakeholders' contributions affect EO's dimensions differently, suggesting that balancing interests is crucial for EO. Further research points towards the fact that

stakeholder expectations constrain entrepreneurial orientation (Coombes et al., 2011) and that heterogenous risk preferences lead to lower levels of risk-taking (Van der Krogt et al., 2007).

<TABLE 4 > A stakeholder perspective on differences between non-profit and for-profit organizations' EO dimensions

Theoretical approach	***EO-Dimensions***	***Non-profit organizations***		***For-profit organizations***
Stakeholder Theory	*Innovativeness*	*Stakeholder pressure diminishes the degrees of freedom. NP serve a public mandate, and the expectations to date focus on effectively delivering the demanded quality and quantity, negatively affecting boards' motivation to support entrepreneurial initiatives (Coombes et al., 2011) (-)* *Financing from different stakeholders is not favourable for high levels of innovativeness since the rewards from innovation are not translated into financial success for the organization (Giraud Voss et al., 2005) (-)*		*Stakeholders are aligned, and the board has more degrees of freedom. The incentive to be involved in innovative activities (+)* *The main income stems from clients: reward from innovation is translated into financial success. (+)*
	Risk-taking	*Multiple stakeholders with heterogeneous risk preferences lead to compromise in boards, resulting in a low-risk strategy (Van der Krogt et al., 2007).* *Stakeholder representation on the board increases heterogeneity (Fama & Jensen, 1983). (-)*		*Aligned risk preference on board leads to the possibility of more risk-taking (Van der Krogt et al., 2007). FP organizations' stakeholders and boards are more likely to support high-risk strategies because they positively affect organizations' performance through clients' contributions. (+)*
	Proactiveness *Collective mobilization*	*No expected differences*		*No expected differences*
+ (-) indicates higher (lower) levels than the other organizational form (NPO resp. PO)				

2.3.2 Differences between for-profit and non-profit organizations emerging from their market position

Another source of differences between for-profit and non-profit organizations is their strategic positioning. Non-profit organizations are increasingly faced with competition due to regulatory reform and stakeholder pressure because of *new public management* regulatory reforms. Therefore, strategy is increasingly important. The increasing interest in strategy is reflected by increasing research on strategy in non-profit organizations and a growing diversity in topics examined (Laurett & Ferreira, 2018).

Two strategic approaches are essential for the strategic positioning of organizations in competition and can explain differences in EO between for-profit and non-profit organizations.

While both ask the same question of how organizations can be successful in competition, their approach is different. The *resource-based view* defines a strategy which best fits the environment (asking how resources and strategy can be combined to perform in a specific environment). In contrast, from a *market-based* perspective, strategy is determined by market structure (asking what strategy has to be chosen in a specific environment). Although strategic positioning and entrepreneurial orientation are closely linked, they are seen as different concepts (Lechner & Gudmundsson, 2014; Linton & Kask, 2017). As Lechner and Gudmundsson (2014) argue, an entrepreneurial orientation describes the

processes and practices of a strategy (*how*), while the strategy defines the competitive tactics (*what*). The relationship between competitive strategy and EO is not exhaustively examined, but it is proposed that competitive strategy mediates the relationship between EO and performance (Moreno & Casillas, 2008) or that it channels EO to reach superior performance (Lechner & Gudmundsson, 2014).

2.3.2.1 Market-based view on strategy

Taking a *market-based* approach to analyze differences between for-profit and non-profit homecare organizations allows us to account for particularities of the regulated healthcare market to answer whether for-profit and non-profit organizations differ in their strategy and the related outcomes. The idea that market structure shapes outcomes goes back to the approach of industrial organizations, which deals with conditions of competition in markets using microeconomic concepts. The early theory developed by Bain/Mason asks how market structure shapes individual firms' conduct and affects their performance. It states that industry structure is the primary determinant of performance, while the conduct of firms is mainly a function of industry structure. Although the theory of industrial organization focused on markets and their competitiveness, Porter applied the theory to the individual firm level and their strategic positioning by analyzing influencing factors of competition ("market forces") (Porter, 1980, 1981).

Porter identified five market forces which affect industry competition such as the potential of new entrants, the bargaining power of suppliers, the bargaining power of buyers, the threat of substitute products or services, and internal industry rivalry, which is again influenced by the other four forces (Porter, 1985a). Based on the analysis of these driving forces, companies can define strategies that can be applied to gain a competitive advantage in the industry. Depending on the strengths or weaknesses of companies about the driving forces of competition, firms use strategies that best position them compared to these driving forces (Porter, 1980). Porter identifies generic strategies that can be applied, such as cost leadership, differentiation, and focus strategy, which apply one of the two strategies to a narrow scope in the industry. While the first two strategies are suitable for generating a competitive advantage, the focus strategy is insufficient for an above-average performance (Porter, 1985b).

Cost leadership aims to offer customers products or services at the lowest possible price, focusing on production and cost efficiency, thereby maximising the cost-benefit ratio. A cost leadership strategy generates a competitive advantage by shielding against the threat of substitution. With such a strategy, homecare organizations are flexible enough to react to supplier demands, and since clients are price-sensitive, the low-cost strategy positively affects market shares. The drawbacks are that a cost leadership strategy requires high initial investments, a high initial market share or privileged position due to governmental regulations or contracts, a broad product line to satisfy a broad customer range, high investments in processes to guarantee the price differential and the danger of decreasing profitability in the market due to imitation by other players. A cost leadership strategy is often associated with low innovativeness and proactiveness since the focus is primarily on delivering a predefined set of goods and services by minimizing costs. On the other hand, there is a debate about whether cost leadership needs a high level of risk-taking at an initial level while in a later stage, risk-taking is lowered due to the predictability of activities (Linton & Kask, 2017)

Due to the financing through healthcare insurance with fixed tariffs for services, competition through prices is only possible for supplementary services offered to clients. Nevertheless, homecare organizations can offer a range of products and services from one hand and in a predefined quality. Because they are receiving government subsidies or residual payments, they cross-subsidize supplementary offerings. With a cost leadership strategy, homecare organizations offer services to many clients and profit from economies of scale regarding costs and knowledge. Before 2011, non-profit homecare organizations had a monopolistic market position and thus had a starting lead compared to for-profit organizations. With moderated competition, they still have regulatory protection from market entry due to today's public service mandates.

Furthermore, for-profit organizations are restricted in some service offerings; thus, they have regulatory protection regarding certain goods. Because of the position as a market leader, which is protected in certain areas due to the service mandates, non-profit organizations are likely following a defender strategy, which includes serving the public mandate by minimizing costs. Non-profit organizations are also not restricted by regulations regarding service offerings.

Differentiation focuses on delivering products or services that are unique to the industry. Firms can differentiate along product attributes (specialized treatment), make services more flexible (place and time), and deliver value to customers. A differentiation strategy shields organizations against buyer price sensitivity by offering added value and resulting in brand loyalty. It protects against supplier pressure through higher margins and creates entry barriers through specific knowledge, brand loyalty and existing relationships. The drawback of differentiation is that it is costly because it includes innovation investment and requires high-quality input factors or intensive customer support. Furthermore, there is the danger of imitation by competitors (Porter, 1985a). It has been argued that differentiation needs a high level of innovativeness, proactiveness and a certain extent of risk-taking, which is associated with high EO levels (Linton & Kask, 2017).

<TABLE 5 > A market-based view (Porter, 1985b) on differences between non-profit and for-profit organizations' EO dimensions

Theoretical approach	***EO-Dimensions***	***Non-profit organizations***		***For-profit organizations***
Strategic positioning – Market-based view (Porter, 1985b)	*Innovativeness*	*Cost leadership strategy aims at reducing investments in research and development. The tradeoff between cost leadership and innovativeness. NP will likely follow a cost leadership strategy because of its market position and public service mandate. (-)*		*To establish differentiation, organizations must rely on innovativeness, which makes it hard to imitate products and services. Through innovation and differentiation among product attributes, they deliver value to customers. FP is restricted by regulation and only competes in specific markets; they likely differentiate regarding the services, the time and place of delivery and the relation between customers (+)*
	Proactiveness	*Cost leaders focus on low prices and offering predefined products while optimizing production modes. Initiating new products is not essential. Therefore, cost leadership does not require high screening of external markets and competitors and does not require shaping markets proactively. (-)*		*Differentiation strategy needs the creation of hard-to-imitate services and products demanding organizations to act as first movers in markets and thus to be proactive (+)*
	Risk-taking	*Cost leadership needs initial investments and, thus, risk-taking (Porter, 1980). However, once the products are defined, risk-taking is less important. (-)*		*Differentiation strategy requires the creation of hard-to-imitate products and services that require risk-taking. (+)*
	Collective Mobilization	*Collective mobilization is important for the quality of goods (+/-)*		*Collective mobilization is important for the quality of goods (+/-)*
+ (-) indicates higher (lower) levels than the other organizational form (NPO resp. PO)				

Since for-profit organizations are restricted by regulation and can only compete in specific markets, they likely differentiate in terms of services, time and place of delivery, and customer relations. Furthermore, since they only receive a small amount of governmental subsidies, they must generate higher revenues. It is, therefore, likely that for-profit organisations choose a differentiation strategy. Empirically, few

studies apply Porter's framework to healthcare organizations. A study in the Swiss hospital context, which mainly involved public NPOs, proposes that strategic orientations, differentiation strategies, and cost leadership are positively related to superior financial outcomes (Eicher & Steiner, 2020).

2.3.2.2 Resourced based view on strategy

While Porter's strategic positioning is based on industry structure, Miles and Snow (1978) take a resource-based view to explain how organizations can take advantage of strategies in a competitive environment. Their research focuses on how organisations maintain "an effective alignment with the environment while managing internal interdependencies" (Miles et al., 1978, p. 547) and they offer a theoretical framework that includes the relationships between strategy, structure, and processes. To align organizations to the external environment, they must solve different problems. The entrepreneurial problem entails the definition of product and market domain, the engineering problem contains the choice of technologies utilized, and the administrative problem how organizational structure and processes are selected and developed. Strategic choices are, however, determined by management capabilities to implement and manage people within this process and to orchestrate internal resources and capabilities. Miles et al. (1978) propose that four different generic strategies can be found, which differ in how they solve the entrepreneurial, engineering and administrative problems when aligning with the environment. Suppose the generic strategies are properly implemented and aligned with the environment. In that case, they lead to superior performance through the choice of a suitable definition of the market domain, the development of distinctive capabilities and resources regarding the production of goods (product and process innovations, technologies, knowledge, efficiency) and the organizational structure and processes (planning system, coordination systems, human resources).

Miles et al. (1978) distinguish four generic strategy types that emerge: defenders, prospectors, analysers, and reactors.

Defenders focus on stability. They offer defined product lines and try to prevent competitors from entering their market by offering competitive pricing or high-quality products. They ignore market trends and instead aim to maintain their market niche. In production, they focus on efficiency using cost-effective technologies. They are organized mechanistically, with management focusing on minimizing costs through functional organization and division of labour, intensive planning, and centralized control with formal hierarchies. Environmental scanning and the search for new opportunities are not necessary. Defenders are most successful in a stable environment. Because of these characteristics, the defender strategy is closely linked to low entrepreneurial orientation.

Because of their service mandate, which demands non-profit organizations to offer services of a predefined quality and quantity at fixed prices, non-profit organisations likely choose a defender strategy above average. Furthermore, government subsidies and loss compensation give them predictability regarding revenues.

In contrast, *prospectors* are characterized by high flexibility. They focus on the development of new products and entering new markets. Market opportunities are detected by surveying environmental conditions, trends and changes. With their active behaviour, they actively influence market trends to gain a competitive advantage. In production, they focus on flexibility by using technologies which can be applied to different production modes and avoid long-term commitments. The organization is of an organic structure with decentralized units. The management focuses on marketing, research and development, and planning, which is result-oriented rather than efficiency-oriented, low formalization, lateral and vertical communication and coordination between units. Prospectors are most successful in a dynamic and changing environment. Prospectors are considered to have a high level of proactiveness since they actively shape markets. Furthermore, the prospector is the only strategy type that focuses on innovativeness to gain a competitive advantage at the expense of efficiency, which implies risk-taking.

At homecare, prospectors are actively shaping the market by offering services such as specialized care and additional services, being flexible regarding the time and location of service delivery, and using new planning and communication processes to generate superior value for clients. Because for-profit organizations are excluded from the public service mandate and compete with non-profit organisations in the remaining service areas, they must be innovative and flexible, especially since they entered the markets late and have to gain new customers. A prospector strategy gives them the flexibility to gain market shares. Although non-profit organizations can also react to increasing competition by applying a prospector strategy, they are less likely to choose it since they are restricted due to the public mandate and are expected to minimize costs.

Next to defenders and reactors, Miles et al. (1978) describe other hybrid strategic types, such as *analyzers,* which exhibit characteristics of defenders or prospectors and, as in the case of reactors, are characterized by the absence of a strategy.

Analyzers are a combination of defenders and prospectors as they attempt to minimize risk similar to defenders and optimize opportunities. In homecare, analyzers are taking the best from defenders and prospectors. They offer new services and apply new processes when demanded and when there is a high probability of success. At the same time, they offer a core of tried and trustworthy services to their customers and minimize costs. Non-profit organizations likely choose an analyzer strategy because of increasing dynamics in the environment due to the regulatory reform and competition forcing them to leave the defender strategy. Since the market is partially protected, some non-profit organizations will probably choose an analyzer strategy and imitate for-profit organizations where it is successful.

<TABLE 6 > A resource-based view (Miles & Snow) on differences between non-profit and for-profit organizations' EO dimensions

Theoretical approach	***EO-Dimensions***	***Non-profit organizations***		***For-profit organizations***
Strategic positioning – Resource-based view (Miles & Snow, 1978)	*Innovativeness*	*Defenders offer defined product lines, which demand a low level of innovativeness. (-) Since the regulatory environment guarantees stability, NP can profit from a defender strategy by offering standardized products to a loyal customer base. (-)*		*Prospectors focus on developing new products and entering new markets, which demands high levels of innovativeness.*
	Proactiveness	*Aim to maintain a market niche, focus on their strengths, ignoring market developments. Environmental scanning and searching for new opportunities, thus proactiveness, is not essential. (-)*		*Market opportunities are detected by surveying environmental conditions, trends and changes. With their active behaviour, they actively influence market trends to gain a competitive advantage. (+)*
	Risk-taking	*Focus on efficiency using cost-effective technologies and minimizing costs. High levels of risk-taking are thus not compatible with a defender strategy. (-)*		*Avoid long-term commitments to a single type of technological process: creating multiple, prototypical technologies with a low degree of routinization and mechanization (Miles et al. (1978, p. 553), demanding risk-taking. (+)*
	Collective Mobilization			*Organic structure with decentralized units. Low formalization, lateral and vertical communication and coordination between units. The collective mobilization of employees allows to create the needed collective capacity. (+)*
+ (-) indicates higher (lower) levels than the other organizational form (NPO resp. PO)				

Reactors do not consistently apply a strategy and react to the environment inconsistently and in an unstable manner. Therefore, it has been described as the absence of a strategy or as a "residual" strategy, arising when one of the other three strategies is improperly pursued" (Miles et al., 1978, p. 557). Reactors lack a clear strategic direction and do not cope with the changing environment due to regulatory reform and increased pressure from competitors and stakeholders. If they are situated in areas protected from competition, such as rural areas, they likely survive but not with a great performance. Non-profit organizations that fail to adapt to the new regulatory environment are reactors because they do not apply a consistent strategic approach. Since for-profit organizations are market entrants and have to be successful, they are unlikely to be reactors or will disappear if they do so. In contrast, for-profit reactors could survive operating in rural areas with few competitors and stakeholder pressure.

Empirically, the framework of Miles and Snow (1978) was applied to the healthcare market with several studies on the strategic positioning of hospitals and the occurrence of all four strategy types was found among hospitals in different countries, not differing between for-profit and non-profit organizations (Helmig et al., 2014). Examining 173 German hospitals and comparing their strategic orientation across sectors, Helmig et al. (2014) find that for-profit institutions are above-average defenders, but only NPO institutions prospectors.

3. Hypotheses

3.1. Entrepreneurial orientation and performance of homecare organizations

EO helps organizations be more flexible, dynamic, and responsive to changing environments, which helps them reap opportunities and potentially create superior performance (Wiklund, 1999). Entrepreneurial-oriented organizations generally exhibit a combination of innovativeness, proactiveness and risk-taking (Covin & Slevin, 1989). In the healthcare sector, we propose using the additional dimension of collective mobilization. Where innovativeness helps organizations to change or create new products and services and reap opportunities (Covin & Slevin, 1989), proactiveness is necessary to scan the environment and to implement innovations in advance of others (Morris et al., 2011) and risk-taking to invest in innovations under uncertainty (Zahra & Covin, 1995). Empirically, EO is positively associated with different organizational performance measures (qualitative and quantitative) (Rauch et al., 2009). In the healthcare sector, Brandt and Znotka (2021) propose that EO could help to face the challenge of constantly rising expectations and costs. According to their case studies, EO results in new occupational models, management tools, medical procedures or an extension in service offers which improve organization-oriented outcomes and, beyond that, increase the effectiveness and quality of the healthcare market (increased performance quality, solution of branch generic problems, innovations in healthcare). Because homecare includes visiting clients' homes, planning and optimizing visiting routes is crucial, and process innovations increase the efficiency of the service delivery. Furthermore, organizational innovations can help to improve communication and homecare quality through horizontal organization and agile management. Next to improvements the offering of new services, such as a specialization on specific health issues such as dementia, palliative care, and psychosocial care (Kiefer et al., 2023) as well as additional services beyond healthcare (household help, social animation) are areas of innovation.

To reap opportunities, the collective mobilization of involved actors, the scanning of the external market, and knowledge about stakeholders' preferences are necessary, which demands the proactivity of the involved actors. Implementing innovations, such as planning tools and new quality measurements, and building the capability for new specialized services demand resources and thus risk-taking. Collective mobilization or working effectively between and within healthcare units is a success factor for homecare organizations with higher perceived healthcare quality and lower unplanned incidence rates for clients (Haase & Franco, 2020; Möckli et al., 2023). Delivering healthcare involves numerous agents and a high interdependence between tasks. The latter requires knowledge of others' roles and resources, a high level of information exchange (Möckli, 2023), and collective decision-making (Ben-Ner & Ren, 2015;

Schmid, 2001). Informal networks are necessary so that areas of innovation are detected, refined, and exploited through employee exchange (De Clercq et al., 2013, 2015). Knowledge sharing is vital because exchanging complementary knowledge increases the knowledge base related to innovativeness and proactiveness (De Clercq et al., 2013). Close knowledge exchange reduces uncertainty through complementary views, and social interactions create trust associated with lower risk-aversion (Kaasa, 2009). Together, both lead to higher levels of risk-taking. Interdependence and knowledge sharing also increase the quality of entrepreneurial outcomes (De Clercq et al., 2015).

Empirical studies on EO in the healthcare sector showed that EO is related to the performance of hospitals (Bhuian et al., 2005; Chahal et al., 2019; Hinz & Ingerfurth, 2013) and nursing homes (Davis et al., 2013).

H1: EO is positively related to the performance of homecare organizations.

3.2. Differences between non-profit and for-profit homecare organizations EO

To assess the differences between the EO level of for-profit and non-profit organizations in home care, we will examine the differences at the level of EO dimensions. We use the four theoretical approaches to explain the differences between for-profit and non-profit organizations, focusing on the organization itself (agency and stakeholder theory) and the market environment in which it operates (Porter's market-based view and Miles & Snow's resource-based view of strategy).

Differences between for-profit and non-profit organizations' EO can derive from the differences in their missions and identities, which shape their organizational practices and behaviours (Thornton et al., 2012). Based on agency theory, Ben-Ner and Ren (2015) argue that since organisations' performance pays off in for-profit organisation*s*, boards are incentivised to fulfil their task, work strategically, and monitor the management effectively. In contrast, since non-profit boards work voluntarily, they are less likely to initiate or implement strategies focusing on innovation. Since the board shapes organizational strategy (Covin & Slevin, 1989), it can be argued that for-profit organizations have higher levels of innovativeness than non-profit organizations. Furthermore, on the level of management and employees, performance-based incentive systems increase the incentives to focus on developing ideas and processes and thus on innovativeness (Kuratko et al., 2005). In contrast, since non-profit organizations would rather pay high-efficiency wages, this does not reward the development of ideas and new processes and thus does not foster innovativeness.

On the other hand, research shows that team development and training are linked to the innovativeness of organizations (Florén et al., 2016). Ben-Ner and Ren (2015) propose that non-profit organizations attract intrinsically motivated employees through their network. If the hiring strategy is successful, this likely leads to better-qualified and trained employees in non-profit organizations. Empirically, it was shown that team development is higher in non-profit organizations (Schmid, 2001) and Swiss non-profit homecare organizations have a staff that is better educated and permanently employed (Möckli, 2023), making development and training more effective. Morris et al. (2011) suggest that the social mission is a motivational driver to engage in ideas and adaptations. Research showed combining a motivated, educated workforce with a participatory leadership style leads to innovation (Muñoz et al., 2020).

Depending on which effect overrides, it is unclear whether non-profit or for-profit organizations have higher levels of innovativeness. It is also possible that innovativeness is of a different quality between non-profit and for-profit organizations: as Schlesinger and Gray (2006) argue, for-profit organizations are faster to react to changes in demand by increasing, lowering or changing their services, which implies higher levels of constant incremental innovation compared to non-profit organizations. In contrast, non-profit organizations focus on more fundamental innovations (Schlesinger & Gray, 2006). That social innovation was higher in non-profit compared to for-profit organizations was also shown in the example of elderly care in Spain (Guzmán et al., 2024).

Next to internal influence factors, the relationship with stakeholders is a determinant of the innovativeness of organizations. Non-profit boards are influenced by *stakeholder pressure,* which diminishes the degrees of freedom. Since non-profit organizations serve a public mandate, the expectations to date focus on effectively delivering the demanded quality and quantity, negatively affecting boards' motivation to support entrepreneurial initiatives (Coombes et al., 2011). Findings from Giraud Voss et al. (2005) show that financing from different stakeholders, such as Swiss home care, is not favourable for high levels of innovativeness since the rewards from investing in innovation are not directly translated into financial success for the organization. Evidence of the hindering effect of a tight regulatory corset combined with the short-term saving requirement is also found in case studies in the Swiss context (Kiefer et al., 2023)

Managers in for-profit organizations have higher incentives to actively screen the market and initiate change since they are rewarded depending on their organisation's financial performance. In contrast, non-profit organizations more often focus on the quality of goods and services, which are difficult to monitor and thus reward accordingly (Roomkin & Weisbrod, 1999). Focusing on the quality of services and goods demands non-profit organizations to screen clients and suppliers' behaviour and actively shape the relationship with stakeholders. Davis et al. (2011) found that non-profit healthcare organizations have higher scores in environmental scanning focusing on suppliers, stakeholders and customers. In contrast, for-profit organizations focus more on main competitors and score higher in screening competitors' strategies and policies. Furthermore, Schlesinger and Gray (2006) argue that for-profit organizations are faster at implementing changes, suggesting higher levels of proactiveness. Since proactiveness is defined relative to competitors and markets (Covin & Slevin, 1989; Lumpkin & Dess, 1996), we argue that for-profit organizations have higher proactiveness levels than non-profit organizations.

Concerning *risk-taking*, several authors argue that non-profit organizations have a lower risk propensity than for-profit organizations. Because non-profit organizations, in general, have multiple stakeholders with heterogeneous risk preferences, boards prefer to find a compromise between the preferences and tend towards a low-risk strategy, which is broadly supported (Van der Krogt et al., 2007). Giraud Voss et al. (2005) examine the complex relationships between stakeholders and entrepreneurial orientation in theatre non-profit organizations. When confronted with customers, a strategy with high risk-taking and innovativeness pays out because customers profit from a broad set of new offerings, translating into revenues. On the other hand, such a strategy encounters a headwind from established funders. When translating the findings to the context of non-profit homecare, it can be argued that non-profit organizations with a public mandate face more diverse stakeholder expectations and have lower risk-taking levels than for-profit organisations mainly funded by customers' contributions. This was also confirmed by a case study on a Swiss home care organization where the main stakeholders' lack of trust was identified as inhibiting risk-taking (Kiefer et al., 2023). Since boards cannot gain much from opposing stakeholder expectations, they will likely follow stakeholders' preferences. The effect is further reinforced by the stakeholders' representation on the board (Fama & Jensen, 1983).

In contrast, for-profit organizations' stakeholders and boards are more likely to support high-risk strategies because they positively affect organizations' performance. Second, following *agency theory,* performance-based incentives are more widespread among for-profit organizations, leading to higher levels of risk-taking in the management and employees (Correia et al., 2023; Kuratko et al., 2005). Furthermore, incentives linked to economic performance likely attract managers with a higher preference for risk-taking behaviours and shaping the organisation's risk-taking (Roomkin & Weisbrod, 1999).

Other internal factors that are a potential source of differences between for-profit and non-profit homecare services are the tendency for formal and informal collaboration, participative leadership style, employee education and training, delegation of decision-making power and inclusion of employees. According to empirical findings, the latter is more pronounced in non-profit healthcare organizations

(Ben-Ner & Ren, 2015; Möckli, 2023; Schmid, 2001). As Ben-Ner and Ren (2015) argue, the delegation of decision-making is a reaction to monitoring problems and addressing principle-agency issues in non-profit organizations. Horizontal leadership styles with the delegation of decision-making power and including employees in entrepreneurial actions have been associated with higher innovative capabilities (Guzmán et al., 2024; Muñoz et al., 2020; Verschuere et al., 2014). Furthermore, employee education and training have been identified as an essential resource for innovation (Padilla-Meléndez et al., 2014; Rodríguez & Guzmán, 2013) in social enterprises and for EO in general (Florén et al., 2016; Wiklund et al., 2009). Therefore, we argue that non-profit organizations principally have higher levels of the additional dimension of *collective mobilization* than for-profit organizations.

Based on internal influence factors and stakeholder relationships, we argue that although non-profit organizations can benefit from innovativeness, proactiveness, risk-taking and collective mobilization, for-profit organizations have higher levels in these dimensions and thus of EO.

Next to internal influence factors, differences between for-profit and non-profit organizations in healthcare can also be explained through their strategic positioning in markets. According to industrial organization, market position and share determine strategy and market performance. Following this view, the market position affects the strategy of organizations and, thus, their entrepreneurial orientation. Analysing the differences using Miles and Snow (1978) typology, successful non-profit organizations are likely to follow a cost leadership strategy because of the advantages of their public service mandate and the entry barriers for for-profit organizations.

A cost leadership strategy aims to offer products or services to customers at the lowest possible price with a strong focus on production efficiency, controlling costs, and maximizing cost benefits. In contrast, unprofitable investments are avoided (Porter, 1980). A *cost leadership strategy* thus aims to reduce investments in research and development, which are necessary for innovation. Furthermore, since cost leadership demands high initial investments and innovativeness is costly, there is a tradeoff between cost leadership and innovativeness. Therefore, organizations following a cost leadership strategy are likely to have lower levels of innovativeness.

In contrast, the differentiation strategy focuses on delivering unique products or services within the industry. To establish differentiation, organizations must rely on innovativeness, which makes it hard to imitate products and services. They deliver value to customers through innovation and differentiation among product attributes (Porter, 1985a). Empirical research showed that a cost leadership strategy is related to lower levels of innovativeness, while a differentiation strategy is positively associated with innovativeness (Lechner & Gudmundsson, 2014). Homecare organizations can differentiate by offering additional services to customers, such as specialized healthcare treatment, additional services not related to healthcare or by differentiating regarding the time of services delivered (flexible time and night shifts). Offering these services demands innovativeness. Furthermore, they can differentiate their relationship to notifying institutions such as hospitals or medial practices. Differentiation can be a helpful strategy since there are various competitors depending on the place, and transparency between the services delivered has increased through online platforms, enabling one to find alternatives more quickly. Nevertheless, it is time-saving for institutions to work with established partners; thus, a good relationship with partners is a helpful differentiation strategy. Since regulations restrict for-profit organizations and can only compete in specific markets, they likely differentiate in terms of services, the time and place of delivery, and the customer relationship. For-profit organizations are likely to choose a differentiation strategy also because they receive lower public contributions and have to generate revenues through additional services. Therefore, we argue that for-profit organizations, likely choosing a differentiation strategy, have higher levels of innovativeness than non-profit organizations with a cost leadership strategy.

Since cost leaders focus on low prices and offering a predefined product set while optimizing the production modes, initiating new products is not essential. Therefore, cost leadership does not require high screening of external markets and competitors and does not proactively shape markets. Due to

regulations and market position, a cost leadership strategy is only possible for non-profit organizations because they receive public funding and are not restricted in services. Therefore, we assume that non-profit organizations have lower levels of proactiveness. In contrast, a differentiation strategy, which for-profit organizations are more likely to follow, must create hard-to-imitate services and products demanding organizations act as first movers in markets and thus be proactive. This was also supported empirically, with proactiveness strongly related to differentiation strategy (Lechner & Gudmundsson, 2014).

Cost leadership needs initial investments and, thus, risk-taking (Porter, 1980). On the other hand, once the investments are made, since cost leaders operate in markets where uncertainty is low and investments are predictable, no high risk-taking level is required later. Because of the market situation as an undisputed monopolist until the regulatory reform in 2011, non-profit organizations had a market advantage in creating the necessary infrastructure and establishing relationships to act as a cost leader in the market. Toady, since the service sets are more or less defined, risk-taking is no longer critical for nonprofit organizations. Furthermore, deficits are covered because of the public service mandate, which reduces uncertainty and decreases the necessity of taking risks. Following a differentiation strategy requires the creation of hard-to-imitate products and services that require risk-taking. Therefore, for-profit organizations following a differentiation strategy are likely to exhibit higher levels of risk-taking.

Miles and Snow (1978) take a *resource-based view* to compare the strategic positioning of organizations identifying defenders, prospectors, analyzers and reactors. Focusing on stability, *defenders* offer defined product lines, which demand a low level of innovativeness and a focus on incremental innovations. Ignoring market trends, they aim to maintain a market niche and instead focus on their strengths, ignoring market developments. Therefore, environmental scanning and the search for new opportunities and, thus, proactiveness are not essential. Like the cost leadership strategy, they focus on efficiency, using cost-effective technologies and minimizing costs. High levels of risk-taking are thus not compatible with a defender strategy. Defenders thrive in a stable environment.

Non-profit homecare organizations likely choose a defender strategy because of their market position. With the regulatory environment, they profit from a defender strategy by fulfilling the service mandate and offering standardized products to loyal customers. Since a defender strategy is related to low levels of innovativeness, proactiveness, and risk-taking, we suggest that non-profit organizations choosing a defender strategy exhibit a low level of EO.

In contrast, *prospectors* are characterized by high flexibility. They focus on developing new products and entering new markets, which demands high innovativeness. Market opportunities are detected by surveying environmental conditions, trends and changes. With their active behaviour, they actively influence market trends to gain a competitive advantage, which proactive behaviour can achieve. In production, they "avoid long-term commitments to a single type of technological process (…) by creating multiple, prototypical technologies which have a low degree of routinization and mechanization" Miles et al. (1978, p. 553), demanding innovativeness and risk-taking. The organization is of an organic structure with decentralized units. The management focuses on marketing, research and development, and planning, which is result-oriented rather than efficiency-oriented, with low formalization, lateral and vertical communication, and comparable coordination between units. The collective mobilization of employees allows the creation of needed collective capacity. Prospectors in homecare are actively shaping the market by offering services such as specialized care and additional services, are flexible regarding the time and location of service delivery and use new planning and communication processes to generate superior value to clients.

Taking the theoretical arguments together reveals that, in general, for-profit organizations are expected to have higher levels of the subdimensions of EO. While the effects are evident for proactiveness and risk-taking, the difference in innovativeness and collective mobilization seems less clear and depends on which influence factor has a more substantial effect. Nevertheless, since EO reflects its

subdimensions, it can be argued that EO levels of for-profit organizations are, on average, higher than for non-profit organizations. Thus:

H2: For-profit homecare organizations have higher EO levels than non-profit organizations.

3.3. Differences between non-profit and for-profit homecare organizations EO - Performance relation - or the moderating effect of the profit status

The choice of a suitable competitive strategy is expected to lead to superior performance. Following the market-based view on strategy, strategy choice follows from the market structure. Porter proposes that choosing a strategy that allows dealing with the market forces leads to superior performance (Porter, 1980). With a differentiation strategy, homecare organizations are shielded against buyer price sensitivity. They offer added value with unique products and services, resulting in brand loyalty. Because of product superiority and higher margins, differentiation protects against supplier pressure because a share of the higher margins can be passed on. Differentiation strategy creates entry barriers through specific knowledge, brand loyalty and existing relationships. For-profit homecare organizations differentiating by offering services to customers such as specialized healthcare treatment, additional services not related to healthcare, or differentiating regarding service hours and night services can be beneficial.

Lechner and Gudmundsson (2014) argue that an entrepreneurial orientation describes a strategy's processes and practices, while the differentiation strategy defines competitive tactics. Therefore, it can be argued that since for-profit homecare organizations do not bear the constraints of a public service mandate and thus have more freedom to operate in niches and seize growth opportunities, EO and a differentiation strategy are beneficial because they lead to better and more innovative products. Since the primary financial source is clients, it generates higher main revenues.

In contrast, non-profit organizations successfully implementing a *cost leadership strategy* can profit through their established market position. The advantages of the strategy are that due to their position as a market leader, non-profit organizations are protected against new entrants, and the threat of substitution is minimized. Therefore, the company is flexible enough to react to supplier demands, and buyers' price sensitivity positively affects sustaining market shares. There is no price competition because of fixed tariffs for nursing, housekeeping and social care services. Since non-profit organizations receive government subsidies and residual payments, they can cross-subsidize their offerings. With a cost leadership strategy, non-profit homecare organizations can offer services to the most significant number of clients. Before the regulatory reform in 2011, non-profit homecare organizations had a monopoly in offering various services to clients. Although there is moderated competition today, they still have regulatory protection from market entry due to the public service mandates. Because of the position as a market leader, which is protected in certain areas due to the service mandates, non-profit organizations following a defender strategy are likely more successful concerning performance. Since a cost leadership strategy is associated with lower EO levels, we argue that non-profit organizations benefit less from an entrepreneurial orientation.

Using a similar approach, the resource-based perspective focuses on the best fit between organizations' resources and market environments. Organizations adopting a prospector strategy are most successful in a dynamic and changing environment. Because for-profit organizations are excluded from the public service mandate and are not receiving government subsidies, they must be innovative and flexible to gain market shares. Since they entered the markets late, they have to gain new customers. A prospector strategy gives them this flexibility. Although non-profit organizations can also react to increasing competition by applying a prospector strategy, they are less likely to choose it since they are restricted due to the public mandate and are expected to minimize costs. A prospector strategy characterised by an organic structure with a high level of innovativeness, creativity and a focus on growth is generally associated with higher levels of financial performance (Helmig et al., 2014). Research in the German

healthcare sector confirmed that a prospector strategy is related to higher overall performance (financial and non-financial) than other strategic choices (Helmig et al., 2014). A prospector strategy is a suitable competitive strategy for for-profit homecare organizations. Moreover, an entrepreneurial orientation is the proper orientation to implement a prospector strategy.

In contrast, non-profit organisations likely choose a defender strategy above average. Since the regulatory environment guarantees them stability, they can profit from a defender strategy by offering standardized products to loyal customers. A defender strategy can be successful for non-profit organisations, especially in areas with few competitors. An entrepreneurial orientation does not fit with a defender strategy since resources are used for entrepreneurial activities, which cannot be used to offer standardized services at low prices.

From the perspective of both approaches, it is expected that EO leads to greater success for for-profit organizations compared to non-profit organizations because a differentiation strategy follows from market structure or a prospector strategy offers the best fit between resources and market environment, and EO is the associated orientation to implement such strategies:

H3: The relationship between EO and performance is stronger in for-profit homecare compared to non-profit homecare organizations.

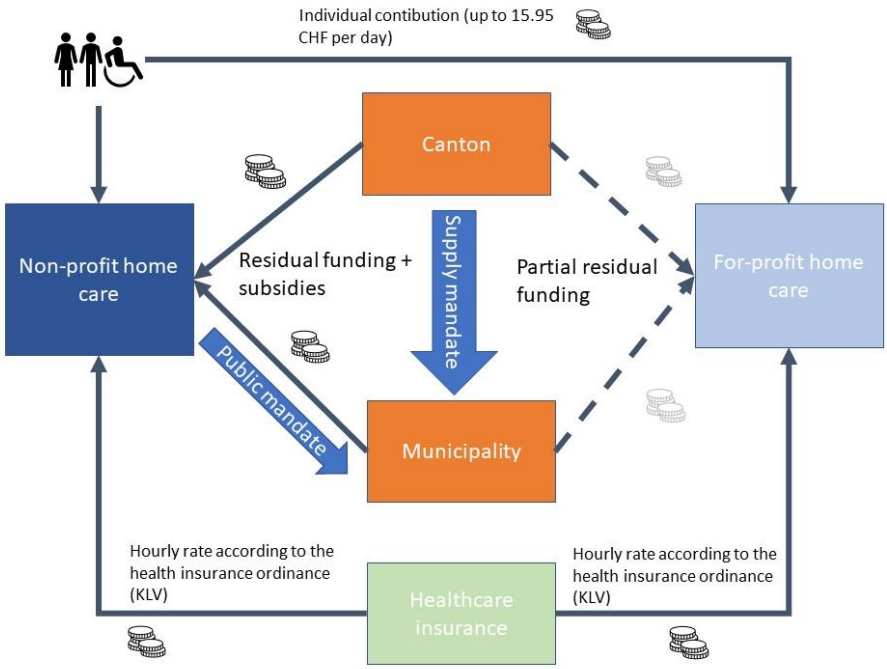
4. Empirical Strategy

4.1. Data

The regulatory reform of care financing in 2011 led to equality between public and private homecare organizations and an increasing number of private homecare providers. Today, homecare organizations in Switzerland are acting in a highly regulated market. Concerning the admission of organizations, there is no difference between for-profit and non-profit homecare organizations on the level of federal government regulation. There are also no other differences regarding quality and employee regulations. However, there are differences between for-profit and non-profit organizations regarding residual financing (which varies between cantons), the payment of value-added tax on household services for for-profit-oriented organizations and tax exemption of non-profit organisations in some instances (Bundesrat, 2021).

The difference with the highest impact for for-profit-oriented homecare organizations is the residual payments to organizations with a public mandate. Homecare is generally financed through public subsidies, but the healthcare insurance pays a share, and retention has to be paid by the client (ranging from 0 to 20%, depending on the canton). Residual costs are paid by the cantons or the local government (communities) (see Figure 1). Moreover, the public mandate implies the residual funding of services. In some cantons (AI, FR, GE, Gl and TI), only homecare organizations with a public mandate receive residual funding and get higher public remunerations than for-profit organizations. In some cantons (BE, GR, UR, VS and ZG), for-profit organizations receive lower contributions due to the lack of duty to supply (INFRAS et al., 2018).

In most cantons (58%), profit-oriented organizations can apply for a public mandate, including primary care. However, there is a strong tendency to give the public mandate for basic remuneration to non-profit organizations, and there are only a few for-profit homecare organizations with a public mandate (Cosandey, 2016). The policy has implications for for-profit homecare organizations because they often receive lower public contributions and are more expensive for individuals. Furthermore, sometimes, depending on the public mandate between the state and non-profit organizations, for-profit homecare service offerings are restricted, resulting in fewer degrees of freedom for the latter.



<FIGURE 1 > Swiss healthcare system

In addition to the non-profit, so-called Spitex, there are over 200 private, i.e., for-profit Spitex organizations, united in their association (Association Spitex Privée Suisse ASPS, founded in 2005) and a more significant number of individual service providers. According to calculations by the Swiss Federal Statistical Office (FSO, 2023), the market share of non-profit Spitex in terms of staff (77.1%), clients (79.1%), and revenue (89.4%) is still higher than for for-profit oriented organizations (19.9% share of staff, 10.6% of clients, 17.1% of revenues) (FSO, 2023). Revenue of non-profit organizations is based on services (65%), contributions from the public sector (32.6%) and donations or contributions (2.1%). In contrast, for-profit homecare organizations mostly rely on services (92.7%), while contributions from the public sector (0.4%) and donations (0.7%) play a minor role. However, comparing pre- and post-regulatory reform years, the market share of for-profit organizations increased (FTE +9.2%, Revenues +8.7%, clients, +4%) while the market share of non-profit organizations decreased (FTE -10.2%, Revenues -10.1%, client -7.5%). The differences are mainly due to the robust market growth of for-profit organizations in long-term care (+40.5% and +3.6% in market share), home and social management (+37. % and +7.2% in market share) and additional services (+21% and +4.0% in market share). In contrast, non-profit organizations gained market share in acute and transitional care (+2.5%) and held their market position regarding the distribution of meals. The difference in market share is translated into higher revenue growth for for-profit organizations with a high increase of revenues (+235%), while service revenues of non-profit organizations had a lower growth rate (+44.5%) but increased the contributions from the public sector (+31.1%) which is due to their public service mandate. In addition to the changing competitive situation mainly affecting primary care (Ecoplan, 2014), stakeholder pressure has also increased (Hehli, 2018). However, in the self-perception of the organizations, the situation is still comfortable due to the demographic development with a growing proportion of the older population and a resulting growing market (+157% clients) and increasing revenues (+155%, 2.68 bil. in 2019 compared to 1.73 bil. in 2011) (see Table 7).

<TABLE 7 > Statistics of Swiss homecare organizations since the regulatory reform in 2011

		NPO[2]					FPO[2]				
		2019		2011		2019-2011	2019		2011		2019-2011
Size an Revenues			Share[1]		Share	Difference[1]		Share[1]		Share[1]	Difference[1]
FTE	Organization	19'089		14'395		32.6%	4'916		1'757		179.7%
	Market	24'755	**77.1%**	16'488	**87.3%**	**-10.2%**	24'755	**19.9%**	16'488	**10.7%**	**9.2%**
	Care	16'343	85.6%	12'438	86.4%	31.4%	4'171	84.8%	1'493	84.9%	179.4%
	Administration	2'746	14.4%	1'956	13.6%	40.4%	745	15.2%	265	15.1%	181.7%
Revenues	*Revenues*	2'130		1'550		37.4%	458		146		214.1%
	Market	2'685.79	**79.3%**	1'733	**89.4%**	**-10.1%**	2'685.79	**17.1%**	1'733	**8.4%**	**8.7%**
	Revenue from services	1'392	65.4%	963	62.2%	44.5%	453	98.9%	135	92.7%	235.1%
	Contributions, donations	45	2.1%	58	3.7%	-22.8%	3	0.7%	8	5.2%	-58.9%
	Contributions from the public sector	693	32.6%	529	34.1%	31.1%	2	0.4%	3	2.1%	-34.5%
Clients and services											
Clients	Organization	312'070		217'457		43.5%	41'661		16'455		153.2%
	Market	**394'444**	**79.1%**	**251'137**	**86.6%**	**-7.5%**	**394'444**	**10.6%**	**251'137**	**6.6%**	**4.0%**
Long-term care	*Clients Org.*	261'689		173'265		51.0%	36'317		14'692		147.2%
	Clients TOT	**338'700**	**77.3%**	**205'134**	**84.5%**	**-7.2%**	**338'700**	**10.7%**	**205'134**	**7.2%**	**3.6%**
	Billed Hours	12'613'338		8'730'558		44.5%	4'121'536		1'319'195		212.4%
	Hours per Client	48		50		-4.3%	113		90		26.4%
Acute and transitional care	*Clients Org.*	1'747		547	219.4%		116		34		241.2%
	Clients TOT	1'874	**93.2%**	603	**90.7%**	**2.5%**	1'874	**6.2%**	603	**5.6%**	**0.6%**
	Billed Hours	18'252		6'900		164.5%	1'684		716		135.2%
	Hours per Client	10		13		-17.1%	15		21		-31%
Home management and social care	*Clients Org.*	108'623		112'711		-3.6%	14'352		5'284		171.6%
	Clients TOT	123'127	**88.2%**	118'093	**95.4%**	**-7.2%**	123'127	**11.7%**	118'093	**4.5%**	**7.2%**
	Billed Hours	4'262'139		4'525'928		-5.8%	2'083'982		935'551		123%
	Hours per Client	39		40		-2.3%	145		177		-18%
Other services	*Clients Org.*	75'139		51'561	45.7%		4'653		976		376.7%
	Clients TOT	80'040	**93.9%**	52'786	**97.7%**	**-3.8%**	80'040	**5.8%**	52'786	**1.8%**	**4.0%**
	Billed Hours	493'312		423'149		16.6%	449'987		60'787		640%
	Hours per Client	7		8		-20.0%	97		62		55%
Meals	*Clients Org.*	28'628		29'272	-2.2%		586		401		46.1%
	Clients TOT	29'215	**98.0%**	29'690	**98.6%**	**-0.6%**	29'215	**2.0%**	29'690	**1.4%**	**0.7%**
	Billed Hours	3'045'965		2'866'502		6.3%	77'855		127'139		-38.8%
	Hours per Client	106		98		8.7%	133		317		-58%

[1] **Bold font refers to the market shares and the difference in market share between non-profit and for-profit home care services.** Otherwise, the numbers refer to the share and differences within the ownership status.
[2] There are also single providers acting in the homecare market, especially in long-term care
Source: Bundesamt für Statistik, Spitex-Statistik

Sample

All homecare organizations in Switzerland that were members of one of the two associations in 2018 were invited to participate in the study: 570 public and 240 private Spitex organizations received an online questionnaire addressed to the management. Finally, 159 public and 46 private organizations participated in the survey, corresponding to 28% and 21% response rates. The size of participating organizations ranges from small organizations with only one employee to large organizations with up to 2,800 employees (FTE). The median number of FTEs is 22 for non-profit and 16 for for-profit homecare services. The representativeness test shows that the sample largely corresponds to the

population in terms of organizational size and regional distribution. Small organizations with fewer than ten employees and large organizations with over 100 are slightly underrepresented. In the second step, we built groups according to the organisation's statements, based on whether they see themselves as a non-profit organisation irrespective of their legal status. The approach was necessary because there are also some organisations with private legal status which are non-profit oriented. The final sample (N= 205) comprises 168 non-profit and 37 for-profit organizations.

<TABLE 8 > Descriptive statistics

Profit status		**Size in FTE**				
	N	**MED**	< 10	10 – 49	50 – 249	> 249
For-profit	37	16	35%	30%	22%	14%
Non-profit	168	22	22%	55%	19%	4%
TOTAL	205		24%	50%	20%	6%

4.2. Measures

4.2.1. Performance

Goal achievement of homecare organizations was measured in two ways (cf. Table 9). First, we measured turnover development in recent years by the stated average growth rate. Growth rate is a widely used performance measure in EO research (Rauch et al., 2009; Wiklund et al., 2009). Second, we used broad, subjective performance measures to capture the influences of EO on different aspects of performance, ruling out contradicting relationships between EO and performance (Lumpkin & Dess, 1996).

<TABLE 9>: Measurement of the performance of homecare (Spitex) organizations

Subjective performance index, Mean (SD)				**Growth rate in last years (ordinal scale)**		
Items (1- «not true» to 5 - «very true")	**NP**	**FP**			**NP**	**FP**
The satisfaction of our clients is exceptionally high	4.52 (0.59)	4.61 (0.54)		Sales decline	13.1 %	8.6 %
We always manage to maintain quality standards.	4.11 (0.63)	4.22 (0.63)		Sales constant	15 %	25.7 %
Our employees are incredibly proud to work for us.	4.36 (0.60)	4.31 (0.62)		Sales growth up to 2%	17.6 %	11.4 %
Qualified personnel prefer to work with us than with a private [resp. Public] Spitex organization.	4.52* (0.68)	3.91 (1.09)		Sales growth 3-5%	21.6 %	11.4 %
The cooperation with our cooperation partners always runs smoothly	4.01* (0.65)	3.63 (0.84)		Sales growth 6-10%	19.6 %	11.4 %
We enjoy strong support in the municipality/canton	4.28* (1.02)	3.03 (1.36)		Sales growth of more than 10%	13.1 %	22.9 %
Our financial situation is comfortable compared to other Spitex organisations.	3.66* (1.21)	3.06 (1.14)				
Summative INDEX with equal weight	4.20 (0.39)	3.97 (0.55)		**Median**	3 – 5%	3 - 5 %
* Difference is statistically significant, p <.01						

Although no commonly used performance scale applies to for-profit and non-profit organizations, authors propose including social and financial performance measures (Coombes et al., 2011; Lumpkin

& Dess, 1996; Morris et al., 2011). Based on the critical question of what outcomes and outputs are relevant for homecare organizations and the literature, we included seven items to assess different aspects of subjective performance. Based on studies in the field, performance dimensions include quality of care (Hinz & Ingerfurth, 2013), employer attractiveness (Erpf et al., 2022), relationship and satisfaction with stakeholders (Lumpkin & Dess, 1996; Lumpkin et al., 2013) and overall financial performance (Hinz & Ingerfurth, 2013). Subjective performance measures are widely used to measure overarching organizational performance and show a robust relationship when assessing the EO performance relation (Rauch et al., 2009). Experts from the Association of Non-Profit Home Care in Switzerland double-checked the items. Because the items assessed different aspects of performance, a formative index consisting of the averaged sum of the seven items was calculated.

4.2.2. Entrepreneurial orientation (EO)

In this study, we used a reduced Covin & Slevin scale[1] and translated it to German and French by slightly changing the wording to the context of healthcare organizations. Three EO experts double-checked the accuracy of the translations. Some minor changes were necessary to avoid irritation from respondents. First, we avoided mentioning the top management as in the original Covin/ Slevin scale. Furthermore, we excluded the item which mentions the competitive aspect of proactiveness, which does not fit Switzerland's more cooperative healthcare market. The approach seems to align with the considerations that competitive aggressiveness is a distinct dimension and can be separated from proactiveness (Lumpkin & Dess, 1996). We also used a reduced scale with two items per dimension. Although this might be problematic in a formative construct, it should not be problematic for a reflective measurement design (Jarvis et al., 2003). We measured EO as a second-order unidimensional (reflective) construct (Covin & Wales, 2012; George, 2011).

<TABLE 10> EO Items

EO Items	**(1 -7 opposing statements)**	
INN1	We have not changed our services in the last five years.	Over the last five years, we have made many changes to our services.
INN2	There have been only minor changes in our services over the last five years.	Fundamental and far-reaching changes have occurred in our services over the last five years.
PRO1	Typically, we react to the activities of our competitors.	Typically, we launch activities to which our competitors then respond.
PRO2	It hardly ever happens that we are the first to appear on the market with new services or ways of working.	It happens very often that we are the first to appear on the market with new services or ways of working.
RSK1	We are convinced that in our industry, it is better to act cautiously and move forward in small steps.	We are convinced that in our industry, it is necessary to pursue one's goals courageously and in big steps.
RSK2	In an uncertain decision-making situation, we tend to wait so that we can avoid expensive, wrong decisions.	In an uncertain decision-making situation, we dare to do something to achieve great success afterwards.
Collective (entrepreneurial) mobilization	Do staff meetings always take place in your organization where important issues are discussed and decided collectively? If yes, these meetings take place primarily to ensure that... (1 - "strongly disagree" 5- "strongly agree")	
	… we can realize important innovations in our products and services. (CEC1)	
	... we are faster than our competitors. (CEC2)	
	… we encourage each other to take greater risks. (CEC3)	
	… our employees can get new impulses and start initiatives. (CEC4)	
	... we can be competitive and combative in competition. (CEC5)	

[1] For the original Covin/Miller & Slevin (1989) scale see Covin & Wales (2012)

In addition to the three Covin and Slevin items, we introduced an additional dimension of collective entrepreneurial aspects. In line with Ribeiro-Soriano and Urbano (2010) and Yan and Sorenson (2003), the dimension entails the collective entrepreneurial capacity of the whole organization rather than of individual members or teams. We thus try to measure the aggregated entrepreneurial capacity or mobilization of the individuals of an organization. In contrast to existing scales, e.g. by Haase and Franco (2020), which measure the individual exchange processes within the firm and, in our view, capture the individual contributions to entrepreneurship, we focus on the "sum" of individual entrepreneurial attitudes and processes on the firm level. Departing from the existing dimensions which measure EO (Covin & Slevin, 1989; Miller, 1983), we measure the collective mobilization with the question of whether staff meetings always take place where important issues are discussed and decided *collectively* and whether these meetings take place primarily to ensure that action is undertaken in relation to the dimensions of an entrepreneurial orientation, which we measured reflexively.

4.2.3. Control variables

The competitive intensity was measured by a filter question to assess whether another regional organisation offers the same services. Following this filter question, we asked for the intensity of competition ("the organisation actively poaches our clients", "The organisation is taking away market share", and "We perceive the private Spitex providers as competitors"). The answers ranged from 1 – "not true" to 5 – "very true". From the answers, an index was built ($\alpha = 0.923$) where for non-profit organizations, it ranges from 0 (= monopoly, no private Spitex in own market) to 5 (= at least one competitor and intense rivalry with predatory competition); 33% of the organizations are currently in a monopoly situation. For-profit homecare services are always in a competitive situation, but the latter can vary in the degree of perceived rivalry.

As controls for performance, we included organizational-specific CV. To assess the profit orientation of the organization, we asked for-profit organizations whether they perceive themselves as not-for-profit ("We see ourselves as a "not-for-profit" organization"). The answer corresponded to a control question on the importance of profitability ("How important is it for your organization to be profitable?") ranging from 1 – "not important at all" to 10 – "very important". Organizations which assessed themselves as non-profit scored five or lower on the scale, suggesting the consistency of their answers. Furthermore. We controlled for regional regulation and whether the organization received a deficit guarantee, meaning that the local government covered the deficit when needed. Although deficit guarantees are only granted to non-profit organizations with a public mandate, there is heterogeneity in the degree of deficit guarantees, and the latter can influence the organizations' resources and affect their performance. A dummy was included as a control for the strategic orientation, asking whether the organization maintains close cooperation with another organization, affecting the availability of resources and, thus, performance ("Does your organization currently maintain close cooperation with one or more other organizations?").

Furthermore, organizational-specific variables were included, potentially affecting the performance of homecare services, such as size (in FTE), the share of care staff (in %), and the share of management with business education (in %), which is a proxy for professionalization and the time per home visit (ranging from less than 5 minutes to more than 30 minutes in average), which is an indication of how effective organizations can operate, since the journey time cannot be charged. Furthermore, for performance, we controlled the number of hours billed to clients, which is a proxy for the efficiency of homecare organizations. For the model with EO as a dependent variable, we asked for the average time used for educational and organizational development purposes (2% to over 10%), assessing the propensity for education and training related to EO.

5. Results

5.1. Entrepreneurial orientation and organizational success of homecare organizations

Measurement model

To test the hypothesis of a positive relation between EO and the performance of homecare service organizations, we used structural equation modelling (SEM), which is appropriate for measuring models with multiple dependent and reflexive variables. Relying on standard procedure, we first tested the reliability, convergent, and discriminant validity of the measurement model using exploratory (EFA) and confirmatory factor analysis (CFA) (Anderson & Gerbing, 1988; Fornell & Larcker, 1981) using the *lavaan* package in R (Rosseel, 2012). Because we had some missing variables, we used full information maximum likelihood estimation (fiml), which is the most efficient method for dealing with missing variables (Newman, 2014).

To assess the scale, we first assessed the reliability of the construct. The Cronbach's alpha based on the inter-item correlations shows a high correlation with $\alpha = 0.86$, suggesting a high internal consistency of the scale. Since we introduced the new dimensionality of collective mobilization in addition to the Covin/Slevin items, we used EFA to assess the dimensionality of the construct. The Kayser-Meyer-Olson test (KMO = 0.842) and the Bartlett sphericity test (chi-sq. (55) = 820.302, $p < 0.001$) indicated that EFA was appropriate to analyze the scale. The principal component analysis with varimax rotation revealed two factors with an eigenvalue above 1, which explains 58.80 of variance together. The first factor is the traditional Covin/Slevin items; the second is the additional dimension of collective mobilization.

Nevertheless, and because of theoretical considerations, we modelled the initial Covin Slevin construct as a second-order construct (George, 2011) and added the separate dimension of collective mobilization to the construct. The decision to use a second-order model as specified was also backed by the results of an alternative model, with only two factors, as suggested by EFA, which showed a slightly weaker fit with the data (Chi-square= 150.887, df = 97, CFI = 0.959, SRMR = 0.051). The composite reliability of EO was significantly lower than the specified model (EO: CR = 0.68), suggesting that the chosen model was the proper specification.

<TABLE 11> Reliability, convergent, and discriminant validity of the measurement model

	EO	**INN**	**PRO**	**RSK**	**CM**	**COMP**
Innovativeness (INN)		1	(0.70)	(0.74)	(0.48)	(0.04)
Proactiveness (PRO)	-	0.72	1	(0.80)	(0.47)	(0.06)
Risk-taking (RSK)	-	0.72	0.79	1	(0.54)	(0.07)
Collective mobilization (CM)		0.48	0.54	0.54	1	(0.04)
Environmental rivalry (COMP)	0.11	0.11	0.07	0.10	0.09	1
AVE		0.68	0.45	0.48	0.56	0.80
CR	0.88	0.77	0.56	0.64	0.86	0.92

Diagonal elements are the square root of the average extracted variance of the construct (AVE). Off-diagonal elements are the correlations between the constructs. Above the diagonal in brackets are the HTMT values.

For the specified model, confirmatory factor analysis (CFA) indicates a satisfactory fit with the data (Chi-square = 126.670, df = 95, CFI = 0.976, SRMR = 0.047). The composite reliability of the latent constructs is acceptable (EO: CR = 0.88; COMP = 0.92)) according to Hair Jr et al. (2014). The

reliability of the subdimensions of EO is acceptable for INN (CR: 0.77), RSK (CR = 0.64), and CM (CR = 0.86) but not for PRO (CR = 0.56). However, lower reliability is expected because the subdimensions of EO consist only of 2 items. An explanation is also the cross-loadings between the EO dimensions, as EFA showed.

The test for convergent validity (AVE > 0.5), following Fornell and Larcker (1981), revealed acceptable levels for all constructs except RSK and PRO, which again can be explained by the cross-loadings between the subdimensions of EO. Discriminant validity with the HTMT procedure was given for all constructs (HTMT < I 0.85 I) (Henseler et al., 2015) (see Table 11).

The common method bias test where a model with all items loaded on one common factor (Podsakoff et al., 2003) revealed a poor fit (Chi-square= 801.111, df = 104, CFI= 0.470, SRMR= 0.141). Therefore, we conclude that a common method bias (responses with a similar pattern over the whole questionnaire) is unlikely. Furthermore, the study with educated respondents (consisting of leaders of homecare organizations) and multi-item scales makes a common method bias less likely (Bergkvist & Rossiter, 2007).

<TABLE 12> Descriptive statistics and loadings of the EO construct

Dimension	Item	Std-Loading	Mean (SD)
Innovativeness (α= 0.75)		**0.796**	
	INN1	0.706	5.6 (1.4)
	INN2	0.902	5.0 (1.7)
Proactiveness (α= 0.56)		**0.879**	
	PRO1	0.597	4.5 (1.2)
	PRO2	0.707	4.3 (1.8)
Risk-Taking (α= 0.64)		**0.897**	
	RSK1	0.729	4.9 (1.6)
	RSK2	0.645	4.1 (1.5)
Collective Mobilization (α= 0.86)		**0.604**	
	CM1	0.544	3.7 (1.2)
	CM2	0.842	2.5 (1.2)
	CM3	0.758	2.4 (1.2)
	CM4	0.622	3.9 (1.1)
	CM5	0.887	2.7 (1.2)

The model showed an acceptable fit with the data (Chi-square=310.018, df = 207, CFI= 0.93, SRMR= 0.073). It explains a partial variance in homecare organizations' variable growth (R^2 = 0.10) and subjective performance (R^2 = 0.19). Among the control variables, deficit guarantee (= .138, p < .05) was positively, and size (= - .144, p < .01) was negatively related to subjective performance. The other control variables remained insignificant.

Testing the hypothesis, EO, with the standardized loadings of innovativeness (β =0.796, p < 0.001), proactiveness (β = 0.879, p < 0.001), risk-taking (β = 0.897, p < 0.001) and collective mobilization (β = 0.604, p < 0.001), was positively related to growth (= 0.476, p < 0.05) and subjective performance (= 0.131, < 0.05) of homecare organizations. The hypothesized relationship of *H1* can thus be supported (see Table 13).

<TABLE 13>: Results of the EO performance relationship

	Model 1 N=205			
	DV= growth		DV= performance rating	
	b	*p-value*	*b*	*p-value*
Constant	4.373 (0.905)	0.001	4.284 (0.199)	0.001
EO (H1)	0.472 (0.216)	0.029	0.131 (0.053)	0.013
CV				
Competitive intensity	-0.161 (0.097)	0.097	-0.044 (0.024)	0.067
NPO (dummy)	-0.409 (0.436)	0.349	0.166 (0.099)	0.094
Deficit guarantee (dummy)	- 0.107 (0.257)	0.678	0.138 (0.058)	0.018
External Cooperation (dummy)	-0.484 (0.259)	0.062	0.075 (0.063)	0.230
Size (log fte)	0.346 (0.292)	0.236	-0.144 (0.060)	0.017
Billed Hours	-0.074 (0.082)	0.368	0.001 (0.018)	0.954
Share of care staff (in %)	-0.002 (0.007)	0.700	-0.003 (0.002)	0.081
Share of Management with business educ	-0.002 (0.004)	0.982	0.000 (0.001)	0.801
Time per home visit (minutes)	-0.006 (0.099)	-0.023	0.006 (0.027)	0.812
$\chi 2$				310.018
df				207
CFI				0.93
SRMR				0.073
Notes: unstandardized estimates				

5.2. Testing differences between for-profit and non-profit organizations' EO

Because we were interested in differences between for-profit and non-profit organizations with competitors in their field of activity, we split the sample of non-profit organizations into a group that reported direct competitors and a group without direct competitors. It can be assumed that non-profit organizations without competitors are in a privileged position, having a monopoly in their care service and are thus in a different position than those having direct competitors. Non-profit organizations without competitors are operating in areas with significantly lower population growth (mean = 2.68) compared to non-profit organizations with competition (mean = 3.18), which usually is the case in less densely populated areas and typically goes hand in hand with a higher dependence on the public service mandate without many degrees of freedom for entrepreneurial development.

<TABLE 14a> Differences between non-profit and for-profit organizations' mean levels

	NP (N=44)	NPc (N=114)	FP (N=37)	Significant diff. between groups (ind. t-tests)
	Without competition	With competition	With competition	
		Mean (SD)	Mean (SD)	
EO (0-1)	0.54* (0.18)	0.54** (0.15)	0.61** (0.17)	FP > NPc, NP
INN (1-7)	5.01 (1.46)	5.31 (1.33)	5.35 (1.47)	
PRO (1-7)	4.35* (1.40)	4.26** (1.17)	4.86** (1.21)	FP > NPc,NP

RSK (1-7)	4.47 (1.34)	4.41^{+} (1.28)	4.81^{+} (1.51)	FP > NPc
Collective mobilization (1-5)	3.0^{+} (1.08)	3.03^{+} (0.91)	3.34^{+} (0.76)	FP > NPc,NP
CV	NP (N=44)	NPc (N=114)	FP (N=37)	Significant diff. between groups
Competitive intensity (0-5)	0	2.76* (0.89)	2.68* (1.31)	FP,NPc> NP
External cooperation (Y/N)	0.63 (0.49)	0.74 (.44)	0.67 (0.48)	
Size (log fte)	1.26 (0.50)	1.42 (0.54)	1.33 (0.74)	
Share of management with business education %	18.63 (24.86)	19.44* (30.74)	30.15* (35.85)	FP > NPc,NP
Share of hours billed to clients (1 – 7)	2.51*** (1.42)	2.78*** (1.40)	4.97*** (2.00)	FP > NPc;NP
Share of care staff in %	78.90 (12.73)	76.65 (15.9)	74.94 (22.78)	
Travel time per home visit in minutes (1 - 7)	2.49 (1.00)	2.73*** (1.13)	3.60*** (1.75)	FP > NPc,NP
Time budget for education in minutes (1-4)	2.53 (0.73)	2.63 (0.88)	2.50 (0.74)	
Performance Variables				
Performance (1-5)	4.22* (0.41)	4.17** (0.39)	3.97** (0.55)	NP,NPc > FP
Growth (1-7)	3.66 (1.49)	3.53 (1.59)	3.94 (1.96)	
Significance level: + p < .10, * p <.05, ** p < .01, *** p < .001				

Testing differences in control variables, the results show that for-profit homecare services have significantly higher shares of hours billed to clients, a higher share of managers with business educational backgrounds and longer travel time. In contrast, non-profit organizations have higher subjective performance levels. The results between non-profit organizations with and without competition did not differ significantly (see Table 14a).

<TABLE 14b> Differences between non-profit and for-profit organizations' mean levels

	NP (N=42)	NPc (N=107)	FP (N=27)	Significant diff. between groups[1]
	NPO without competition	NPO with competition	PO with competition	
		Mean (SD)	Mean (SD)	
EO (0-1)	0.55 (0.18)	0.55* (0.15)	0.61* (0.15)	FP > NPc
	NP (N=39)	NPc (N=103)	FP (N=20)	
INN (1-7)	4.99 (1.52)	5.34 (1.34)	5.25 (1.60)	
PRO (1-7)	4.33 (1.38)	4.29* (1.20)	4.87* (1.06)	FP > NPc
RSK (1-7)	4.45 (1.38)	4.45* (1.33)	5.00* (1.31)	FP > NPc
Collective mobilization (CM) (1-5)	3.03 (1.1)	3.06 (0.91)	3.41 (0.75)	
CV: Competitive intensity, Size (log fte), Share of management with business education %, Share of hours billed to clients (1 – 7), Share of care staff in %, Time budget for education in minutes (1-4)				
Significance level: + p < .10, * p <.05, ** p < .01, *** p < .001, [1]Bonferroni corrected				

To test differences in EO levels between the three groups we used ANOVA, to test differences between the dimensions of EO we used MANOVA, (Table 14b). The Levene test showed no indication of variance heterogeneity (p > .05). The groups (NPO with competition, NPO without competition and PO) had a significant effect on EO (F (2, 175) = 3.667, p < 0,028, partial η^2 = .042). Bonferroni corrected differences within the groups revealed that for-profit homecare organizations (Mean = .61, SD = .15) had significantly higher EO levels than non-profit organizations with competition (Mean = .55, SD = .15).

Testing the hypothesized differences between for-profit and non-profit homecare services, we compared the mean of the EO dimensions with multivariate analysis of variance (MANOVA), which is appropriate

to test multiple independent correlated variables. The Levene test showed no indication of variance heterogeneity for each dependent variable ($p > .05$), and the box test showed covariance homogeneity ($p = 0.17$). The groups (NPO with competition, NPO without competition and PO) had a significant effect on the dimensions INN, PRO, RSK, and CM (F (8, 300) = 2.261, $p < 0{,}05$, *Wilks* $\lambda = 0{,}889$, partial $\eta^2 = .057$). Post-hoc univariate ANOVAs for every dependent variable showed a significant effect between the created groups and proactiveness (F (2, 153) = 4.18, p = 0,017, partial $\eta^2 = .052$) and risk-taking (F (2, 153) = 3.111, p = 0,047, partial $\eta^2 = .039$). Bonferroni corrected post-hoc tests reveal that for-profit oriented homecare services had significantly higher levels of proactiveness, p = .014 (MDiff = 0.911, 95%-CI [0.143, 1.680]) and risk-taking, p = .041 (MDiff = 0.866, 95%-CI [0.025, 1.708]) compared to non-profit oriented homecare services with competition. In contrast, there were no significant differences between non-profit organizations without competition and for-profit organizations.

To confirm the results found by simple t-tests by including control variables, we used structural equation modelling with a dummy for NPO (NPO = 1 if the organization declared itself as a non-profit organization). Furthermore, we only included organizations that declared that they had direct competitors. Model 2 had an acceptable fit with the data (Chi-square = 207.838, df = 126, CFI= 0.895, SRMR= 0.075) and explained a considerable variance in EO ($R^2 = 0.255$). Among the CV size (= .425 $p < .001$) and time budget for education (= .206, $p < .05$) had a positive effect on EO. The effect of the profit status on EO revealed that non-profit homecare organizations had significantly lower EO levels (= -.355, $p < .05$) than for-profit organizations, supporting Hypothesis 2. Testing the profit status on the subdimensions of EO (Model 3) revealed similar results for the CVS, where size and time budget for education positively affected the dependent variables. Testing the hypotheses at the subdimensions revealed that in tendency, non-profit organizations had lower levels in the subdimensions of EO, but the difference was only significant for proactiveness (= .566, $p < .01$) and risk-taking (= .567, $p < .05$) (see Table 15).

<TABLE 15> Determinants of EO

	Model 2 (EO) N = 151	Model 3 (Subdimensions of EO) N=151			
	EO	INN	PRO	RSK	CM
Competitive intensity	0.050 (0.091)	-0.065 (0.126)	0.025 (0.108)	0.136 (0.177)	0.086 (0.057)
External cooperation	0.064 (0.133)	0.100 (0.181)	0.026 (0.169)	0.067 (0.219)	0.080 (0.104)
Size (log fte)	0.425 (0.102) ***	0.414 (0.165) *	0.440 (0.116) ***	0.682 (0.180) ***	0.079 (0.075)
Share of management with business education	-0.001 (0.002)	-0.001 (0.003)	-0.002 (0.003)	-0.002 (0.003)	0.000 (0.001)
Share of care staff	-0.004 (0.004)	-0.009 (0.005)	-0.007 (0.005)	0.004 (0.007)	-0.001 (0.003)
Time budget for education	0.206 (0.082) *	0.143 (0.115)	0.243 (0.093) **	0.268 (0.123) *	0.128 (0.068) +
H2: NPO (Yes)	-0.355 (0.167) *	-0.054 (0.202)	-0.566 (0.186) **	-0.567 (0.258) *	-0.113 (0.112)
$\chi 2$	233.820				207.838
df	149				126
CFI	0.895				0.899
SRMR	0.075				0.067
Notes: unstandardized estimates + p < .10, * p <.05, ** p < .01, *** p < .001					

5.3. Testing differences between for-profit and non-profit EO performance relationships

To estimate the influence of the non-profit status on the relationship between EO and performance, we tested the interaction effect of the profit status with EO on performance. We used hierarchical ordinary least squares (OLS) in SPSS 26 with the listwise deletion for missing values. Table 16 shows the results of the regressions on the two dependent variables separately.

<TABLE 16> The moderating effect of the profit status (only organizations which reported competitors in the same area)

	DV = growth (N = 126)				DV = performance rating (N = 135)		
Constant	5.057 (1.062) ***	5.001 (1.300) ***	2.386 (1.948) ***		4.894 (.265) ***	4.348 (.315) ***	4.193 (.460) ***
Competitive intensity (index)	-.307 (.165) *	-.327 (.161) *	-.378 (.162)		-.089 (.039) *	-.088 (.038) *	-.089 (.039) *
External cooperation (dummy)	-.333 (.348)	-.347 (.343)	-.324 (.340)		.113 (.083)	.083 (.081)	.081 (.081)
Size (log fte)	.337 (.283)	.184 (.287)	.241 (.286)		-.124 (.067) $^{+}$	-.181 (.068) *	-.180 (.068) *
Billed Hours (share)	-.068 (.084)	-.154 (.092)$^{+}$	-.131 (.093)		-.033 (.021)	-.017 (.023)	-.016 (.023)
Share of care staff (in %)	-.007 (.009)	-.006 (.009)	-.001 (.009)		-.004 (.002) $^{+}$	-.003 (.002)$^{+}$	-.003 (.002)
Share of management with business education	-.005 (.005)	-.004 (.005)	-.005 (.005)		.000 (.001)	.000 (.001)	.000 (.001)
NPO (dummy)		-.682 (.425)	2.107 (1.615)			.203 (.103)$^{+}$	.371 (.377)$^{+}$
EO		1.900^{+} (1.049)	5.347 (2.189) *			.706 (.249) **	.918 (.521) $^{+}$
EO x NPO (H3)			-4.443 (2.483) $^{+}$				-.270 (.583)
F-value	1.276	2.009^{+}	2.175*		2.445 $^{+}$	3.168 **	2.823 **
F-change	1.550	4.134*	2.955^{+}		2.445*	4.891**	.215
R2	.060	.121	.144		.103	.167	.169
Adj. R2	.013	.061	.078		.061	.115	.109
Notes: unstandardized estimates + p < .10, * p <.05, ** p < .01, *** p < .001							

The final models (including the moderator variable) were significant. The variance inflation factors (VIF) showed no indication of multicollinearity (VIF < 4). The interaction between EO and NPO was negative (= - 4.443, p = 0.076), suggesting that non-profit organizations benefit less from the EO–growth relation than for-profit homecare organizations. However, the relation was not significant on a 5% significance level. In contrast, there was no difference in the EO-subjective performance (= -.270, p = 0.644) between for-profit and non-profit organizations. We, therefore, must reject the hypothesis that for-profit organizations benefit more from EO than non-profit organizations (H3).

6. Discussion

6.1. Contribution to theory

This paper takes a comparative approach and examines EO and the link to non-profit and for-profit homecare service performance to explain the differences between the growth of for-profit and non-profit homecare services since the regulatory reform.

First, we propose that the EO of homecare organizations includes an additional dimension of collective action, an essential feature of healthcare organizations' entrepreneurial orientation (Ben-Ner & Ren, 2015; Haase & Franco, 2020). Using the initial Covin/Slevin Scale with the additional dimension of collective mobilization, including a focus on internal collaboration and collective decision-making, we find that it fits the Covin/Slevins measurement instrument. The finding adds empirical evidence to the theoretical claim of adopting the EO scale to non-profit organizations (Lumpkin et al., 2013; Morris et al., 2011) and shows that collective mobilization (or internal collaboration) is an essential additional dimension together with innovativeness, proactiveness and risk-taking to measure the EO of healthcare organizations. The results align with similar research on healthcare organizations (Haase & Franco, 2020) and is interesting for research on non-profit organizations, as it offers empirical evidence on whether social entrepreneurship is about collectives or individuals (Morris et al., 2020). Moreover, the findings offer further research opportunities along EO's antecedents and outcomes when taking a collectivist rather individualistic research focus on EO.

Second, by focusing on the examined relationships, our results show that EO is positively linked to homecare organisations' growth and subjective performance. The results are comparable to existing research on the positive EO-performance relation of for-profit and non-profit organizations in healthcare (Bhuian et al., 2005; Davis et al., 2013; Hinz & Ingerfurth, 2013) and add empirical evidence on homecare services, a particular type of organization which is increasingly important to solve healthcare challenges.

Third, comparing and testing differences between the EO of non-profit and for-profit homecare shows that for-profit organizations have significantly higher EO levels than non-profit organizations. The results compare to Hinz and Ingerfurth (2013) finding that for-profit organizations have higher EO levels. Focusing on the subdimensions of EO, allowing a closer look at differences, the results reveal higher levels of proactiveness and risk-taking in for-profit organizations. At the same time, there are no significant differences regarding the level of innovativeness and collective mobilization.

The higher EO levels of for-profit homecare organizations can be explained by *agency theory*, which leads to differences in board behaviour and to differences in organizational designs in non-profit organizations (decision-making, monitoring, incentive system, and recruitment) (Ben-Ner & Ren, 2015; Fama & Jensen, 1983), affecting EO and subdimension levels. In non-profit organizations performance-based incentives are less important (Ben-Ner & Ren, 2015; Möckli, 2023) and low individual incentives are associated with lower levels of risk-taking at the management and employee levels (Correia et al., 2023; Kuratko et al., 2005). Furthermore, because non-profit organizations hire employees through their network which best fits the organizational culture (Ben-Ner & Ren, 2015), there is likely a self-selection of managers with low risk-preference shaping the level of organizational risk-taking (Roomkin & Weisbrod, 1999). Regarding proactiveness, for-profit organizations can adopt and implement new strategies faster than non-profit organizations. The finding sketches the claim that for-profit organizations have a more professional management because of their incentive structure and are thus systematically screening external markets, as suggested by Hinz and Ingerfurth (2013) and in line with agency theory (Ben-Ner & Ren, 2015).

That innovativeness levels did not differ between for-profit and non-profit organizations can be explained by the difference in their response to the principle-agency problems. For-profit organizations implement performance-based incentive and monitoring systems which foster organizational innovativeness and EO (Correia et al., 2023; Kuratko et al., 2005). Research showed that the appropriate set of incentives and leadership styles was related to higher levels of innovation (Muñoz et al., 2020). On the other hand, the measures implemented by non-profit organizations to address the principal-agency problem lead to an organizational structure with a participative governance and the suitable leadership styles (Ben-Ner & Ren, 2015), and to innovativeness in non-profit organizations (Guzmán et al., 2024; Muñoz et al., 2020). Furthermore, team development positively affects the innovativeness of organizations (Florén et al., 2016), and social mission and permanent employment strengthen motivation

and identification, leading to engagement in the development of ideas (Morris et al., 2011). If non-profit organizations succeed in creating a configuration of participative leadership and management styles, they can also achieve innovative results together with motivated and qualified employees (Muñoz et al., 2020).

Although innovativeness levels did not differ, it is still a remaining research question whether innovativeness is of a different quality between non-profit and for-profit organizations: as Schlesinger and Gray (2006) argue, for-profit organizations are faster to react to changes in demand by increasing, lowering or changing their services, which implies higher levels of constant incremental innovation compared to non-profit organizations. In contrast, non-profit organizations focus on more fundamental innovations (Schlesinger & Gray, 2006). That social innovation is higher in non-profit compared to for-profit organizations was also shown in the example of elderly care in Spain (Guzmán et al., 2024). Further research could test these propositions.

Most surprisingly, the additional dimension of collective mobilization showed no significant difference, implying that the collective aspect was equally present in both organizational types. The finding was remarkable because non-profit organizations invested more time in employee training, an essential antecedent of collective entrepreneurial outcomes. The finding could be a sign that for-profit homecare organizations are using the same strategies as non-profit organizations and would contradict the proposition of Ben-Ner and Ren (2015) of higher delegation of decision-making authority to employees of non-profit compared to for-profit organizations.

Differences in EO levels can be also explained by *stakeholder theory*. Non-profit homecare organizations, financed by public contributions and clients' contributions, comply with the stakeholder expectations and offer low-risk and high-quality services, while for-profit organizations relying on clients' contributions take more risks to meet clients' expectations and generate revenues (Giraud Voss et al., 2005). The finding is typical for non-profit organizations with a more complex stakeholder situation and more heterogeneous risk preferences, leading them to average down the risk level (Van der Krogt et al., 2007), potentially explaining differences in the EO of non-profit organizations. Further research could focus on stakeholder expectations and the related risk level to shed light on the interactions with EO. Furthermore, focusing on the quality of services and goods urges non-profit homecare organizations to screen clients and suppliers' behaviour and actively shape the relationship with stakeholders. In contrast, for-profit organizations primarily focus on clients' preferences and market development, which were previously shown empirically by Davis et al. (2011) in the context of US nursing homes. Since we measured proactiveness relative to competitors and markets (Covin & Slevin, 1989; Lumpkin & Dess, 1996), the higher proactiveness levels reflect organizations' different environmental scanning behaviours. It would be interesting to replicate studies using a broader measure of proactiveness, allowing for stakeholder relationships (Löffel, 2023; Morris et al., 2011). The result of no difference between innovativeness-levels contrasts *stakeholder theory,* which suggested higher levels of innovativeness for for-profit organizations because of the public service mandate and stakeholder expectations, and low degrees of freedom and no incentive to engage in innovative behaviour for non-profit organizations. The higher-than-expected innovativeness levels for non-profit organizations could be explained by research showing that the stakeholder composition is a source of innovativeness in non-profit organizations (Coombes et al., 2011). Furthermore, the lower-than-expected innovativeness levels of for-profit organizations can be explained by restrictions due to regulations, which lead to restricted degrees of freedom for for-profit organizations' management focusing on quality rather than innovativeness. Future research could examine the relationship between stakeholder expectations and the innovativeness for-profit and non-profit organizations and gain insights on the complex relationship.

Agency theory as well as *stakeholder theory* offer explanations why for-profit organizations have higher EO levels than non-profit organizations. Further research could go into more depth and test the

individual explanatory approaches in comparative studies linking organizational features to EO and examining differences between stakeholder expecations and their management and EO.

The view on differences in market position and strategic positioning between for-profit and non-profit organizations offers additional explanation of higher EO levels for for-profit homecare organizations. For-profit organizations were allowed to enter new markets only with the regulatory reform in 2011, explaining their lower market share of around 17% in 2019, while non-profit organizations started from a monopolistic position. Today, the public service mandate still has implications for for-profit organizations that receive low public contributions, demanding them to generate revenues through higher prices. Furthermore, depending on the cantons and the service mandate, for-profit homecare is restricted in providing goods and services. Using the generic strategies of Porter (1985a), which account for market concentration and market position, the results of lower EO levels for non-profit organizations can be explained by non-profit organizations having a quasi-monopolistic position. Because of regulatory protection and entry barriers, non-profit organizations benefit from a cost leadership strategy associated with lower levels of innovativeness, proactiveness, and risk-taking and, thus, lower EO levels. Focusing on delivering the products and services defined through the public service mandate and cross-subsidizing additional services, non-profit organizations can offer a lower prices and maximize their benefits by minimizing costs. In contrast, for-profit organizations adopting a differentiation strategy reap the opportunities by offering new services such as palliative or dementia treatment and flexibly adjusting the delivery time and location of services. Since a differentiation strategy is associated with an entrepreneurial orientation (Lechner & Gudmundsson, 2014), the market position of for-profit organizations explains differences in EO.

Miles and Snow (1978) takes another stand and, asks which strategic choice best fits the environment rather than the more deterministic market-based view on strategy, can equally explain differences in the EO-level. The public service mandate and regulatory framework lead to a situation where non-profit organizations are receiving government funding and have to offer defined products in markets. The market position and the public service mandate lead to non-profit organisations relying on clients (65% of revenues) and public service contributions (32% of revenues). To fulfil this mandate and meet the stakeholders' expectations, they provide the quality demanded through standardized procedures and monitor and optimise costs. Furthermore, their organizational structure favours lower levels of risk-taking and proactiveness. Because of this starting point, a defender or a mixed strategy generates the best fit between resources and environment, and non-profits likely prefer such a strategy over a prospector strategy. Therefore, choosing an entrepreneurial orientation is unsuitable since its benefits cannot be reaped, and an entrepreneurial orientation is costly, which is detrimental to minimizing costs.

In contrast, for-profit organizations are growth-oriented (214% growth form 2011 to 2019) and rely on clients' contributions (99% of revenues), and government contributions are neglectable. Therefore, a prospector strategy characterized by flexibility, developing new products and entering markets is optimal for for-profit organizations to generate a competitive advantage. Entrepreneurial orientation is a useful alignment to reach these goals. Since the organizational characteristics of for-profit organizations, as argued above, are favourable for an entrepreneurial orientation, for-profit organizations are thus focusing on an entrepreneurial posture, which leads to better and innovative products and allows them to gain market shares.

The results reveal no statistically significant differences in whether for-profit organizations benefit more from an EO than non-profit organizations. Although insignificant, the relationship between EO and growth was stronger for for-profit organizations than non-profit organizations, emphasising EO's role in organizational growth (Moreno & Casillas, 2008; Wiklund et al., 2009). In contrast, the relationship between EO and subjective performance did not differ between organizations.

Higher EO levels do not result in superior performance of non-profit organizations, which is consistent with the fact that a differentiation strategy is unsuitable for non-profit organizations because of their market position and that only a strategic fit offers superior performance (Zahra & Pearce, 1990). Non-

profit organizations generate higher performance by following a cost leadership strategy focusing on quality and minimizing costs incompatible with high EO levels. In contrast, for-profit organizations benefit from an EO, resulting in higher growth levels. Although the relation between EO and growth was insignificant, the finding that the EO –growth relation was more robust for for-profit organizations suggests that a differentiation strategy with an EO generates a competitive advantage. The fact that the higher EO of for-profit organizations did not transform into a significant competitive advantage can be explained by the regulatory environment, which does not offer enough degrees of freedom for a differentiation strategy to be successful. The finding is comparable to results in early deregulated markets, where differentiation strategies (with an entrepreneurial orientation) do not necessarily transform into higher success for organizations (Smith & Grimm, 1987). However, the situation could change in the future with continuing regulatory changes. An indication is that the market share of for-profit organizations increased from 8% to 17% while the market share of non-profit organizations decreased simultaneously. Nevertheless, the non-significance could also be explained by the sample's low number of for-profit organizations.

Following Miles et al. (1978), the result of no significant difference between for-profit and non-profit EO - performance relationship can similarly be explained by the differentiated regulatory environment with market protection in certain areas and competition in others. Therefore, different strategic types (prospector, analyzer, and defender) are equally beneficial in generating a competitive advantage. The finding compares to the results of Helmig et al. (2014) on the German hospital sector, that because of the complex market situation with high interdependence and price and quality regulation, different strategic orientations (prospector, mixed and defender strategy) were equally positively related to financial and non-financial success and thus different associated levels of EO lead to superior performance. Nevertheless, the more robust relationship for the EO -growth relationship for for-profit organizations suggests that they can profit from a prospector strategy with higher growth levels. With the ongoing adjustments regarding regulation, it would be interesting to replicate the same study to monitor the developments in the field over time and find an answer to whether non-profit homecare organizations, for their part, react to the increasing competition by increasing their EO level or whether they shift to other strategic orientations. Furthermore, measures for different strategic orientations could offer new insights into variations in strategy between organizations and further insights into the relationship between the choice of strategy, EO and performance.

There was no difference in the EO – subjective performance relationship between non-profit and for-profit organizations, but a positive relationship between EO and subjective performance for both organizational types could point toward the fact that EO is beneficial not only to generate higher growth levels but also for other objectives as suggested before when answering the first research question. Thus, for-profit and non-profit organisations benefit from higher EO levels, but non-profit organizations start from lower levels.

6.2. Contribution to practice

The findings are interesting for practitioners because healthcare organizations adopting an entrepreneurial strategy with innovativeness, proactiveness, risk-taking, and collective mobilization exhibit higher growth and overall performance. An EO could thus be a means to achieve the rising expectations of stakeholders and clients and to provide high-quality care. Therefore, An entrepreneurial orientation can address some of the persisting challenges in the healthcare sector. Although both organizational types profit from an entrepreneurial orientation, non-profit organizations generally exhibit lower EO levels, including lower levels of risk-taking and proactiveness towards main competitors. Non-profit organizations should, therefore, consider particularities concerning EO and align the risk-taking level with the risk tolerance of primary stakeholders.

In competition, non-profit and for-profit homecare organizations should carefully consider the market environment and existing resources when choosing a competitive strategy. The strategic positioning

should match the industry structure and optimally integrate the existing resources. This also has to be considered when investing in an entrepreneurial orientation because EO is resource-intensive (Wiklund, 1999).

Policymakers should note that an entrepreneurial orientation of homecare organizations is associated with higher success regarding growth and perceived quality measures. Since non-stationary care is one of the strategic pillars in dealing with challenges such as demographic change with a multimorbid population and consequently rising costs, entrepreneurial approaches might offer solutions to address these challenges. To reap the benefits of entrepreneurial approaches, it is essential to implement a regulatory framework that offers degrees of freedom to innovative solutions for healthcare organizations under the quality and cost constraints of existing healthcare policies.

6.3. Limitations and future research

Our comparative results must be considered within a highly regulated healthcare system, where both organizational types have different legal requirements regarding financing. Moreover, there is a persisting preference for public mandate provision to non-profit organizations, affecting the degree of freedom of for-profit organizations. Thus, the regulatory framework must be considered when transferring the results to other contexts where for-profit and non-profit organizations compete in the same market. This offers the possibility of further comparative research focusing on the regulatory environment and helps to answer the remaining questions of whether differences in EO stem from organizational differences or differences in the market environment.

Although our study uses different theoretical approaches to explain differences in EO levels between for-profit and non-profit organizations, it does not test them empirically. Thus, we cannot say which theoretical approach best explains the differences between for-profit and non-profit homecare's EO levels. Future research could include control variables for the different theoretical approaches when replicating the study and gain further insights to explain the interrelationship between organizational differences, entrepreneurial orientation, strategy, and competitive advantage. This would contribute to examining EO in the non-profit sector and answer the call for more theory-based research in EO studies (Miller, 2011).

The study has methodological limitations, which are typical for this study type. First, since the questionnaire relied on single respondents, the validity of the responses can be improved with multidimensional measures. Furthermore, including effectiveness measures could help assess the overall costs of a non-stationary healthcare system. Since there are attempts to implement a monitoring system with quality measures in homecare, these could offer possibilities to address these issues in further studies and assess the performance of organizations with objective and aggregated quality and efficiency measures. Second, reversed causality cannot be ruled out with the study design. Although similar research has shown causality between EO and performance, it would be important to replicate studies in healthcare with a longitudinal study design to trace further developments in the homecare services market.

7. Conclusions

Our work showed that an entrepreneurial orientation is positively related to the performance of homecare organizations. Since non-stationary treatment addresses healthcare system challenges, such as demographic change and rising costs, the findings are relevant and give hope that entrepreneurial solutions can contribute to policy objectives such as better quality of care.

Comparing non-profit and for-profit organizations, we provide evidence of differences between for-profit and non-profit organizations regarding EO and add to the existing scarce comparative literature (Davis et al., 2011; Hinz & Ingerfurth, 2013). We explain the differences between for-profit and non-profit organizations using theoretical approaches such as agency and stakeholder theory, which focus

on organizational differences. Furthermore, we account for the market environment and use theories of strategic positioning (Porters (1985a) market-based and Miles and Snow (1978) resource-based view on strategy) to explain differences in the EO – performance relationship. We thereby answer the claim of a greater connection between EO research and theory (Miller, 2011). Market position is often overlooked when explaining the differences between for-profit and non-profit organizations, but it plays an important role, especially in regulated markets. Our approach thus contributes to the question under what condition EO is useful for the competition between for-profit and non-profit organizations.

Nevertheless, we cannot show that differences in EO transform into significant differences in performance, although the effect on organizational growth seems stronger for for-profit organizations, which is also reflected in their increasing market share. The result might be due to the regulatory environment, which does not yet offer enough degrees of freedom and persisting unequal standards regarding the financing and provision of the public mandate for for-profit homecare organizations, but this could change with future market reforms. It will be interesting to see whether increasing competition and further regulatory reforms will lead to an organizational adaptation of non-profit organizations and to isomorphism between the two organizational forms (DiMaggio & Powell, 1983) or whether structural inertia forces non-profit organizations to leave markets when they are not anymore protected through regulation and supported through governmental contributions (Hannan & Freeman, 1984).

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9. Appendix

1	***Construct/Indicator***	***1***	***2***	***3***	***4***	***5***	***6***	***7***	***8***	***9***	***10***	***11***	***12***	***13***	***14***	***15***	***16***	***17***
	Performance	1																
2	Growth	.249*	1															
3	EO	.095	.248*	1														
4	INN	.027	.209*	.796*	1													
5	PRO	.041	.201*	.786*	.489*	1												
6	RSK	.125	.123	.805*	.536*	.506*	1											
7	Collective mobilization (CM)	.223*	.189*	.662*	.402*	.379*	.404*	1										
8	Competitive intensity	-.152*	-.076	.089	.081	.052	.067	.065	1									
9	NPO (dummy)	.192*	-.083	-.169*	-.036	-.180*	-.113	-.129	-.183*	1								
10	Deficit guarantee (dummy)	.214*	-.089	-.172*	-.039	-.197*	-.187*	-.018	-.044	.402*	1							
11	External cooperation (dummy)	.076	-.126	-.024	.012	.006	-.030	.080	.121	.012	-.033	1						
12	Size (log fte)	-.134	.143	.329*	.259*	.322*	.270*	.089	.172*	.029	-.091	.046	1					
13	Efficiency	-.061	-.021	-.007	-.087	-.003	-.024	.122	.018	-.450*	-.237*	-.037	-.033	1				
14	Share of care staff (in %)	-.113	-.014	-.103	-.130	-.101	.006	-.014	-.121	.047	-.123	-.011	-.070	-.092	1			
15	Share of management bus. educ (%)	-.021	-.059	-.013	.004	-.013	-.003	-.018	.063	-.128	-.112	.085	.011	.125	.017	1		
16	Time per home visit (minutes)	-.081	.064	.153*	.124	.093	.071	.102	.149*	-.269*	-.201*	-.065	.110	.110	.060	.153*	1	
17	Time budget for education	.106	-.021	.175*	.094	.162*	0.121	.255*	.061	.051	.018	.189*	.002	.029	-.032	.135	.195*	1
	Mean	4.15	3.65	.56	5.24	4.38	4.49	3.05	2.12	.82	.42	.71	1.37	3.08	76.62	21.77	2.85	2.59
	SD	.43	1.66	.17	1.40	1.25	1.34	.95	1.45	.39	.49	.47	.57	1.76	16.66	31.17	1.31	1.31
	Min.	2.83	1	.13	1.00	1.50	1.50	1.00	.00	0	0	0	.00	1	14.0	0	1	1
	Max.	5.00	7	1.00	7.00	7.00	7.00	4.80	5.00	1	1	1	3.45	7	100.0	100	7	4
Significance level * p <.05																		

<Table 1A> Correlations of the variables

Dependent and independent variables[1]
Performance
Perceived market performance (1 – does not apply» to 5- «applies very much»)
The satisfaction of our clients is exceptionally high. (Hinz & Ingerfurth, 2013)
We always manage to maintain quality standards. (Hinz & Ingerfurth, 2013)
Our employees are incredibly proud to work for us. (Erpf et al., 2022)
Qualified personnel prefer to work with us than with a private [resp. Public] Spitex organization. (Erpf et al., 2022)
The cooperation with our cooperation partners always runs smoothly. (Lumpkin & Dess, 1996; Lumpkin et al., 2013)
We enjoy strong support in the municipality/canton. (Lumpkin & Dess, 1996; Lumpkin et al., 2013)
Our financial situation is comfortable compared to other Spitex organisations. (Hinz & Ingerfurth, 2013)
Growth How has your annual budget (turnover) developed in recent years? (1 – "Sales decline", 2 – "Sales constant", 3 – "Sales growth up to 2%", 4 – "Sales growth 3-5%", 5 – "Sales growth 6-10%", 6 – "Sales growth of more than 10%")
Entrepreneurial orientation (EO) (CR = 0.88) (Covin & Slevin, 1989; Yan & Sorenson, 2003)
Innovativeness (1 -7 opposing statements) (CR= 0.77, AVE= 0.68)
We have not changed our services in the last five years / Over the last five years, we have made many changes to our services. (INN1)
There have been only minor changes in our services over the last five years. / Fundamental and far-reaching changes have occurred in our services over the last five years. (INN2)
Risk-taking (1 -7 opposing statements) (CR= 0.64, AVE = 0.48)
We are convinced that in our industry, it is better to act cautiously and move forward in small steps. / We are convinced that in our industry, it is necessary to pursue one's goals courageously and in big steps. (RSK1)
In an uncertain decision-making situation, we tend to wait so that we can avoid expensive wrong decisions. / In an uncertain decision-making situation, we dare to act so that we can achieve great success afterwards. (RSK2)
Proactiveness (1 -7 opposing statements) (CR= 0.56, AVE = 0.45)
Typically, we react to activities of our competitors. / Typically, we launch activities to which our competitors then respond. (PRO1)
It hardly ever happens that we are the first to appear on the market with new products/services or ways of working. / It happens very often that we are the first to appear on the market with new products/services or ways of working. (PRO2)
Collective entrepreneurial capacity (CEC) (CR= 0.86, AVE = 0.56) (Yan & Sorenson, 2003; Yan & Yan, 2016)

Do staff meetings always take place in your organization where important issues are discussed and decided collectively? If yes, these meetings take place primarily to ensure that... (1 - "strongly disagree" 5- "strongly agree")
… we can realize important innovations in our products and services. (CEC1)
... we are faster than our competitors. (CEC2)
… we encourage each other to take greater risks. (CEC3)
… our employees can get new impulses and start initiatives. (CEC4)
... we can be competitive and combative in competition. (CEC5)
Control Variables (CV)
Competitive intensity 0 (= monopoly, no private Spitex in own market) to 5 (= at least one competitor and intense rivalry with predatory competition) (CR= 0.92, AVE = 0.80)
Public Spitex actively poaches our clients.
Public Spitex is taking market share away from us.
We perceive the public Spitex organization as a competitor.
Non-profit -"We see ourselves as a "not-for-profit" organization" (Y/N) - How important is it for your organization to be profitable?") ranging from 1 – "not important at all" to 10 – "very important" (non-profit if score is lower than 5)
Cantonal regulation We have a deficit guarantee from the municipality/canton (only applies to NPO)
Cooperation with other organizations Does your organization currently collaborate closely with one or more other organizations? (Y/N)
Efficiency - Proportion of invoiced hours worked (1 – "< 50%", 2 – "50 – 54%", 3 – "55-59%", 4 – "60 - 64%", 5- "65-69%", 6 – "70 – 75%", 7 – "> 75%")
Organizational CV - **Size** (in FTE) - **Share of care staff** (in %) - **Share of management with business education** (in %) - **Average time per home visit** (1 – "< 5 min., 2 – "5-9 min.", 3 – "10-14 min", 4 – "15-19 min, 5 – "20-24 min", 6 – "25-29 min.", 7 – " > 30 min.") - **Average worktime for educational purposes per employee** (1 – "2%", 2 – "2-5%", 3 – "6-10%", 4 – " > 10%")

Table 2A - Measures

Conclusions

The following section answers the dissertation's research questions, derives practical implications and limitations, and shows opportunities for future research.

1 EO and performance of non-profit organizations and cooperatives

This section links to the debate on whether adopting business-like strategies leads to advantages or disadvantages for non-profit organizations and cooperatives. At the example of an entrepreneurial orientation as a business-like strategy, which describes processes, practices, and decision-making styles of organizations that act entrepreneurial (Lumpkin & Dess, 1996), the research question *whether cooperatives and non-profit organizations benefit from EO to reach their multi-dimensional objectives, and if they can use collective characteristics (inter and intra-organizational cooperation) to increase performance* is discussed and answered.

With a cross-sectoral sample of Swiss cooperatives (Paper 1a), a subsample of Swiss housing cooperatives (Paper 1b) and homecare organizations (Paper 3), it is shown that both types of third-sector organizations benefit from EO to reach organizational performance. The results align with research on EO in non-profit organizations and cooperatives, finding positive effects of EO on organizational performance (Guzmán et al., 2020; Kyriakopoulos et al., 2004; Stock et al., 2024). Since the results hold for different third-sector organizations, such as self-help or mutual-benefit organizations (cooperatives) and third-party non-profit organizations (Paper 3), the results propose that an entrepreneurial orientation positively affects the performance objectives of third-sector organizations.

Looking more closely at different performance measures and by considering market-related, social and member-related performance separately, the dissertation aims to show whether EO contributes equally to the different performance objectives, which is essential for the discussion of possible positive and negative effects of using business-like practices. In contrast to prior results for non-profit organizations (see e.g. Stock et al., 2024), the dissertation reveals no direct effect between EO and mission-related performance for cooperatives. In contrast, mediation analysis shows that EO positively affects member-related and social performance in cooperatives *indirectly* through market-related performance (Paper 1a). The results hold for different types of self-help (mutual-benefit) organizations, such as “traditional” cooperatives (e.g. housing cooperatives), which are member-oriented and not active on external markets, and cooperatives that are market-oriented and competing with corporations in the same business areas. The dissertation thus adds further evidence on the impact of EO on broad organizational performance objectives but proposes a differentiated view on how EO affects social and member-related performance through the achievement of market-related performance.

The finding is in line with the view that applying business-like practices such as EO bears potential for cooperatives by leading to superior market-related performance (Guzmán et al., 2020; Kyriakopoulos et al., 2004). Since cooperatives as mutual-benefit organizations are comparable to self-help non-profit organizations (Purtschert, 2005), the findings could be transferred to other self-help organizations. However, the danger of mission drift when applying business-like practices like EO cannot be ruled out by the findings of this dissertation since member-related and social objectives are not directly reached.

Furthermore, it is shown through Papers 1a and 1b that collective characteristics of cooperatives (inter- and intra-organizational cooperation) led to higher levels of EO and indirectly affected market-related performance. Entrepreneurial orientation can, therefore, be combined with organization-specific collective characteristics and could be a source of competitive advantage for the cooperative business model. The findings add to the debate on how cooperatives can be innovative and competitive and take advantage of their collective characteristics (Birchall, 2012; Boone & Özcan, 2016). Moreover, the results could indicate that cooperatives' entrepreneurial posture is different and entails collective characteristics, as proposed by Diaz-Foncea and Marcuello (2013). Similarly, the research on homecare organizations (Paper 3) proposes that collective mobilization of the workforce is closely linked to the dimensions of EO and led to the performance of for-profit and non-profit homecare organizations.

By studying EO as a mediator, the results of the dissertation show potential relationships between collective characteristics, entrepreneurial orientation, and performance. It thereby adds empirical evidence and theoretical reasoning to the effect of EO as a mediator in third-sector organizations and closes a research gap. The findings add a new aspect to the debate on whether business-like practices are helpful for organizations that are not primarily profit oriented and claim that organizational-specific characteristics or peculiarities of these organizations, such as using their collective characteristics, can be combined with business-like practices to generate a competitive advantage.

2 Determinants of EO in cooperatives

Answering the second research question (*How do organizational and contextual factors determine the EO of cooperatives?)* Papers 2a and 2b examined how EO is related to external (environmental munificence, hostility, and dynamism) and internal organizational influence factors of cooperatives. Using the cooperative business canvas (Mazzarol et al., 2014), organizational influence factors such as purpose (relevance of social and financial goals), strategy (growth orientation), organizational resources, governance (member engagement), and organizational structure (pricing structure, share of third-party services) where examined. Growth strategy has shown to be essential for EO, which is in line with the close association between EO and growth for for-profit organizations (Moreno & Casillas, 2008; Wiklund et al., 2009) as well as for non-profit organizations (Erpf et al., 2022; Stock et al., 2024). On the other hand, the results propose, that EO is not relevant for organizations without a

growth strategy. The finding adds to the literature claiming that applying business-like practices is important in a competitive environment. Likewise this implies, that organizations without a growth strategy might not focus on EO since it is costly and bears opportunity costs (Wiklund, 1999), since resources invested in an EO cannot be reinvested in objectives related to the organization's mission. Other determinants such as financial or social mission, share structure, and profit formula were not critical for EO, which contrasts claims that social mission is a driver for entrepreneurial orientation (Morris et al., 2011) but is in line with the view that a social mission orientation can have mixed effects on EO (Lumpkin et al., 2013).

Resources are important antecedents of EO in cooperatives, which compares to research on SMEs (Wiklund et al., 2009) and is consistent with the propositions by Lumpkin et al. (2013) and empirical research on non-profit organizations (Stock & Erpf, 2022). In contrast to the literature, the results suggest that networking resources are more critical for the EO of cooperatives than human and financial resources. The finding is relevant for cooperative research since, according to the orthodox economic view, they face difficulties attracting financial resources because of the lack of incentives of the cooperative business model. Cooperatives can thus rely on collective mobilization of the internal and external network to be more entrepreneurial. The potential of networking resources could explain the puzzle that cooperatives persist in competition with corporations under certain circumstances despite the disadvantages of the cooperative business model and gives indications of how cooperatives manage to gain a comparative advantage over corporations (Berti & Pitelis, 2022; Birchall, 2012; Boone & Özcan, 2016). Networking resource might also be important for non-profit organizations since they face similar challenges in raising financial resources (Lumpkin et al., 2013) and have difficulties in investing in risky ventures (Lurtz & Kreutzer, 2017). Using networking resources thus bears potential for non-profit organizations, which was also proposed by qualitative research (Lurtz & Kreutzer, 2017).

Member participation was shown to be negatively related to EO in cooperatives. Although member participation is an essential feature of cooperatives and non-profit organizations, it is not necessarily compatible with EO. An explanation is that including members creates inertia, contrasting with a flexible and dynamic posture such as EO. For non-profit organizations, the finding links to critiques that applying business-like practices is negatively associated with member participation (Suykens et al., 2023) and to the debate in cooperative research that business-like practices could undermine cooperative values (Puusa & Saastamoinen, 2021).

Examining the impact of environmental conditions on EO, the dissertation closes a research gap for cooperatives and adds to the scarce research on third-sector organizations. That hostility, dynamism, and munificence are found to be positively related to EO in cooperatives is comparable to prior research for SMEs (Strobl et al., 2022; Wiklund & Shepherd, 2005) and non-profit organizations (Hinz & Ingerfurth, 2013). Furthermore, the finding that environmental munificence and dynamism

moderate the growth strategy - EO relationship suggests that EO and growth are necessary in a dynamic and munificent environment, and since the result holds for traditional member- as well as market-oriented cooperative, irrespective of the degree of market orientation. The relationship between financial reserves (high equity ratio) and EO was more substantial in a dynamic environment, suggesting that building EO is resource-intensive for cooperatives and demands financial degrees of freedom, which aligns with similar research on SMEs (Wiklund & Shepherd, 2005).

3 EO in comparison between non-profit and for-profit organizations

The remaining research question of *whether there is a difference in EO and associated outcomes between for-profit and non-profit organizations operating in the same market* (RQ3) is discussed in this section.

Results from comparative research on homecare organizations in Paper 3 indicate a difference between non-profit and for-profit organizations' EO levels (reflected in the dimensions of proactiveness and risk-taking). In contrast, no significant difference was found in the EO - performance relationship. The results align with findings from Hinz and Ingerfurth (2013) that the EO of for-profit-oriented hospitals is higher than that of non-profit hospitals. At the same time, the results of this dissertation contrast Davis et al.'s (2011) findings of no difference in EO levels in nursing homes. While Hinz and Ingerfurth (2013) use economic theories and institutional isomorphism to explain these differences, additional theoretical explanations are offered within Paper 3. The dissertation proposes that agency theory can be used to explain differences, such that board behaviour shapes organizational designs in non-profit and for-profit organizations, including decision-making, monitoring, incentive systems, and recruitment (Ben-Ner & Ren, 2015; Fama & Jensen, 1983), and finally lead to lower EO-levels in non-profit compare to for-profit organizations. For example risk-taking, agency theory implies that performance-based incentives in for-profit organizations lead to higher levels of risk-taking at the whole organizational level (Correia et al., 2023; Kuratko et al., 2005) and that self-selection of employees with similar values lead to the dominance of risk-taking culture (Roomkin & Weisbrod, 1999). Agency theory can also explain higher levels of proactiveness, such that managers of for-profit organizations have an incentive to screen external markets actively (Kuratko et al., 2005), resulting in higher proactiveness levels than competitors.

Furthermore, the dissertation discusses other theoretical approaches, such as the relationship to organizations' stakeholders, to explain the differences in EO levels. According to stakeholder theory, organizations must balance and shape the relationship with stakeholders to succeed and survive, and the management must find compromises between stakeholders' interests (Parmar et al., 2010). Since stakeholders' interests are more heterogeneous in non-profit organizations, it can be argued that EO levels are lower in non-profit organizations. Especially for lower risk-taking levels in non-profit organizations, stakeholder heterogeneity offers an interesting explanatory approach, in line with

existing research on risk-taking in non-profit organizations (Coombes et al., 2011; Van der Krogt et al., 2007).

Additionally, theories of strategic positioning (Porter's (1985) market-based and Miles and Snow (1978) resource-based view on strategy) are used to explain differences in the EO – performance relationship. It is argued that differences in market position result in higher EO levels of for-profit homecare organizations but that remaining regulations in the market and the lack of degrees of freedom do not (yet) transform into superior performance of for-profit organizations. For research on non-profit organizations, this implies that EO is equally beneficial for non-profit and for-profit organizations when they are acting in the same competitive environment.

Non-profit organizations could, therefore, take advantage of business-like behaviour to gain a competitive advantage and align their practices to corporations in line with the idea of *competitive isomorphism* (Suykens et al., 2023). Nevertheless, since there is rarely perfect competition between non-profit and for-profit organizations, an entrepreneurial orientation does not contribute to the success of organizations to the same extent, since for profit organizations are restricted in their offerings due to public service mandates and have less degrees of freedom. An indication for this hypothesis is that the EO-growth relationship was stronger for for-profit organizations (although not significant), which can be explained either by more degrees of freedom for the latter or by the organizational differences.

Paper 3 connects EO research and theory, which is called for but rarely fulfilled (Miller, 2011). Furthermore, it includes market position and strategic positioning to explain the differences between for-profit and non-profit organizations' EO and related outcomes. Market position is often overlooked for non-profit organizations when markets are partially deregulated.

4 Implications for the measurement and definition of EO of non-profit organizations and cooperatives

Although the dissertation focused on the determinants and outcomes of EO of organizations in the third sector, implications on the measurement of EO of non-profit organizations and cooperatives can be derived. Because of the field of study, it was necessary, as proposed by Morris et al. (2011), to adapt the EO measure to third-sector organizations. One reason is that member-oriented organizations do not necessarily act in competitive markets. Thus, proactiveness, defined as being the first relative to competitors, must be adapted to proactiveness towards stakeholders. This extension of the measurement instrument fits well with Covin/Slevin's (1989) measurement instrument for cooperatives, as shown in Paper 1b and Paper 2. Furthermore, the item that implied competitive aggressiveness in the Covin and Slevin (1989) measurement scale was not compatible with the proactiveness dimension of cooperatives and homecare organizations. The finding can be explained either by different narratives in the non-profit sector or by the absence of competitive aggressiveness as a strategy in this sector.

It was also necessary to change the wording of the EO scale to refer to the whole organization, as initially proposed by Miller (1983). Democratic values are strongly anchored in non-profit organizations and cooperatives, which is also reflected in favouring collective leadership styles. Therefore, the Covin/Slevin scale (1989) was adapted so that the items that aimed at the top management team were instead related to the entire organization.

Furthermore, the dissertation offers avenues for research on the definition of EO in third-sector organizations. It is proposed that collective characteristics such as internal and external collaboration are important for non-profit organizations and cooperatives EO. The dissertation's research on cooperatives showed that the collective mobilization of the workforce and collaboration with other organizations are linked to EO. It is argued in Papers 1a and 1b that collective characteristics are closely linked to cooperatives' entrepreneurial behaviours and that entrepreneurial orientation in cooperatives has collective characteristics. Paper 3 argues that collective mobilization is also an important dimension for healthcare organizations (Ben-Ner & Ren, 2015; Haase & Franco, 2020; Möckli et al., 2023) including a focus on internal collaboration and collective decision-making. Empirically, it is shown to be closely linked with the dimensions of EO and had a good fit with the Covin/Slevin (1989) measurement instrument. The finding suggests that collective mobilization of the workforce is a potential additional element for healthcare organizations' EO, next to innovativeness, proactiveness, and risk-taking. For research on third-sector organizations, the findings are interesting since the collective characteristics are a unique feature of third-sector organizations but are rarely linked to entrepreneurship in the prior literature, and there is a gap on researching the combination of business-like behaviour and third-sector organizations' characteristics. For EO-researchers, the findings could shift the view from EO as the result of the efforts of an entrepreneur to the more collective result of several actors. Although the individualistic view still dominates the collectivistic view, the latter can increasingly be found in research examining the collectivistic process of idea generation and innovation (Dimov, 2007; Muñoz et al., 2020) or the link between social capital, knowledge sharing and EO (De Clercq et al., 2013), in research on cooperative entrepreneurship (Diaz-Foncea & Marcuello, 2013) and in the research stream on collective entrepreneurship in family firms (Yan & Sorenson, 2003; Yan & Yan, 2017).

5 Practical implications

Non-profit organizations and cooperatives can use an entrepreneurial orientation with *innovativeness*, *proactiveness, and risk-taking* to increase market-related performance and social and member-related objectives. The latter objectives are indirectly achieved through economic success. Adopting an entrepreneurial orientation bears potential for the growth of non-profit organizations and cooperatives, especially in a competitive environment. An EO can also be used as a competitive strategy to confront for-profit organizations when operating in the same markets or when competition increases due to regulatory reforms. Moreover, the findings suggest that adopting business-like practices does not necessarily lead to mission drift. Nevertheless, that social and member-related objectives are not

reached directly through EO suggests that business-like practices are primarily useful to reach market-related objectives. Therefore, managers of non-profit organizations and cooperatives must promote their mission and use EO as a means rather than an end. They also must bear in mind that EO has opportunity costs since resources invested in EO cannot be used for mission-related purposes. Adopting an entrepreneurial orientation is thus useful under certain conditions, for example, in a competitive and dynamic environment or when the organization focuses on growth. Non-profit organizations and cooperatives should carefully consider the market environment, existing resources and their objectives when focusing on an entrepreneurial orientation since the strategic positioning should match the industry structure and optimally integrate the existing resources. Furthermore, they should consider particularities concerning the EO of non-profit organizations and cooperatives, for example to balance the risk-taking level with the risk tolerance of primary stakeholders.

Furthermore, member participation and EO are not necessarily compatible. For managers in the non-profit sector, the finding points towards the importance of balancing member and business goals, caring for participatory values, and having a good knowledge of non-profit management. Therefore, education and knowledge about the mission at the board and management level and for members and employees are essential.

Maintaining the mission and participative values is important to prevent mission drift and can be used as a unique characteristic that creates a competitive advantage. Fostering internal and external collaboration can create an innovation-friendly environment in cooperatives and other non-profit organizations and increase EO and performance. Managers are encouraged to mobilize collective resources and encourage employees to take responsibility, foster communication and knowledge sharing between employees, create open error management and build trust among employees and close ties to members and customers. Such an environment might attract a skilled, motivated, and value-oriented workforce and lead to superior entrepreneurial outcomes. At the same time, organizations should consider collaborating with other organizations when challenges arise. As a result, costs can be saved, ideas and information exchanged, and projects jointly launched.

Policymakers should note that an entrepreneurial orientation bears potential for non-profit organizations. An EO could be a means to achieve the rising expectations of stakeholders and clients and to provide high-quality care. It might address some of the persisting challenges in the healthcare sector. In order to reap the benefits of entrepreneurial approaches in healthcare, the regulatory framework should offer degrees of freedom for innovative solutions while preserving the quality standards required.

For cooperatives, policymakers could intensify their efforts to create a business-friendly environment, including red tape reduction and legal reforms to update the cooperative law. Moreover, they could provide detailed information about the cooperative business model on the official information channels and offer consulting services. The state could support cooperatives with tax incentives and

loans where they provide important services for the community (e.g. housing cooperatives). Even if general state support for cooperatives is not in line with the country's economic policy, research and education in cooperatives can be promoted, and the state can support social entrepreneurship through existing innovation promotion vehicles.

In addition to public efforts, cooperatives can show solidarity with other cooperatives by supporting them with favourable loans and promoting education and research on cooperatives. These efforts could be complemented by private initiatives such as mentoring programs for cooperative start-ups, which are a valuable support tool.

6 Limitations and future research

The dissertation's findings must be considered under the limitations of the study design. Although different types of non-profit organizations are considered, the main contributions rely on cooperatives. Regarding research on the importance of collective characteristics and the determinants of EO, the results might be specific for the cooperative organizational form which is characterized by a unique democratic governance and a strong member-orientation. Although the cross-sectoral design of the study and the inclusion of various types of cooperatives suggests that the results can be transferred to other self-help non-profit organizations, third-party user non-profit organizations might have other determinants affecting EO and other organizational-specific characteristics such as a strong social mission or for foundations a strong dependence on stakeholders. Future research could complete the picture by examining other types of non-profit organizations. New determinants of EO in non-profit organizations could be found by this approach.

The dissertation suggests that EO helps reach multidimensional performance measures and that business-like practices are beneficial. However, it is not clear under what conditions investments in EO crowd out social performance and member objectives in the short term, and there are remaining questions on the causal relationship between member participation and EO. Research could focus on these questions through longitudinal and case studies and give further insights on adverse effects when applying business-like practices. Furthermore, the studies assess the impact of EO on performance on the organizational level. Although organizational objectives are likely linked to achieving social goals (such as the amount of social goods provided in a society) the study does not provide a direct link. Future research could examine the impact of EO on the provision of public goods or the development of social capital. With this approach, it could be assessed whether applying business-like practices like EO not only leads to better organizational performance but also to a net impact on the provision of social goods and potential indirect side effects of applying an EO could be unravelled.

The dissertation offers theoretical explanations of why EO differs between for-profit and non-profit healthcare organizations and provides empirical evidence from comparative research. Nevertheless, it does not empirically test how agency, stakeholder theory or theories of strategic positioning are causally linked to EO and performance. Future research could fill these gaps and empirically explore

differences in EO between for-profit and non-profit organizations by focusing on stakeholder or agency theory. Furthermore, the link between EO and strategy was only provided indirectly and theoretically. Future research could empirically test the link between EO and competitive strategy, clarifying how EO and competitive strategies are linked. Thereby, it would contribute to answering the call for more theory-based EO research (Miller, 2011) and fill research gaps on the relationship between strategic positioning and EO in non-profit research and beyond.

The study's context of the Swiss economic-political system, with the characteristics of a regulated free market economy, impacts non-profit organizations and cooperatives. On the one hand, they have certain degrees of freedom that can be seized with an EO. On the other hand, organizations must deal with regulatory requirements which impede entrepreneurial projects. The Swiss system is generally favourable for SMEs; since cooperatives face the same requirements, they can prosper with an entrepreneurial attitude. However, it might be interesting to replicate the studies in other economic and legal conditions to test whether cooperatives benefit from an EO to the same extent and in different economic and political environments.

When interpreting the comparative results on homecare organizations, the highly regulated healthcare system, where both organizational types have different legal requirements regarding financing, must be considered. The degree of regulation likely affects the impact of EO. Differences in the regulatory environment and in the degree of competition between for-profit and non-profit organizations offer possibilities for further comparative research and potentially shed light on whether differences between non-profit and for-profit organizations' EO-performance relationship go back to organizational influence factors or differences in the market position.

The dissertation discussed adaptations of the EO scale with the inclusion of member proactiveness and the inclusion of an additional element of collective mobilization into the EO scale. These propositions are derived from theoretical reasoning, quantitative studies, and factor analysis. However, to test to what extent EO entails collective aspects, further qualitative studies must examine the relationship between entrepreneurial orientation and collective characteristics in non-profit organizations. The insights could add to the debate about whether EO is of an individual or collective nature (Morris et al., 2020). Additionally, by adapting the original business-like EO scale to non-profit organizations and cooperatives, the dissertation offers theoretical and empirical insights that can be further explored with qualitative and quantitative studies and complement existing streams of research on the manifestation of entrepreneurial attitudes of not primarily profit-oriented organizations. However, based on the original EO scale and its theoretical adaptation to third-sector organizations, the essence of the entrepreneurial behaviour of non-profit organizations can only be approximated. To correctly answer the question of how entrepreneurial behaviour manifests and is measured in non-profit organizations and cooperatives, future research could start from scratch and develop a new measure that captures the entrepreneurial attitudes of these organizations.

The studies in this dissertation have methodological limitations that offer avenues for further research. First, the questionaries in the studies relied on single respondents. While this is common in EO research, using a multidimensional view when assessing EO could increase the robustness of the results. Second, using yearly reports, Paper 1a validated profitability in one-third of the sample. However, other performance measures could not be externally validated and partially relied upon perceived measures. Although no further secondary performance measures were available, future studies could invest in this issue and provide more robust performance measures and perceived measures such as member satisfaction and social performance could be assessed multi-dimensionally. When measuring the impact on social performance in healthcare organizations, it would likewise be useful to include objective measures such as quality of treatment or cost-effectiveness. The attempts to implement a monitoring system with quality measures at homecare in Switzerland could offer possibilities to address these issues in future studies. These improvements could provide more robust results when assessing the impact of EO and advance the field of non-profit organizations' performance measurement.

Third, like most studies in this research field, reverse causality cannot be ruled out with the applied study design. Econometric approaches like using instrumental variables or a longitudinal study design could address this issue. A longitudinal study design could simultaneously answer the research question of how the impact of EO varies along the lifecycle of organizations and in different economic and regulatory environments.

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