



UNIVERSITAT  
POLITÈCNICA  
DE VALÈNCIA

**DOCTORAL THESIS**

**THE CORPORATE REPORTING LANDSCAPE AND IDENTITY OF  
COOPERATIVE ENTERPRISES**

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OCTOBER 2024

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## ABSTRACT

Cooperatives are associations of persons voluntarily uniting for economic, social and cultural needs and are distinguished from investor-owned firms (IOFs), as they are addressing the communal need of members relating to affordable goods and services. Cooperatives are democratically managed by members who are owners also fulfilling the role as suppliers, workers or customers. Today, cooperative membership globally amounts to one billion members operating in several industries. Existing literature mainly reflects the perspective of IOFs and focuses on market-driven determinants for reporting that do not necessarily reflect cooperative identity as a determinant. Existing corporate reporting frameworks are predominantly based on the reporting needs of IOFs and have been shaped according to corporate and financial market needs, not acknowledging key aspects of cooperative identity. In addition to these shortcomings, the identity of cooperatives recently become a topic of debate amongst various stakeholders. It is argued that cooperatives have an image management problem. Cooperatives are also urged to increase the public awareness about their benefits. The time has therefore come to revisit cooperative identity in a modern world.

To shed light on the existing reporting practices of cooperatives and as a point of departure to improve on cooperatives' public awareness and image, the study investigated the level of adoption and determinants for the adoption of corporate reporting of the global largest 300 cooperatives in the world. For a sample of 78 cooperatives, all corporate reports published online, for the 2017 year of reporting, were hand collected and coded. To establish the level of adoption, a content analysis was performed and to identify the determinants, linear regression, binary logistic regression and ordinal regression analysis were performed. The content analysis distinguished between the types of corporate reports. For the level of adoption, the study further distinguished between reports published based on no framework, reports based on a framework and the application of a framework with external assurance. The findings indicated potential improvements for the level of adoption for the different types of reports. For example, integrated reporting and management reporting are adopted by the minority of cooperatives with no assurance on integrated reporting.

For the determinants of adoption of reporting, the study distinguished between common determinants and determinants idiosyncratic to cooperative nature. Results indicated that cooperatives in countries orientated in favour of stakeholders, larger cooperatives and

cooperatives with listed instruments, as well as cooperatives operating in a sector with a larger impact on the environment, are more likely to adopt corporate reporting. Determinants idiosyncratic to cooperative nature include cooperative identity and distribution of profits. Cooperatives more assertively communicating their identity in the president's letter to members, are more likely to adopt annual reporting. Cooperatives who limit profit distribution to members only, are more likely to adopt formal management reporting. The findings make several contributions to the arena of cooperative knowledge. Firstly, the empirical evidence on the lack of adoption does not only identify the potential improvements for the level of adoption of reporting but also demonstrate the lack of guidance provided by on the reporting of the accomplishment of cooperative principles and values. This result also provides guidance for the development of corporate reporting guidance. The findings in this study, thus provide a relevant point of departure for cooperatives to regain traction to improve on their image and public awareness. Secondly, this study identifies how the adoption of corporate reporting by cooperatives, are influenced by common determinants such as industry, country and institutional factors. This provides relevant insights as cooperatives are expected to revisit their business models, to adapt to a world with many challenges and to be more inclusive.

Determinants that are idiosyncratic cooperative characteristics, illustrate that cooperatives that function based on traditional principles and values are in fact willing to report on their achievements and contributions. This observation serves as another possible point of departure for cooperatives to recover from the image management problem as idiosyncratic reporting is an opportunity to reinforce their traditional values and to communicate their unique nature. Lastly, a theoretical contribution is made to distinguish between common and idiosyncratic determinants for the adoption of reporting. Whilst a variety of theories are applied to explain the adoption of corporate reporting, the adoption of annual reporting and management reporting, with determinants that are idiosyncratic to cooperatives, are specifically explained by employing the stakeholder, legitimacy, transaction cost and institutional theories.

## RESUMEN

Las cooperativas son asociaciones de personas que se unen voluntariamente para satisfacer necesidades económicas, sociales y culturales y se distinguen de las empresas de capital (IOF) porque abordan las necesidades comunes de los miembros en relación con bienes y servicios asequibles. Las cooperativas son gestionadas democráticamente por socios que son propietarios y cumplen también el rol de proveedores, trabajadores o clientes. Hoy en día, la membresía de las cooperativas a nivel mundial asciende a mil millones de miembros que operan en varias industrias. La literatura existente refleja principalmente la perspectiva de las IOF y se centra en los determinantes impulsados por el mercado para la presentación de informes que no necesariamente reflejan la identidad cooperativa como determinante. Los marcos de presentación de informes corporativos existentes se centran predominantemente en las necesidades de presentación de informes de las IOF y se han configurado de acuerdo con las necesidades corporativas y del mercado financiero, sin reconocer aspectos clave de la identidad cooperativa. Además de estas deficiencias, la identidad de las cooperativas se ha convertido recientemente en un tema de debate entre diversas partes interesadas. Se argumenta que las cooperativas tienen un problema de gestión de imagen. También se insta a las cooperativas a aumentar la conciencia pública sobre sus contribuciones. Por lo tanto, ha llegado el momento de revisar la identidad cooperativa en un mundo moderno. Para arrojar luz sobre las prácticas de presentación de informes existentes de las cooperativas y como punto de partida para mejorar la conciencia pública y la imagen de las cooperativas, el estudio investigó el nivel de adopción y los determinantes para la adopción de informes corporativos de las 300 cooperativas más grandes del mundo. Para una muestra de 78 cooperativas, todos los informes corporativos publicados en línea, para el año 2017, fueron recopilados y codificados manualmente. Para establecer el nivel de adopción se realizó un análisis de contenido y para identificar los determinantes se realizaron análisis de regresión lineal, regresión logística binaria y regresión ordinal. El análisis de contenido distinguió entre los tipos de informes corporativos. Para el nivel de adopción, el estudio distinguió además entre informes publicados elaborados sin un marco de información, informes basados en un marco y la aplicación de un marco con revisión externa. Los resultados indicaron mejoras potenciales para el nivel de adopción de los diferentes tipos de informes. Por ejemplo, la presentación de informes integrados y de gestión son adoptados por una minoría de cooperativas sin ninguna revisión externa sobre los informes integrados.

Para los determinantes de la adopción de informes, el estudio distinguió entre determinantes generales y determinantes idiosincrásicos de la naturaleza cooperativa. Los resultados indicaron que las cooperativas en países orientados a favor de las partes interesadas, las cooperativas más grandes y las cooperativas con instrumentos cotizados, así como las cooperativas que operan en un sector con un mayor impacto en el medio ambiente, tienen más probabilidades de adoptar la presentación de informes corporativos. Los determinantes idiosincrásicos de la naturaleza cooperativa incluyen la identidad cooperativa y la distribución de los resultados. Las cooperativas que comunican su identidad de manera más asertiva en la carta del presidente a sus miembros tienen más probabilidades de adoptar informes anuales. Las cooperativas que limitan la distribución de resultados sólo a sus miembros tienen más probabilidades de adoptar informes de gestión formales. Los hallazgos hacen varias contribuciones al campo del conocimiento cooperativo. En primer lugar, la evidencia empírica sobre la falta de adopción no sólo identifica las mejoras potenciales para el nivel de adopción de la presentación de informes, sino que también demuestra la falta de orientación proporcionada por los organismos sobre la presentación de informes sobre el cumplimiento de los principios y valores cooperativos. Este resultado también proporciona orientación para el desarrollo de directrices sobre presentación de informes corporativos. Los hallazgos de este estudio proporcionan, por lo tanto, un punto de partida relevante para que las cooperativas recuperen impulso y mejoren su imagen y conciencia pública. En segundo lugar, este estudio identifica cómo la adopción de informes corporativos por parte de las cooperativas está influenciada por determinantes generales como la industria, el país y factores institucionales. Esto proporciona información relevante ya que se espera que las cooperativas revisen sus modelos de negocios, se adapten a un mundo con muchos desafíos y sean más inclusivas.

Los determinantes que son características cooperativas idiosincrásicas ilustran que las cooperativas que funcionan con base en principios y valores tradicionales están de hecho dispuestas a informar sobre sus logros y contribuciones. Esta observación sirve como otro posible punto de partida para que las cooperativas se recuperen del problema de la gestión de la imagen, ya que los informes idiosincrásicos son una oportunidad para reforzar sus valores tradicionales y comunicar su naturaleza única. Por último, se realiza una contribución teórica para distinguir entre determinantes comunes e idiosincrásicos para la adopción del reporting. Si bien se aplica una variedad de teorías para explicar la adopción de informes corporativos, la adopción de informes anuales y de gestión, con determinantes que son idiosincrásicos de las



cooperativas, se explica específicamente empleando las teorías de las partes interesadas, la legitimidad, costes de transacción e institucionales.

## RESUM

Les cooperatives són associacions de persones que s'unixen voluntàriament per a satisfer necessitats econòmiques, socials i culturals i es distingixen de les societats de capital (IOF) perquè aborden les necessitats comuns dels membres en relació amb béns i servicis assequibles. Les cooperatives són gestionades democràticament per socis que són propietaris i complixen també el rol de proveïdors, treballadors o clients. Hui dia, la filiació de les cooperatives a nivell mundial ascendix a mil milions de membres que operen en diverses indústries. La literatura existent reflectix principalment la perspectiva de les IOF i se centra en els determinants impulsats pel mercat per a la presentació d'informes que no necessàriament reflectixen la identitat cooperativa com a determinant. Els marcs de presentació d'informes corporatius existents se centren predominantment en les necessitats de presentació d'informes de les IOF i s'han configurat d'acord amb les necessitats corporatives i del mercat financer, sense reconèixer aspectes clau de la identitat cooperativa. A més d'estes deficiències, la identitat de les cooperatives s'ha convertit recentment en un tema de debat entre diverses parts interessades. S'argumenta que les cooperatives tenen un problema de gestió d'imatge. També s'insta les cooperatives a augmentar la consciència pública sobre les seues contribucions. Per tant, ha arribat el moment de revisar la identitat cooperativa en un món modern. Per a llançar llum sobre les pràctiques de presentació d'informes existents de les cooperatives i com a punt de partida per a millorar la consciència pública i la imatge de les cooperatives, l'estudi va investigar el nivell d'adopció i els determinants per a l'adopció d'informes corporatius de les 300 cooperatives més grans del món. Per a una mostra de 78 cooperatives, tots els informes corporatius publicats en línia, per a l'any 2017, van ser recopilats i codificats manualment. Per a establir el nivell d'adopció es va realitzar una anàlisi de contingut i per a identificar els determinants es van realitzar anàlisis de regressió lineal, regressió logística binària i regressió ordinal. L'anàlisi de contingut va distingir entre els tipus d'informes corporatius. Per al nivell d'adopció, l'estudi va distingir a més entre informes publicats sense marc, informes basats en un marc i l'aplicació d'un marc amb revisió externa. Les troballes van indicar millores potencials per al nivell d'adopció dels diferents tipus d'informes. Per exemple, la presentació d'informes integrats i de gestió són adoptats per una minoria de cooperatives sense cap revisió externa sobre els informes integrats.

Per als determinants de l'adopció d'informes, l'estudi va distingir entre determinants comuns i determinants idiosincràtics de la naturalesa cooperativa. Els resultats van indicar que les cooperatives en països orientats a favor de les parts interessades, les cooperatives més grans i les cooperatives amb instruments cotitzats, així com les cooperatives que operen en un sector amb un major impacte en el medi ambient, tenen més probabilitats d'adoptar la presentació d'informes corporatius. Els determinants idiosincràtics de la naturalesa cooperativa inclouen la identitat cooperativa i la distribució de resultats. Les cooperatives que comuniquen la seua identitat de manera més assertiva en la carta del president als seus membres tenen més probabilitats d'adoptar informes anuals. Les cooperatives que limiten la distribució dels resultats només als seus membres tenen més probabilitats d'adoptar informes de gestió formals. Les troballes fan diverses contribucions al camp del coneixement cooperatiu. En primer lloc, l'evidència empírica sobre la falta d'adopció no sols identifica les millores potencials per al nivell d'adopció de la presentació d'informes, sinó que també demostra la falta d'orientació proporcionada pels organismes sobre la presentació d'informes sobre el compliment dels principis i valors cooperatius. Este resultat també proporciona orientació per al desenrotllament de directrius sobre presentació d'informes corporatius. Les troballes d'este estudi proporcionen, per tant, un punt de partida rellevant perquè les cooperatives recuperen impuls i milloren la seua imatge i consciència pública. En segon lloc, este estudi identifica com l'adopció d'informes corporatius per part de les cooperatives està influenciada per determinants comunes com la indústria, el país i factors institucionals. Això proporciona informació rellevant ja que s'espera que les cooperatives revisen els seus models de negocis, s'adapten a un món amb molts desafiaments i siguen més inclusives.

Els determinants que són característiques cooperatives idiosincràtiques il·lustren que les cooperatives que funcionen amb base en principis i valors tradicionals estan de fet disposades a informar sobre els seus assoliments i contribucions. Esta observació servix com un altre possible punt de partida perquè les cooperatives es recuperen del problema de la gestió de la imatge, ja que els informes idiosincràtics són una oportunitat per a reforçar els seus valors tradicionals i comunicar la seua naturalesa única. Finalment, es realitza una contribució teòrica per a distingir entre determinants comunes i idiosincràtics per a l'adopció del reporting. Si bé s'aplica una varietat de teories per a explicar l'adopció d'informes corporatius, l'adopció d'informes anuals i de gestió, amb determinants que són idiosincràtics de les cooperatives, s'explica específicament emprant les teories de les parts interessades, la legitimitat, costs de transacció e institucionals.

# CHAPTER ONE

## 1. INTRODUCTION

The term ‘cooperative’ refers to an association of members who unite voluntarily to meet their common economic, social, and cultural needs. Cooperatives are traditionally based on the values of openness, honesty, social responsibility, and caring for others (International Cooperative Alliance (ICA, n.d.-a). Ownership, in the case of cooperatives, is therefore assigned to persons who have a transactional relationship with the organization, as distinct from investor-owned firms (IOFs) that are owned by its providers of capital (Hansmann, 1999).

Cooperatives are a widespread global phenomenon with more than one billion cooperative members, three million cooperative organisations, employing 280 million individuals. Such organizations provide access to affordable goods and services for their members (ICA, n.d.-c), and are increasingly entering fields where IOFs have traditionally operated unchallenged, such as provision of health and educational services (Borzaga et al., 2020), as well as renewable energy (Piterou & Coles, 2021). In industries where cooperatives have traditionally operated, their role is now also expanding in contemporary society. Thus, agricultural cooperatives are playing a role in promoting sustainability by adopting and promoting to their farmer members environmentally friendly technology (Sarkar, Wang, Rahman, Qian, & Memon, 2022); and similarly, financial cooperatives are improving their viability/sustainability (and that of their members) by contributing to the ‘real’ economy during times of financial crisis (McKillop, French, Quinn, Sobiech, & Wilson, 2020).

Although cooperatives operate on a different model to that of the IOF’s enterprise, with different property rights and governance (Chaddad & Cook, 2004; Hansmann, 1996; Nilsson, 2001), existing literature mainly reflects the perspective of IOFs (Battaglia, Bianchi, Frey, & Passetti, 2015) in that it also focusses on market-driven determinants for reporting (De Villiers & Dimes, 2021; Gamerschlag, Möller, & Verbeeten, 2011) that do not reflect on cooperative identity as a determinant. Existing corporate reporting frameworks are predominantly focused on the reporting needs of IOFs, and have been shaped according to corporate and financial market needs. They do not necessarily have the capacity to acknowledge key aspects of cooperative identity (ICA, 2016; Levy, Szejnwald Brown, & De Jong, 2010). Cooperatives are by their nature focused on the social and economic well-being of their members, while IOFs prioritize creating and extending shareholder wealth (Mazzarol, Clark, Reboud, & Limnios,

2018). Due to the limited number of governance mechanisms/reporting structures that address cooperative-specific needs, organisations such as the International Labour Organization (2002) and the UN General Assembly: Economic and Social Council (2021) have demanded the establishment and formalisation of a suitable suite of regulations and legislation for cooperatives. Motivation for this rests in the fact that cooperatives have a growing role to play in achieving the UN's Sustainable Development Goals (SDGs), and a conducive regulatory environment for cooperatives would thus offer crucial support to cooperatives' contributions to the global accomplishment of these goals (Bartoll, Findlay, Obaa, Altman, & Spear, 2019; UNGA, 2023). Such support could also assist cooperatives to improve on the management of their image and increasing the public's awareness of cooperatives' benefits (Diamantopoulos, 2022; DotCooperation LLC, 2023; S. Novkovic, 2022).

Numerous scholars have investigated the different types of corporate reporting and their levels of implementation: their research includes the areas of financial reporting (Barth, 2006; De Villiers, Cho, Turner, & Scarpa, 2021; Isidro, Nanda, & Wysocki, 2020), integrated reporting (De Villiers, Venter, & Hsiao, 2017; Lai & Stacchezzini, 2021), management reporting (Cavicchi, Oppi, & Vagnoni, 2019), environmental and social reporting (Ahmed, Zhao, Ahmad, & Habiba, 2021; Hellman, Nilsson, Tylaite, & Vural, 2022; Reverte, 2009), and governance reporting (De Villiers & Dimes, 2021; Ferrarini, 2017; Lopatta, Canitz, & Tideman, 2022). For corporate reporting, scholars have generated a large body of research on a variety of aspects including establishing determinants for corporate reporting (including company size) (Katarachia, Pitoska, Giannarakis, & Poutoglidou, 2018); the orientation of the host country towards corporate stakeholders (Dhaliwal, Radhakrishnan, Tsang, & Yang, 2012); environmental sensitivity of the sector (Pizzi, Rosati, & Venturelli, 2021); and regarding companies operating in the financial sector (Saha & Akter, 2013).

Studies that focus on cooperatives' reporting practices are mainly focused on their corporate social responsibility (CSR) efforts, evaluated in terms of the Global Reporting Initiative's Sustainability Reporting Guidelines (GRI Guidelines) (Bollas-Araya, Polo-Garrido, & Seguí-Mas, 2019), the GRI Guidelines G4, (Yakar Pritchard & Çalıyurt, 2021) and the United Nations (UN) Sustainable Development Goals (SDGs) (Polo-Garrido, Bollas-Araya, & Bravo-Sellés, 2022). While these studies provide insight into the adoption and theoretical motivation for implementing GRI and SDG-based reporting, they do not account for corporate reports based on other reporting frameworks. The determinants were also limited to market, country and

institutional drive aspects, not addressing determinants that are idiosyncratic to cooperative identity, ownership structures and member involvement.

In addition to the development needs for cooperative-specific corporate reporting guidance and regulations as well as the shortcomings in research performed on the corporate reporting from the perspective of cooperative, the identity of cooperatives has recently become a topic of debate amongst various stakeholders of cooperatives. It is argued that cooperatives have an image management problem, and are also urged to increase their public's awareness of cooperatives' benefits (Diamantopoulos, 2022; DotCooperation LLC, 2023; S. Novkovic, 2022). The time has therefore come to revisit cooperative identity in a modern world with many challenges caused by technologies, and sustainability-, inequality- and discrimination-related issues (Wilson, Hoyt, Roelants, & Kumar, 2021).

To fulfil the research gaps identified, the study has three main aims. Firstly, in response to the current debate about cooperative identity, it seemed appropriate to review the body of literature and research on cooperatives. The characteristics that are idiosyncratic to cooperatives will be identified followed by evaluating the appropriateness of current research approaches and theories to address the demand of revisiting the concept of cooperative identity. To achieve this objective, a Structured Literature Review, following the four steps set by Stechemesser and Guenther (2012) will be conducted.

The second aim of this study is to obtain an understanding on the corporate reporting by cooperatives with reference to the types of reports published as well as the standards and frameworks applied by cooperatives. To obtain an understanding of the aggregate of the different kinds of corporate reports adopted, a content analysis on all the reports published by the cooperatives in the sample will be performed and documented using a codebook approach. The quality of reporting will then be measured by means of an index, considering the application of a reporting framework and whether the report was audited, providing assurance on the report complying with the framework. The index will therefore be a basic composite that capture coverage and quality of corporate reporting. Based on the index a linear regression model will be conducted to identify market, country and institutional driven determinants of the level of adoption of corporate reporting by cooperatives.

The third aim of the study is to identify characteristics that are idiosyncratic to cooperative identity, ownership structures and member involvement as determinants for the level of adoption of the different types of corporate reports. To identify the determinants, ordinal regression models and binary logistic models will be employed.

The study makes several contributions to the extant arena of knowledge. Firstly, from a practical perspective, the study sheds light on the adoption of corporate reporting practices by cooperatives, as it identifies potential improvements for the level of adoption of all types of reporting of cooperatives. Empirical evidence is also provided, demonstrating the lack of corporate report frameworks specifically reporting on the accomplishment of cooperative principles and values. This result, then provides direction for the development of corporate reporting guidance specifically addressing the reporting needs of cooperatives. These findings are especially enlightening, and pertinent to the current debate regarding cooperative identity (Hoyt, 2021). It is considered that cooperatives have a poor image management problem, and are urged to increase their public's awareness of cooperatives' benefits (Diamantopoulos, 2022; DotCooperation LLC, 2023; S. Novkovic, 2022). The findings in this study thus provide a relevant point of departure for cooperatives to regain traction in this regard, by improving on their reporting practices.

Secondly, this study identified how the adoption of corporate reporting by cooperatives, are influenced by common determinants such as market, country and institutional factors. This provides relevant insights as cooperatives are expected to revisit their business models, to adapt to a world with many challenges and to be more inclusive (Hoyt, 2021). Determinants that are idiosyncratic cooperative characteristics illustrates that cooperatives that function based on traditional principles and values are in fact willing to report on their achievements and contributions. This observation serves as another possible point of departure for cooperatives to recover from the image management problem as idiosyncratic reporting is an opportunity to reinforce their traditional values and to communicate their unique nature (Diamantopoulos, 2022; DotCooperation LLC, 2023; S. Novkovic, 2022).

Thirdly, a theoretical contribution made by this study is to improve understanding of the relationship between the stakeholder, agency, institutional, legitimacy, and political cost theories to explain the adoption of corporate reporting. In Chapter 5, the study identifies a relationship between institutional, stakeholder, legitimacy and political cost theories and the

adoption of corporate reporting in general. This is similar to Vitolla, Raimo, and Rubino (2020) who found there is a relationship between agency theory and integrated reporting quality and Nishitani, Unerman, and Kokubu (2021) who found that legitimacy theory and voluntary disclosure are in some instances compatible. In Chapter 6, the study also explains the adoption of annual reporting and management reporting, with determinants that are idiosyncratic to cooperatives with the stakeholder, legitimacy, transaction cost and institutional theories.

The remaining part of the study is structured as follows:

Background on the history, development and nature of cooperatives is provided in Chapter 2. In response to the current debate about cooperative identity and to identify idiosyncratic cooperative characteristics, Chapter 3 comprises a Structured Literature Review addressing cooperative identity. The prominence of the corporate reporting landscape to the study necessitates an overview thereof which is provided in Chapter 4 from a general regulatory perspective. With an emphasis on cooperatives' corporate reporting practices, Chapter 5 provides an overview of the nature and extent of the different types of reports and frameworks adopted by cooperatives by means of a codebook, followed by a reporting index quantifying the overall adoption of corporate reporting by cooperatives. Determinants for the level of the adoption of corporate reporting is then identified by means of a linear regression model. Chapter 6 identifies determinants for the adoption of the different types of corporate reports by cooperatives by means of ordinal regression and binary logistic regression. The determinants include factors that are a market, country and institutional driven, as well as factors that are idiosyncratic to cooperative identity, ownership structures and member involvement. A conclusion on the corporate reporting as well the status cooperative identity and the effect thereof on corporate reporting is reached in Chapter 7.

## CHAPTER TWO

### 2. BACKGROUND TO COOPERATIVES

According to the ICA identity statement (ICA, n.d.-a), a cooperative is:

an ‘autonomous association of persons united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly owned and democratically-controlled enterprise.’

The traditional ownership structure of cooperatives and IOFs are therefore seen as “polar [opposite] forms of organization” (Chaddad & Cook, 2004, p. 358). Cooperatives are owned by suppliers, customers or workers (Hansmann, 2013) and not by investors, and are therefore characterised by values that include solidarity, trust, fairness, self-help, self-responsibility, democracy, equality and equity (ICA, n.d.-a; Nilsson, 2001). These values accommodate multiple stakeholders, which include capital providers, consumers, suppliers, and employees (López-Espinosa, Maddocks, & Polo-Garrido, 2009). The remaining parts of this chapter will provide background to the history, development and the nature of cooperatives.

#### 2.1. History and development

The population in this study relating to cooperatives across the world (Global Top 300 cooperatives) necessitates background to the development of cooperatives from a global perspective. This chapter provides background to the development and current status of cooperatives in the United States (US), Europe and Japan.

Cooperatives formed part of the North American and European economies since the 17<sup>th</sup> and 18<sup>th</sup> century followed by the development of the modern form of cooperatives in the 1900s (Goforth, 2001; Zeuli, Cropp, & Schaars, 2004). In response to challenges faced by the working class in the rising capitalist system, North American labour unions organised worker cooperatives in the 1800s that expanded to a modern movement with a broad social mission in the 1830s (Curl, 2010). An example of producer cooperatives that emerged during the same period, in response to monopsony power of privately held milk processing plants, is the cooperative dairy association that emerged in New York to produce cheese from members’ raw milk (Porter & Scully, 1987). At the beginning of the 21 century, 30 000 US cooperatives operated across the US creating more than two-million jobs (Deller, Hoyt, Hueth, & Sundaram-Stukel, 2009).



In France, agricultural cooperatives emerged from worker trade unions in 1884 followed by the establishment of the Agricultural Society of Poligny, providing farm workers with access to credit. In the region of Flanders, Belgium, cooperatives emerged just after 1850 in the form of food stores providing their members with basic products (Morales Gutierrez, 2005). When the centrifugal separator was introduced, dairy cooperatives emerged rapidly between 1880 and 1900 in Germany (Bonus, 1986). In the middle 1990s, almost 58 000 cooperative societies with a total of 13.8 million members existed in Europe. In 2005, the European Union (EU) agricultural cooperatives were regarded as an important phenomenon for rural development, production and commercialisation of agricultural products, with a total of 26 000 cooperatives, employing 700 000 workers. Spain at the time had 4 175 cooperatives, and was regarded as the EU country with the most fresh fruits and vegetable coops (I. Guzmán & Arcas, 2008).

In Japan, cooperatives also forms a crucial part of the economy, and date back since the 1800s when mutual organisations were formed in response to social needs (ICA Asia-Pacific, 2019). Farmer cooperatives, providing credit to farmers existed since the 1900s and was regulated by the Industrial Cooperative Law. The Law was subsequently broadened by allowing industrial cooperatives to marketing, purchasing, and processing services. In the 1950s cooperative operations were further broadened by the Agriculture Cooperative Association Law, authorising cooperatives to engage in business operations like rendering credit that were normally done by banks or credit unions. From a financial reporting perspective, Japanese agriculture cooperative associations used an accounting system called the Ohara system, where all transactions were are treated as cash transactions and entered to a two-column cashbook. In spite of the inadequate accounting system, the Agriculture Cooperative Association Law also required of governmental auditors to perform annual audits on cooperatives receiving deposits (Essene, 1953). At the beginning of the new millennium, 670 000 cooperatives existed in Japan, and especially retail cooperatives became known for its high quality of service, application of modern technology, and enhancement of member involvement (Birchall, 2004).

## **2.2. Cooperatives' nature**

The nature of cooperatives differing from other enterprises including IOFs and non-profit organisations necessitates background to the nature of this type of enterprise. The establishment of the cooperatives principles as well as other unique factors including the ownership structure and member involvement are discussed in this chapter.

The story of the Rochdale Society of Equitable Pioneers that has inspired cooperatives since the 19<sup>th</sup> century led to the establishment of the famous Rochdale Principles. The impoverished weavers in the small English town of Rochdale, who established the Rochdale Society, illustrated how to develop a successful organisation while achieving mutual benefits for members, laid the foundation for cooperatives' principles (Fairbairn, 1994; Zeuli et al., 2004). The ICA, established in 1895, struggled with the definition of cooperation during the interwar period; after many controversial attempts, in 1934 they defined the Rochdale principles as follows: "Open membership, democratic control, distribution of the surplus to members in proportion to their transactions, political and religious neutrality, cash trading and promotion of education" (Hilson, 2011; Miller, 1937).

In 1966, the ICA updated these principles. The most significant changes include: cash trading that fell away; more guidance and prescriptions that were provided on surpluses and share capital; and consideration for the community obtained substance in a new principle (Fairbairn, 1994). Today, cooperatives are globally operating according to the Cooperative Values and Principles, adopted by the ICA in 1995. These values include "self-help, self-responsibility, democracy, equality, equity, and solidarity". The ICA Principles, according to which these values have been put in place, include: "1. Voluntary and open membership; 2. Democratic member control; 3. Members' economic participation; 4. Autonomy and independence; 5. Education, training and information; 6. Cooperation among cooperatives; 7. Concern for the community"(ICA, 1995).

Whilst cooperatives are focused on the mutual benefits they provide, and on social responsibility (ICA, 2015), IOFs pursue shareholder maximization as the preferred corporate goal (Friedman, 1970; Sundaram & Inkpen, 2004). Accordingly, in their role as agents for the shareholders, IOFs' managers are expected to focus on maximizing shareholder wealth; cooperatives, on the other hand, tend to implement governance structures that promote member-owners' interests and fulfil specific needs (Hansmann, 1999). Cooperatives would also, for example, supply products in less profitable areas, or utilize the local labour force, whereas IOFs would not consider such initiatives with no lucrative expectations (Sonja Novkovic, 2006). Moreover, cooperatives are now thriving in industries and businesses traditionally dominated by IOFs (Nilsson, 2001). Members' shares in cooperatives are also distinguished from shares in IOFs. Shares issued to members serve as a form of capital for the cooperative, but also provide membership rights for its members. Members' voting rights and

the economic benefits associated with operational transacting between the member and the cooperative are however attached to membership rather than to shareholding. Therefore, member shares usually have limited transferability, and are typically redeemable when the member leaves the cooperative (López-Espinosa, Maddocks, & Polo-Garrido, 2012).

Birchall (2012), however, suggests that the cooperative identity statement (ICA, n.d.-a) implies a separation between the association of persons and the enterprise, as that would result in conflict between the democratic structure of the cooperative and its business strategy. A more unified vision, recognising that the organisation is controlled by the owners who are also the main stakeholders benefitting from the organisation, is therefore suggested (Birchall, 2012). Moreover, studies on the governance of cooperatives emphasise the importance of managing issues relating to the heterogeneity of member preferences. It suggests that governance structures ought to distinguish between the core and peripheral activities of cooperatives. Decision-making that deviates from common member interests could lead to business failure, or conversion into IOFs (Iliopoulos & Valentinov, 2022).

## CHAPTER 3

### 3. COOPERATIVE IDENTITY: A REVIEW AND FUTURE RESEARCH AGENDA

Before further investigating the corporate reporting landscape of cooperatives in Chapters 4 – 5, we have in Chapter 3 revisited the appropriateness of cooperative identity, principles and values, by means of a Structured Literature Review (SLR). Additional background is also provided on aspects mentioned in other chapters, such cooperatives' image, public awareness and adaptation in a modern society.

#### 3.1. Background

Cooperative enterprises have been addressing the economic, social and cultural needs of individuals and communities since the 17<sup>th</sup> century [International Cooperative Alliance (ICA, 1995)]. The cooperative movement has survived global events over the past century, including industrialisation, two world wars and more recently the financial crisis of 2008. The time has however come to revisit the appropriateness of cooperative identity as a means to ensure resilience, in spite of the economic, social and environmental challenges in a world that is also known for new technologies, and sustainability-, inequality- and discrimination-related issues (Wilson et al., 2021). During the 33<sup>rd</sup> World Cooperative Congress of the ICA (33<sup>rd</sup> ICA Conference) cooperative members from all regions and sectors globally, were advised to adapt their cooperative identities to meet demands of current times, whilst also guarding the cooperative ethos (Hoyt, 2021). It therefore seemed appropriate to review the body of literature and research on cooperative identity, and to address the following issues: What are the cooperative values, identity and principles? How are cooperative values, identity and principles applied by cooperatives in different countries and sectors?

Certain potential development areas and associated actions have also been identified as necessary to ensure the longevity of cooperatives' values, identity and principles. Thus, cooperatives can improve on the inclusion of women, youth, people of colour and marginalised communities (Hoyt, 2021). Cooperatives are also encouraged to communicate their unique nature, values and principles (DotCooperation LLC, 2023) to their members as well as their client, supplier and customer bases. To improve on the general management and governance of cooperatives, and to preserve the cultural heritage of local cooperatives in their communities, the importance of the education of members, directors, staff, and the general public have also been recently emphasised. Training programmes are also needed to provide the necessary

competence to manage and govern cooperatives (Hoyt, 2021). Preceding these concerns, Birchall (2005) identified the merit of revisiting the Cooperative Principles (ICA, 1995) again. Examples of aspects that should be considered for addition to the existing principles are concern for the environment (more than ‘concern for the community’); a principle recognising the contribution of employees; and a principle defining consequences of non-compliance with the principles. I

Since the early 1900’s, cooperatives have been established by producers who acted collectively to correct negative impacts of market failures (i.e. depressed or excessive prices) (Cook, 1995). Market failure therefore became a reason for the establishment of cooperatives. Organisations however tend to compete for social and economic fitness to gain political authority and to earn institutional legitimacy, leading to isomorphism (organisations becoming more similar to each other) (Meyer & Rowan, 1977). Isomorphic trends in cooperatives normally constitute the adaptation of its organisational form, the separation of the social and economic dimensions of the organisation, hybridisation and degeneration (Spear, 2004). S. Novkovic, Puusa, and Miner (2022) describe isomorphism as the situation where cooperatives do not acknowledge their cooperative identity and the collective dimension of the organisation, rather using investor orientated ownership and not member ownership performance management criteria, thus hindering cooperatives’ efforts to meet their full potential. Another source of institutional isomorphism is in the form of organisational response to pressure for the adoption of corporate social responsibly reporting (CSR) (Roszkowska-Menkes & Aluchna, 2017). Identifying a cooperative’s perspective, Mattila (2009) came across cooperative bank employees who are convinced that CSR is motivated by peer pressure, and they therefore questioned the sincerity behind the adoption thereof. Bretos, Errasti, and Marcuello (2020) on the other hand, are of the opinion that cooperatives are more likely to mobilise resources and activate processes to revitalize rather than to conform in response to any isomorphic pressures.

In summary, isomorphic pressures in the case of cooperatives could be caused by pressure to adopt IOFs’ related attributes or by certain expectations for CSR practices to be implemented. In some instances, cooperatives would find mechanisms that resist the imposition of isomorphism. In this chapter, cooperative identity will be investigated from the lens of isomorphic pressures, including the causes, effects and possible responses to it.

### **3.2. Methodology**

We performed a Structured Literature Review (hereafter referred to as an SLR), following the four steps set by Stechemesser and Guenther (2012). Limitations of this study are that only English language publications were considered for the study, and that we were unable to obtain access rights to some journals, so have had to exclude those publications.

#### *Step 1: Selecting research questions, databases, websites and appropriate search terms*

In response to the identified need, the research question we address is: How are cooperative values, identity and principles applied by cooperatives in different countries and sectors? According to the ICA (1995), cooperative identity comprises the values and principles of a cooperative. Our search terms for investigating cooperative identity therefore included: “cooperative\*identity”; “co-operative\*identity”; “cooperative\*principles”; “co-operative\*principles”; “cooperative\*values”; “co-operative\*values”. The search terms were used to search for documents in which the title contained at least one of these search terms. The databases used were SCOPUS (scopus.com), and Web of Science Core Collection ([www.webofscience.com](http://www.webofscience.com)). A total of 170 articles were initially identified, based on these broad criteria.

#### *Step 2: Applying practical screening data*

Publications, excluding books, from 1990 to present day were included in the search. We then excluded publications relating to non-economic disciplines such as the arts and humanities, computer sciences, engineering, and psychology. Duplicates between the two databases were also removed. Based on the enhanced criteria, 54 of the 170 articles were thus excluded. Some publications were also not accessible as we did not have access rights, whilst some publications did not have an English language edition/version, and were thus also excluded. Applying these last two criteria led to the removal of another 73 publications, leaving forty-three publications for analysis at this stage. Subsequently, the contents of the publications were further scrutinised, and it was found that some publications did not in fact discuss cooperatives as an organisational form, resulting in the exclusion of another eight publications. Thus, for example, cooperative values referring to an organisational culture but not to the type of organisation, or cooperative values referring to other disciplines, were excluded. A total of 35 publications were ultimately considered for the analysis.

#### *Step 3: Applying methodological screening data*

We then analysed and categorised publications based on their statement of cooperative principles, values and identity in general; a further sort identified studies according to their focus on principles, values and identity as they related specifically to a country and/or industry. In the next section we discuss the application of the cooperative principles, values and identity in general (as presented in the identified literature), and thereafter the discussion focuses on these two categories, specifically by country and by industry.

#### *Step 4 Synthesizing our findings*

Our findings have been synthesised in Chapter 3.3, Results and discussion, that follows below. For the bibliographic analysis we have firstly addressed cooperative principles, values and identity in general, followed by the investigation of their application in individual countries, and then by types of industries. As a supplement to the latter, a view will be developed on isomorphic pressures affecting cooperative identity, and on possible responses to it.

### **3.3. Results and discussion**

Literature relating to cooperative principles, values and identity will first be addressed in general.

#### **3.3.1. Cooperative principles, values and identity**

In order to identify the complimentary features and to capture the integrative nature of cooperative enterprise, both Byrne (2022) and S. Novkovic et al. (2022) departed from the scholarly argument of cooperative identity being underpinned by its dual nature comprising a social and economic purpose, also resting on the tensions between the social and economic aspects of cooperatives. S. Novkovic et al. (2022) contributed to the understanding of cooperative organisations by explaining the nature thereof based on the theory of associationism. In the case of cooperatives, the associative practices of members (who are also users and beneficiaries) in combination with entrepreneurship are regarded as complementary features due to the potential to create value on economic, social, cultural and environmental levels. Recognition and protection of cooperative values (in response to isomorphic pressures) is therefore also an advantage for maximising cooperative impact. Byrne (2022) explains cooperative identity in terms of relational theory which, according to Blustein (2011), '*provides a framework to understand how working is embedded in external and internal contexts*'. The application of relational theory, according to Byrne (2022), not only allows the integration of member and cooperative values as well as social and economic values, but also bridges the

social and economic tension (referred to earlier) as relationality is based on integration rather than separation (Gergen, 2009). From a practical perspective, S. Novkovic (2022) argues that social responsibility indicators for entities could be derived from cooperative identity, and a normative yardstick could simultaneously be developed for identifying context based indicators. Cooperatives are democratically managed, and their purpose is to meet the social and economic needs of members, rather than the maximising of shareholder wealth. In terms of socio-economic measures, cooperatives are leaders at addressing issues such as paying reasonable wages, effecting fair employment practices, and investing in the real economy.

An example of a social reporting-related innovation is the Social Responsibility Information System that was developed for Ambato's Credit Unions (Molina *et al.*, 2018). This web-based system not only respond to the absence of standardised reports measuring compliance with cooperative principles, but also allows the credit union to manage, evaluate and report on social responsibility results that have been achieved. Utilisation of the tool by a specific credit union resulted in its services being expanded further into rural areas, and to an improvement of its corporate image with clients. The improved image arose from an improvement in social responsibility metrics through employing the principles of voluntary association and training (Molina *et al.*, 2018).

In spite of this example, and S. Novkovic (2022) stance on cooperative identity's positive impact on social responsibility, Diamantopoulos (2022) is of the opinion that co-operation has an image problem which could be ascribed to a communication gap of international proportions. Over the last two decades Diamantopoulos (2022) has observed trends where cooperative learning and training initiatives have been mainly aimed at sector insiders (such as cooperative management boards and members), to the exclusion of the cooperatives' communities and the wider public. A neglected and uninformed public allows ignorance of the concept to grow, and this leads to questions of relevance, and potentially undermines the concept of mutualism, thereby also threatening the future of cooperatives. Moreover, the ICA's Statement on Cooperative Identity (ICA, 1995) does provide legitimacy for those defending cooperatives against isomorphic influences. In order to reach outsiders, and to reinforce the cultural principles and advances of cooperatives, academics have been promoting informal learning initiatives to increase the popularity of cooperatives. They are also of the opinion that the cooperative movement should be contributing to informal education that could more easily reach the public through contributions to think-tank initiatives, for example, and by including



cooperative principles in local journalism and media coverage. Egia and Etxeberria (2019) further confirm the seriousness of education, training and information relating to cooperative values in an era of digital revolution and modern cooperative training. The recommended point of departure to ensure the longevity of cooperative principles would be the technical training of aspirant cooperative members and employees, as well as increased cooperative training in the society where cooperatives operate.

Goel (2013) provides further legitimacy to cooperative principles and values by illustrating that it could also serve as a foundation for family businesses. Goel (2013) argues further that the application of cooperative principles and values could even enhance governance-related issues, including the role of outside board members, and the fair distribution of power and resources, as well as enhancing trust among family members. In spite of the positive confirmation provided by Goel (2013) and Waring, Lange, and Chakraborty (2022) more recently, the latter have also provided evidence confirming a need for the revision of cooperative principles to make them more in tune with the currently globalising business environment. The framework and design principles (Baggio *et al.*, 2016) provided by Ostrom (1990) for governance of common/pool resources by institutions addressing the collective actions, is recommended as a point of departure when revisiting cooperative principles.

Another phenomenon threatening cooperatives, that has also been the subject of many studies, is “free riding”(Carpenter, 2007; Giannakas, Fulton, & Sesmero, 2016). Peetz (2005) has studied free riding from the perspective of cooperative unions. Firstly, Peetz (2005) investigated the Rand formula that originated from a strike in the automobile industry in the early 1940’s in Canada. The Rand formula is a judicial requirement where non-union members pay equivalent member dues to unions. Inspired by the Rand formula, in the later 1990s, some Australian unions also introduced agency fees where non-union members were required to reward unions for negotiated agreements also covering them. These fees became excessive and were eventually prohibited by the state. Although mechanisms such as ‘social obligation fees’ are also available to ensure unions are compensated for benefits received by non-union members, the general answer for free riding is to ensure that non-members do not benefit from efforts that they do not contribute to.

In this chapter, we referred to theories explaining cooperative nature and the potential thereof to protect cooperatives against isomorphic pressures. We also touched on the benefits of

cooperative nature for members and the environment, as well as matters that could potentially threaten cooperatives' existence, such as the so-called image problem that cooperatives are facing, and the well-known concept of free riding. For the last part of this chapter, we will provide a broader view by referring to the interaction between cooperatives and mainstream economies.

From the historical view provided by Whyman (2012) it is evident that the relationship between cooperatives and economists ranged from help and support on the one side to criticism and rejection on the other side. Even when cooperatives were still marginal to the economy, Smith (1937) argued that human behaviour favours self-interest as the motivator for the economic person, putting a wedge between mainstream and cooperative economics. Alfred Marshall (Bankovsky, 2018; Whyman, 2012), on the other hand, acknowledged cooperation as a form of business for its ability to unite social reform and business acumen to the benefit of member talent, thus also benefitting the community. In spite of the fluctuating interaction between cooperatives and economists, the dynamic development of cooperatives has contributed to economic theory and theoretical frameworks about organisations and their performance that could provide direction towards further developments (Whyman, 2012).

In response to the rise and institutionalisation of the Social Solidarity Economy (SSE<sup>1</sup>) in many Asia-Pacific countries over the past few decades, Iyer, Gopal, Dave, and Singh (2021) investigated the longevity of cooperative identity. Although it could be argued that the decrease in cooperative performance had an influence on the rise of the SSE, cooperatives are still acknowledged. According to the findings made by Iyer et al. (2021) cooperatives are not only people orientated (with a strong international foundation), but their identity has the potential to provide further direction to the SSE. Similar to the potential impact of cooperative identity on SSEs, Mellor (2012) argues that cooperatives are well positioned to redirect the mainstream finance-driven economy to a Green Economy aimed to meet the needs of people on an ecologically and socially sustainable basis. Cooperative banks providing a large proportion of bank branch networks in European Union countries is a practical example of the potential of cooperatives towards the establishment of a Green Economy.

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<sup>1</sup> 'The social economy consists of an ensemble of activities and organisations, emerging from collective enterprises, that pursue common principles and shared structural elements' (Neamtan, 2002).

The functioning of cooperatives and the application of cooperative principles and values (even in strongly adverse circumstances) will be investigated next, from the perspective of select individual countries.

### **3.3.2. Application of cooperative principles, values and identity, by country**

Based on the findings of Fairbairn (2000), the effective implementation of cooperative values could be subject to/compromised by political circumstances and culture. During the start of the Cold War in Germany, in the later part of the 1940's, the largest part of the German cooperative movement, namely the German consumer movement, suffered severely under the political circumstances of the time. Although the movement has subsequently been re-built, the circumstances under which this occurred did not make it easy to establish the credibility and usefulness of the cooperative ideal. Cooperatives in East Germany in particular could fulfil economic functions, but meaningful autonomy and member control were largely absent, by political design. In West Germany, cooperatives were allowed to function autonomously as working class institutions, but could offer only limited economic benefits to their members (Fairbairn, 2000). Another example of government/regulatory interference with the autonomy of the cooperatives is provided by Bierecki (2020). Although credit unions in Poland are some of the most developed credit unions globally, state supervision by means of the Financial Supervision Authority (FSA) has, since 2012, led to a decline in Polish credit unions. The decline is mainly caused by the FSA regulating and limiting the establishment of credit unions, as well as the encouragement of credit union mergers and even their takeover by large commercial and cooperative banks. From this, it is evident that cooperative autonomy could be threatened by isomorphic influences of governance structures.

A case study of worker cooperatives in Spain (C. Guzmán, Santos, & Barroso, 2020) again showed the potential power of cooperated identity by illustrating how cooperative principles can enhance performance. In this case performance was represented by sales growth and employee/payroll growth. The application of cooperative principles was measured by partners' attendance of the general assembly and their share in profit distribution, as well as expenditure on education and the community.

In a different industry entirely, cooperative education has gradually emerged over the past few years as a viable response to the neoliberal invasion of education in the UK (Noble & Ross, 2021). This study on Higher Education Cooperatives (HECs) showed how cooperative

principles enhance cooperation, growth and democracy in HECs, thus providing useful, less stressed learning environments. An educational environment relies on the wholehearted participation of teachers, researchers, graduates, students and providers of professional services, and according to Noble and Ross (2021), recognising this multiplicity of stakeholders necessitates the incorporation of principles that not only form a basis for open membership and democratic control, but also establishes requirements for members' contributions to the generation and maintenance of social, financial and cultural capitals. The principal of education, training and shared information should also therefore inform the skills and interventions required by members and management to ensure that cooperative principles are effectively applied in the organisation.

Determining cooperative values was approached from a different angle in a Finnish study conducted by Puusa, Hokkila, and Leppänen (2016) in which 3,680 Finnish students' perceptions of different business forms were gathered and analysed by means of a survey. In comparison to other business forms, it was found that students are more positively inclined towards cooperatives. As an extension of this result, a textual analysis was performed on a sample of 36 students' responses. It showed that although cooperative values (including democracy, equality and social responsibility) are valued by students, the safety offered by cooperatives was found to be the most appealing aspect of cooperatives. Cooperatives were seen as providing employment, having a positive impact on society and being aware of the long-term impact of their actions, and this created a sense of security and continuity in an environment of otherwise rapidly evolving fragmentation of domestic and global societies. Another Finnish study on cooperative identity, showed that the members in general perceive cooperative identity in accordance with cooperative values and principles of the (ICA, 1995). Cooperative attributes reflected in members' responses in the study mainly included cooperatives' unique mission, solidarity and commonality, reciprocity and commitment, as well as its social and long term influence (Puusa & Varis, 2016). Similar to Diamantopoulos (2022), the findings made by Puusa and Varis (2016) also suggest that it is important to actively promote cooperative ideology in society to maintain the viability and acceptance of the ideology.

In order to investigate cooperative members' views and understanding of cooperative principles from an Australian perspective, Oczkowski, Krivokapic-Skoko, and Plummer (2013) conducted 18 in-depth interviews with members of a variety of types and sizes of cooperatives.

Although it was found that the application of cooperative principles varies between industries, there was an indication that small/local community-based cooperatives tend to practice cooperative principles more diligently than larger, regional and national business-focussed cooperatives. Principles that received more support from participants include voluntary and open membership, democratic member control and member economic participation, whilst the other principles showed greater variance in the support shown by participants. While some participants even saw the principles relating to education, training and information, as well as concern for the community, as preeminent, there was an absence of emphasis on cooperation among cooperatives, and this could be ascribed to the still very few cooperatives present in Australia. During the interviews conducted by Oczkowski et al. (2013), some participants argued that there should be fewer cooperative principles: unfortunately, very few reasons justifying this preference were provided. During the interviews, recommendations for additional principles were also made, with participants advocating for revisions to the current principles, should changes in circumstances occur, and advocating particularly strongly for a more commercial focus for operating cooperatives.

Concerns were raised regarding democratic member control particularly in respect to apathetic members, as this could compromise effective and efficient decision-making. Open membership, on the other hand, is also not a universally acceptable alternative as this could, according to some participants, have an adverse effect on the interests of existing members. The Board members' understanding of cooperative culture, and their motivation in support of it, seems to have an important and generally recognised effect on the application of cooperative principles by cooperatives. Moreover, the education, training and information principles were seen as being especially pertinent to management and Board members, as, by improving their understanding of the cooperative principles and their place in a particular business sector, cooperative orientated decision-making and management emphasis would be improved. A final recommendation from this study was that effective communication channels are needed, as is a knowledge of the requirements for members soon to be appointed to the Board; these are still required to enhance democratic decision-making (Oczkowski *et al.*, 2013).

### **3.3.3. Application of cooperative principles, values and identity, by industry**

In the early 1990's, Davis and Worthington (1993) recognised that the structures initially offered by cooperatives, (those based on the principles of mutuality), were valuable and relevant to a variety of industries previously not considered compatible with cooperative ideals.

This could be achieved by redefining capital ownership so as to also accommodate the weaker segments of society. The updated version of this question is now posed: Can the model, while holding to its initial purposes, revive the cooperative movement in response to a decade of creeping materialism; and are managers and directors able to find a common theme articulating what cooperative members and management should be striving for? Davis and Worthington (1993) research offered a possible solution arising from an examination of the role of cooperative banks, with specific reference to the case of the British Cooperative Bank. The Bank started in 1872 as the Loan and Deposit Department of the Cooperative Wholesale Society. A century later, by the early 1970's, the bank had shifted its emphasis to non-cooperative sectors due to the need to survive competitive practices and risks in the market, and this threatened its commitment to practice cooperative values and ideals. However, thanks to management's commitment to cooperative principles, and to the strength of the organisational culture, the bank has now successfully combined cooperative and commercial banking. Moreover, is it argued that the commercial business has enhanced the performance of the cooperative business, as well as the organisation's ability to deliver cooperative banking services, and thus to achieve cooperative values and principles. Key successes in the early 1990's included the bank's renewed focus on customer needs, provision of free banking services for customers who stayed in credit, involvement in community projects, and sponsored training courses, for especially women. Further investigation of these successful applications of cooperative principles and values therefore seems appropriate.

Data gathered by Unda (2022) from credit union supporters during the 1990's illustrate that cooperative values (such as caring for members and social responsibility), not only play a pivotal role for maintaining relationships with their own members, but also in definitively differentiating credit unions from other banks (Unda, 2022). Evidence of credit unions effectively demonstrating cooperative values is provided by a longitudinal study that extends from 1936 to 2020. This study not only found that cooperatives consistently addressed the needs that were specific to countries or areas, but also that they successfully provided access to credit to disadvantaged communities in rural and urban areas. The situation is similar in both developed and emerging economies (Parrales Choez, Valls Martínez, & Martín-Cervantes, 2022).

From a U.S. perspective van Rijn (2022) was able to confirm that credit unions are still serving society by maintaining branches in both underpopulated and low-income areas. Although van

Rijn (2022) is also of the opinion that credit unions can improve on how their cooperative identity is demonstrated and how cooperative principles are implemented, they found that credit unions in the U.S. are still able to differentiate themselves from other types of banks, even where, in the case of some credit unions, they have become almost as large as community banks. The data relating to credit unions gathered by van Rijn (2022) reflect that management tends to be more gender diverse, and their remuneration incentive schemes are less aggressive than mainstream banks. Credit unions' lending practices and interest rates also tend to be more conservative.

Forney and Häberli (2017) provide a view on the impact of the implementation of the values of democracy, solidarity and autonomy that goes beyond the traditional cooperative organisational form. The existence and operation of dairy cooperatives in Switzerland was adversely affected by the Federal Office for Agriculture's decision to end its regulation of milk quotas, thereby allowing all dairies to sell unlimited quantities of milk to the markets, at will. This weakened the position of some (smaller) cooperative dairies, but ultimately resulted in these cooperatives being forced to co-operate with each other, and thereafter with corporate farmers' organisations. Surprisingly, this has led to the rejuvenation of cooperatives' values in some instances. Complex and unexpected (but ultimately mutually beneficial) outcomes have also been observed in which co-operation amongst different organisational forms have resulted in democracy, solidarity and autonomy being practiced beyond the traditional cooperative structures. In the case of an agricultural cooperative, it has also been proved that there is a significant positive relationship between members' awareness of cooperative principles and the cooperative's adherence to such principles (Badiru, Yusuf, & Anozie, 2016).

S. Novkovic and Power (2005) investigated the use and impact of Collins' (1999) 'catalytic mechanisms' on agricultural and rural cooperatives as they adapted to challenges caused by new technologies, governance issues caused by heterogeneous member needs and regulatory requirements, collectively threatening cooperative identity. Catalytic mechanisms have been defined by Collins (1999) as: "the crucial link between objectives and performance; they are a galvanizing, nonbureaucratic means to turn one into the other". The rural agricultural cooperatives studied showed great concern for their members and their communities when they opted to diversify the range of goods and services they offered (so as to address member needs), rather than simply leaving such communities. In so doing they also gained a larger market share in the delivery of agricultural products and services (Fulton, 2001).

A similarly catalytic mechanism that led to the extensive growth of a sugar business and to the improvement of produce delivered by producers, was the so-called Quality Payment System, introduced in the Red River valley of Minnesota and North Dakota. Sugar beet farmers are now being paid according to the sucrose yield of their produce, and this has proven to not only address market demand more affectively, but has given rise to innovative agricultural practices that have also enhanced members' financial wellbeing (Fulton, 2001; S. Novkovic & Power, 2005).

The examples of the Swiss dairy cooperatives, the sugar beet producers in the Red River valley and catalytic mechanisms for enhancing the performance of agricultural cooperatives illustrate that cooperative values could be adaptable in modern society. This is however not always the case as illustrated by the challenges which the Third Wave<sup>2</sup> coffee brought to the Maya farmers in Guatemala (Fischer, Victor, & Asturias de Barrios, 2021). These farmers can simply not keep up with the new sensory norms and focus on esoteric tastes. The farmers are further alienated from markets due to limited knowledge of consumer preferences and reliance on middlemen and agents that cannot always be trusted. Eventually, larger suppliers fulfilling consumer expectations benefit from this trend to the detriment of smallholding farmers. Based on the work performed by Nilsson and Ollila (2013) it is evident that pressure on agricultural cooperatives is not limited to smallholding farmers. An increasingly competitive environment in agrifood industries necessitates that a range of measures be taken by agricultural cooperatives to survive. Such measures affect member control, ownership structures and governance of cooperatives, and frequently lead to the cooperative model being diversified and, in some cases, to their adopting IOF attributes.

In response to worker cooperatives that are in a competitive international market, and similarly to other organisation forms, are challenged by internationalisation, Flecha and Ngai (2014) performed a qualitative case study on the Mondragon Cooperative Group<sup>3</sup>. The study showed how Mondragon expanded operations whilst maintaining cooperative values, by creating mixed cooperatives, and by extending the cooperative management model to subsidiary companies. Cooperatives principles such as participation in ownership, management, profit

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<sup>2</sup> During the Third Wave, coffee became an artisanal product as complex as wine, differentiated by various attributes (Boaventura, Abdalla, Araújo, & Arakelian, 2018).

<sup>3</sup> Mondragon comprises four specialist areas: Finance, Industry, Retail and Knowledge, consisting of 81 separate, self-governing cooperatives, employing around 70,000 people and supporting 12 R&D centres (Mondragon Corporation, 2024).



sharing by workers, as well as improved communication and the involvement of workers in democratic decision making, and participatory management, has for example been expanded to non-cooperative companies.

Rabong and Radakovics (2020) investigated the different perceptions of cooperatives' members and customers with regard to the core values of credit cooperatives, housing cooperatives and a mixed general group of cooperatives active in Austria. The data was amassed from a survey conducted amongst more than 2,000 Austrians older than 14 years. Firstly, a principal component analysis (PCA) was performed to establish if a homogenic value core existed for cooperatives across these different industries. "Responsible business conduct", "regionality and tradition" and "economic soundness" were the three value cores identified, that are similar across industries. Secondly, the statistical significance of differences in the rating of credit cooperatives in comparison to other credit institutions was performed by means of a Student's t-test. Results indicated that Austrians are more positively inclined towards credit unions than other credit institutions because they are present in many regions that are not otherwise served by such institutions, and their customer-focused orientation, openness, and honesty is in striking contrast to conventional banking institutions. A notable finding of this study was that country-specific forces/factors have a stronger effect on the perceptions and attributes of cooperatives than specific industry forces do.

### **3.4. Conclusion**

The application of cooperative principles, values and identity have been investigated by numerous researchers in a variety of different geographic and academic settings. Some studies address cooperative identity from a global perspective or across all economic sectors, while some studies investigate the application of cooperative identity from a country- or industry-specific perspective. We have followed a similar approach for the bibliographic analysis under the lens of the isomorphic pressures, including the identification of causes, effects and possible responses to them.

The ICA's Statement of Cooperative Identity (ICA, 1995) itself provides legitimacy for the protection against isomorphic pressures threatening cooperative identity (Diamantopoulos, 2022). To improve on the understanding of cooperative identity S. Novkovic et al. (2022) and Byrne (2022) both refer to association and relational theories to help with the interpretation of cooperative identity. The associative and integrative practices of cooperatives enhance the

impact they have on a social and economic perspective. Although mechanisms like Ambato's Social Responsibility Information System (Molina *et al.*, 2018) exists to report on the value contributed to, and impact made by cooperatives, society's awareness of the role and nature of cooperatives is still lacking, contributing to the image problem cooperatives are accused of tolerating (Diamantopoulos, 2022). Education, training and sharing information about cooperative attributes are proposed responses to improve awareness of cooperative identity (Diamantopoulos, 2022; Egia & Etxeberria, 2019). From the perspective of providing cooperative, education, and training and information on cooperative principles to those managing cooperatives, and to the members, could enhance members' involvement and cooperative orientated decision making (Oczkowski *et al.*, 2013) further protecting cooperatives from the impact of isomorphic powers. In the case of an agricultural cooperative, it has been proved that a significant relationship between the awareness of members about cooperative principles and the adherence of the organisation to such principles exists. In addition to training and information, customer service and accessibility to cooperative service can also provide cooperatives with a competitive advantage in comparison to IOFs (Rabong & Radakovics, 2020). Studies on cooperative banks and credit unions proved that management, demonstrating consistent adherence to cooperative principles, is able to enhance organisational performance and growth (Davis & Worthington, 1993; Unda, 2022; van Rijn, 2022).

Isomorphic pressures, in addition to the poor image and awareness of cooperatives, are threatening the sustainability of the model and such businesses. Other significant threats include free riding, the competitiveness of international markets, and the diversity of member needs. Mechanisms to respond to free riding, include requiring compulsory fees from non-members, and to make sure non-members do not benefit from cooperative operations they do not contribute to (Peetz, 2005). Countering market competitiveness has been proved by the Mondragon example where employees of non-cooperative companies were included in decision-making and profit sharing, basically expanding the cooperative model to other organisations (Flecha & Ngai, 2014). In the case of agricultural cooperatives, it has been demonstrated that members can be mobilised, instead of being left behind. 'Catalytic mechanisms' and socially sustainable approaches could provide members with access to larger markets and improve the quality of goods provided, thus benefitting members and cooperatives in a socially and economically sustainable way (Collins, 1999; S. Novkovic & Power, 2005).

Future research is necessary to identify and implement the changes required for cooperative identity to guard itself against isomorphic influences in the context of a globalised (and increasingly homogenised) economic world. The research should offer practical responses to and clarity on the application of cooperative identity, and provide guidance on the operationalisation of cooperative business practices (Birchall, 2005). It should also enable stakeholders to identify and address threats to cooperative identity, thereby enhancing proactive responses towards that end.

## CHAPTER FOUR

### 4. CORPORATE REPORTING AND CORPORATE REPORTING BY COOPERATIVES

This chapter provides background to the international corporate reporting landscape with reference to the development of a variety of corporate reporting frameworks and standards and the existing status and application thereof. The application of these frameworks as well as challenges faced by cooperatives relating to the use of these frameworks are also addressed in this chapter.

It is important to understand how the demand and supply of voluntary information differ between IOFs and cooperatives before elaborating on their respective practices. To understand the supply of voluntary disclosure we employed the stakeholder and legitimacy theories and for the demand thereof, we employed the agency theory. Employing these particular theories for supply and demand of voluntary information illustrates the contrast between cooperatives' and IOFs' intentions with supplying voluntary information and the difference in the audiences demanding voluntary information.

Stakeholder theory explains voluntary disclosure as the organisation's moral objective to communicate how fiduciary duties towards stakeholders were complied with also illustrating the significance of the organisation towards the satisfaction of stakeholder needs (Cotter, Lokman, & Najah, 2011; Deegan, 2002). Orientations towards stakeholders from the perspective of IOFs and cooperatives differ from each other, as cooperatives are more focussed on stakeholder needs (Bauer, Guzmán, & Santos, 2012). Therefore, cooperative members are not only more likely to gain value from the organisation (Fernandez-Guadaño, Lopez-Millan, & Sarria-Pedroza, 2020), but in addition to providing capital, their interest in the cooperative is also of a dual nature (S. Novkovic et al., 2022) as it could include the role of workers, suppliers and customers. The legitimacy theory, overlapping with the stakeholder theory, further explains that IOFs tend to provide voluntary information to legitimise actions that could in some instances damage their image or threaten their survival (Deegan, 2002) and even providing low quality information to disguise their true performance (Hummel & Schlick, 2016). Cooperatives on the other hand are likely to apply more substantive legitimisation strategies when referring to the actual value they create (Ali, Lodhia, & Narayan, 2021).

Applying agency theory to explain the demand for voluntary information included to corporate reporting (Shehata, 2014) illustrates the difference behind the demand thereof in the case of cooperatives as opposed to IOFs (Cornforth, 2004). Agency theory assumes maximisation of profitability from the perspective of IOF shareholders as the principal. In the case of cooperatives, assuming members as the principal, their interests differ from IOF shareholders with less focus on the maximization of return on capital (Cornforth, 2004). Satisfaction of socio-economic needs are rather prioritised, including the enhancement of marketing of products by members' farms (V. Kumar, Wankhede, & Gena, 2015), securing the delivery of goods and services to members, as well as the provision of employment and the establishment of good working conditions to members (Roelants, Dovgan, Eum, & Terrasi, 2012). In the case of IOFs, shares are also traded in public markets leading to a higher demand for information and transparency (Broberg, Tagesson, & Collin, 2010; Cornforth, 2004). Shares in the case of cooperatives are not traded in open markets (Cornforth, 2004) with limited transferability and are typically redeemable upon termination of membership (López-Espinosa et al., 2012). Management in the case of cooperatives are therefore subject to less ownership monitoring, conventional business performance measures, external pressures from shareholders and possible takeovers (Cornforth, 2004; O'Sullivan & Diacon, 2003). Therefore, the audiences demanding voluntary disclosure substantially differ between IOFs and cooperatives.

#### **4.1. Corporate reporting**

The past two decades have seen a global revolution in organisational corporate reporting practices (Hahn & Kühnen, 2013; Haller, Link, & Groß, 2017). The key aspects of this change focus on the impact of information as its accumulation and analysis moves corporates beyond traditional financial reporting, thus reducing information asymmetry and enabling stakeholders to hold organisations accountable in an increasing number of jurisdictions (Vasyl'eva, Leonov, & Makarenko, 2017). As a result, corporate reporting practices have been subject to many changes (Hahn & Kühnen, 2013; Haller et al., 2017; Unerman, Bebbington, & O'dwyer, 2018; Vasyl'eva et al., 2017), including the development of numerous financial and non-financial reporting frameworks. Whilst traditional financial reporting is limited to providing the information most relevant to financial capital providers, investors and other participants in the market (IASB, 2018a), non-financial reporting illustrates both the financial and non-financial impact of the organisations on their stakeholders (Rupley, Brown, & Marshall, 2017).

Modern financial accounting has, since the early 1900s, evolved in reaction to shareholder needs, and legislation in most countries currently enforces a variety of globally recognised

accounting guidance frameworks. Internationally, the majority of public companies have adopted the International Financial Reporting Standards (IFRS), while smaller companies in these jurisdictions tend to apply the IFRS for small and medium-sized enterprises together with any other country-specific accounting standards (Hellman et al., 2022; Mähönen, 2020; Savova, 2021). Although accounting standards enhance consistency and comparability of financial information (Barth, 2007; IASB, 2018b), items without monetary value tend to be excluded from such reports, and consequently do not address all stakeholder needs (Richmond, Mook, & Jack, 2003). Likewise, little is known about the social benefits and outcomes of accounting regulation and disclosure, beyond the macroeconomic level view of the capital market (Leuz & Wysocki, 2016). Nevertheless, non-financial reporting has gradually been adopted, thus accommodating a broader range of stakeholders (Skouloudis, Evangelinos, & Kourmoussis, 2010), and enhancing corporate planning and organizational decision-making (Adams & Mc Nicholas, 2007). Due the voluntary nature of non-financial reporting, and in order to enhance the quality and consistency of social and environmental disclosures, the European Commission embarked on regulatory action in order to define a widely applicable set of corporate social responsibility (CSR) criteria, with the ultimate objective of implementing mandatory non-financial disclosure across European Union (EU) countries, (Agostini, Costa, & Korca, 2022; Costa & Agostini, 2016; Szadziawska, Spigarska, & Majerowska, 2018) by means of Directive 2014/95/EU<sup>4</sup> (hereafter referred to as the EU Directive). The EU Directive makes it mandatory for large organisations in the EU to disclose social, environmental and diversity information. The implementation of the EU Directive was, however, delayed for a while, as many organisations have still not yet adapted their internal reporting systems to comply with the new reporting requirements (EU, 2014; Giner & Luque-Vilchez, 2022; KPMG, 2017).

In the light of recent acceleration of developments and innovations in corporate reporting standards relevant to the empirical part of this study, we regarded it of the utmost importance to provide an overview of non-financial reporting standards and frameworks on which cooperatives rely: these standards refer to annual reports; environmental and social impact reports; governance and compliance reports; integrated reports and management reports.

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<sup>4</sup> As amended by EU Directive 2022/2464 (EU, 2022)

The annual report is traditionally used by management to communicate the financial and non-financial information of the company (Deegan, 2002; O'donovan, 2002) to its shareholders and major stakeholders. Over the past few years, the generation of separate reports for corporate reporting has also become common practice, moving away from the publication of a single annual report document. For example, some entities publish integrated reports in addition to publishing stand-alone financial reports (usually to comply with mandatory requirements), and even prepare special reports addressing unique needs of key stakeholders (De Villiers et al., 2017).

A gradual increase in pressure on entities to disclose and report their environmental and social information has also led to the standardisation thereof. The main role-players providing guidance on environmental and social reporting standards and styles have until recently been the GRI, the Sustainability Accounting Standards Board (SASB), the International Organization for Standardization (ISO), the Climate Disclosure Standards Board (CDSB), the Task Force on Climate-related Financial Disclosures (TCDF), and the CDP (KPMG, 2020a), formerly known as the Carbon Disclosure Project. The GRI framework is currently applied by the majority of N100<sup>5</sup> and G250<sup>6</sup> companies, followed in number by the SASB framework and ISO standards (KPMG, 2020a). Forty-six percent of G250 companies currently report on their ambitions and efforts to decrease their carbon emissions (KPMG, 2020b).

Due to this ambiguity-enhancing mix of reporting practices (Haller et al., 2017) and social, and economic changes occurring at a pace and scale not witnessed before, the EU and IFRS Foundation policymakers embarked on initiatives to formalise non-financial reporting standards. In 2021, the EU tasked the European Financial Reporting Advisory Group (EFRAG) to start developing a draft document intended to formalise EU sustainability reporting standards. The European Union's aim is to bring non-financial reporting standards on par with financial reporting standards (EFRAG, 2021). The Delegated Act, promulgating the first set of European Sustainability Reporting Standards (ESRS), was adopted by the European Commission (EC) on 31 July 2023. Its provisions were mandated in the Corporate Sustainability Reporting Directive (CSRD) (EU) 2022/2464 (EFRAG, 2023b). In parallel with the EU's actions, the IFRS Foundation joined the conversation in an attempt to streamline and

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<sup>5</sup> The largest 100 companies listed on the NASDAQ.

<sup>6</sup> Globally the largest 250 companies, based on revenue, according to the Fortune 500.

harmonise sustainability information (IFRSF, 2020), and the International Sustainability Standards Boards (ISSB) was established by the IFRS Foundation specifically to set IFRS Sustainability Standards. Arising from an agreement between investor-focused sustainability disclosure organizations, the SASB, CDSB and International Integrated Reporting Council (IIRC) were also consolidated into the ISSB (IFRSF, 2022b). The IFRS Foundation and GRI have also agreed that the IFRS Foundation and GRI will provide the two ‘pillars’ of international sustainability reporting. The IFRS Foundation is to provide reporting requirements representing investor-focused capital market standards, and the GRI is to provide sustainability reporting requirements, designed to meet multi-stakeholder needs (IFRSF, 2022a). Also notable is that the EFRAG and GRI have acknowledged in their Joint-Statement that they have achieved a high level of interoperability between their respective standards in terms of impact reporting, thus preventing the need for double reporting by companies (EFRAG, 2023a). On 26 June 2023 the ISSB issued its inaugural standards, IFRS 1 (General Requirements for Disclosure of Sustainability-related Financial Information), and IFRS 2 (Climate-related Disclosures) (IFRSF, 2023). The GRI’s Universal Standards became in effect for reporting from 1 January 2023 (GRI, 2023).

Governance reporting is another important form of non-financial reporting. Although the term ‘governance reporting’ is used interchangeably with and as a catch-all phrase for, ‘environmental’, ‘social’, ‘sustainability’, ‘CSR’, ‘ESG’ and ‘environmental, governance and sustainability’ reporting (De Villiers et al., 2017; SASB, 2017), the term primarily refers to the disclosure of an entity’s governance structures and/or compliance with codes of governance (IIRC, 2013; IoDSA, 2009). Compliance with national codes of governance is required by legislation in several European countries (particularly France, Italy, Spain and the Netherlands), and in security markets, including those in Canada, the UK (Cuomo, Mallin, & Zattoni, 2016) and South Africa (Tshipa, Brummer, Wolmarans, & Du Toit, 2018). In Spain, listed companies are required to publish governance reports as prescribed by Circular 2/2018 of the CNMV (the Spanish Securities Stock Commission) (CNMV (Comisión Nacional del Mercado de Valores), 2018). In non-financial reporting guidance, large EU companies are advised to report on their governance structures, board and board committee responsibilities, internal control, stakeholder management, and assurance (EU, 2017). The International



Organization of Securities Commissions (IOSCO),<sup>7</sup> announced that regulators should require issuers of securities to provide disclosures with respect to risks specific to environmental, social and governance matters (ESG) , and to identify opportunities in relation to governance, strategy, and risk management (IOSCO, 2019).

Motivated by the increasing number of different types of reports being required, in addition to traditional financial statements, and by the lack of connection between them, the IIRC was established in 2010 (Dumay, Bernardi, Guthrie, & Demartini, 2016) to provide an integrated reporting Framework (IIRC, 2013). The Framework provides standardised guidance on how to combine financial information with management commentary; reporting on governance and remuneration; and environmental reporting (De Villiers et al., 2017; IIRC, 2011, 2013). With the growing application of the Framework, organizations are becoming more accountable (Adams, 2020), increasingly addressing all stakeholder interests (Busco, Frigo, Quattrone, & Riccaboni, 2013) by the utilisation of the six capitals<sup>8</sup> over a period of time (Flower, 2015; IIRC, 2013). While the Framework provides guidance from the perspective of profit-driven organizations, public sector and non-profit organizations can also apply the guidance, with appropriate and necessary adaptations (IIRC, 2013). Some cooperatives regard themselves as well-positioned to apply the Framework, as the integrated nature thereof reflects the integrated nature of cooperatives as articulated in various cooperative values statements (Robbins, 2018). Unfortunately, in the middle of 2023 the IIRC ceased to exist as a separate organisation, and the future adoption of the Framework has become very uncertain (O'Dwyer, Humphrey, & Rowbottom, 2024).

Management reports provide a platform for management to address stakeholders, and usually comprise management's commentary on the financial statements (IIRC, 2013). Many countries require that such disclosures be prepared according to IFRS Practice Statement 1, Management Commentary (IFRSF, 2010; Litan, 2022). For large EU companies, (EU, 2017) management reporting is required to include an overview of the company's operations and the rationale for its structure, by describing how, according to its business model, it transforms inputs into outputs. Companies in the UK and Germany also are legally required to elaborate on the

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<sup>7</sup>IOSCO serves as the global standards setter for the securities segment and regulates more than 95% of the securities markets around the world (Anders, 2019).

<sup>8</sup> Organisations should explain the use, its impact and the interdependence according to the six capitals: financial, manufactured, human, intellectual, natural and social (IIRC, 2011).

practical operation of their business models (Catalfo & Wulf, 2016). Similarly, the US Security and Exchange Commission (SEC) requires registrants to publish a management discussion and analysis document intended to enhance readers' understanding of the financial condition and results of the organisation (Richman et al., 2019).

#### **4.2. Corporate reporting by cooperatives**

The content and transparency of corporate reporting in the case of cooperatives can influence the buy-in, attitude and commitment of stakeholders and members (Joseph, 2007; Westwood, 2014). Cooperatives' apathy or indifference towards such reporting can result in member ignorance of its social responsibility achievements (Sarracino & Fumarco, 2018; Westwood, 2014) and economic potential to reduce the gap between producer and consumer prices, and in providing "missing" services to members, as well as providing individual producers with market access (Valentinov & Iliopoulos, 2021). While there are many different corporate reporting forms and style possibilities used by IOFs, little is known about their usage by cooperatives, nor of the determinants prompting their adoption.

In addition to the corporate reporting discussed in Chapter 4.1, scholars have investigated alternative reporting models intended to reduce information asymmetry apparent in current practices. Such models include 'electronic word of mouth' in the form of crowdfunding that has demonstrated a positive effect on funder investment decisions (Bi, Liu, & Usman, 2017). Technology emerging from the adoption of Industry 4.0, such as the Internet of Things and blockchain, can improve the availability and credibility of information. (Liu, Zhang, He, & Li, 2021). With respect to cooperatives' distinctive reporting requirements, a Social Responsibility Information System for Credit Cooperatives has recently been developed. This web-based system addresses the inability of traditional reporting frameworks to meet the idiosyncratic (Oxford English Dictionary, 2012) reporting requirements of cooperatives, and enables credit unions to manage, evaluate and report on the achievement of their social responsibility targets (Molina et al., 2018).

Corporate reporting as discussed in Chapter 4.1, however, relies on various (and often unrelated) frameworks for reporting economic, social and environmental information, which as often results in issues being reported in isolation, devoid of wider contexts and linkages, and thus not conveying the full impact of the organisation (Unerman et al., 2018). A siloed approach in the case of cooperatives' reporting makes it even more challenging to measure performance,

as the success of a cooperative extends beyond mere financial performance (Corrigan & Rixon, 2017). The tendency of accounting standards setters to limit their frame of reference to IOFs has also led to recurrent friction between them and cooperatives (Polo-Garrido & Meliá-Martí, 2021). The shares members hold in cooperatives are, for instance, classified as liabilities according to existing accounting frameworks, in spite of their economic substance representing equity (López-Espinosa et al., 2009; Seo & Choi, 2021). The majority of frameworks used internationally to govern and regulate CSR are still lacking in clear perspectives on stakeholder inclusiveness, and are failing to identify all stakeholders and address their needs (El-Said, Aziz, Mirzaei, & Smith, 2022). In the absence of reporting frameworks able to reflect cooperatives' performance and socio economic contributions (Polo-Garrido, Mantzari, McCulloch, Piñeiro-Harnecker, & Rixon, 2022), cooperatives still rely on a combination of 'off the shelf' and/or adapted versions of existing IOF-specific frameworks (Hicks, Maddocks, Robb, & Webb, 2007; ICA, 2016; López-Espinosa et al., 2012).

Although alternative reporting models for cooperatives are less common, a few initiatives have been identified in addition to the abovementioned. Based on cooperative principles and values, Co-operatives UK provides frameworks and guidance for cooperatives to set and select appropriate Key Performance Indicators (Co-operatives UK, 2019b), advise on the format and content of their narrative reporting and member communications (Co-operatives UK, 2017), as well as a code of conduct for corporate governance (Co-operatives UK, 2019a). From a sustainability perspective, the ICA published the Sustainability Reporting for Co-operatives: A Guidebook (ICA, 2016), whilst the Cooperatives of the Americas offers the Cooperative Social Balance (BSCoop) socioeconomic management tool, for cooperatives to measure their actions and to improve their image in accordance with cooperative identity (de las Américas, 2019). The International Cooperative and Mutual Insurance Federation (ICMIF) (2024), on the other hand, provides sustainability reporting guidance with the specific focus on mutual and cooperative insurers. With specific focus on larger cooperatives in Spain, the AECA (2022) provides empirical findings and recommendations on non-financial disclosure practices.

In Chapter 5, the adoption and determinants of corporate reporting by cooperatives, considering the different types of corporate reports published and reporting frameworks used will be investigated.

## CHAPTER FIVE

### 5. COOPERATIVES' CORPORATE REPORTING: A COMPREHENSIVE INDEX

Given the many different reporting possibilities as discussed in Chapter 4, little is known about their usage by cooperatives, or the determinants of their adoption. The aim of this part of the study is to extend extant research through an in-depth understanding of the adoption and determinants of corporate reporting, considering the different types of corporate reports published and reporting frameworks used. Similar to the criteria used by Jaffar, Nor, and Selamat (2018), corporate reporting in this research is categorized as: annual reporting; environmental and social reporting; financial reporting; integrated reporting; governance reporting, and management reporting. We conducted a content analysis, on hand collected data, using a codebook approach in order to categorize the nature of published corporate reports of cooperatives. A comprehensive level of adoption of corporate reporting by the Global Top 300 cooperatives was measured by means of a corporate reporting index. Statistically significant determinants of the likelihood of adoption of corporate reporting were established through linear regression modelling.

The population for this study is the Global Top 300<sup>9</sup> cooperatives that the World Cooperative Monitor (WCM) (2018, p. 71) uses to determine the role played by cooperatives in the global economy (Ushkarenko & Soloviov, 2020). The WCM list is, as noted by other authors (Seguí-Mas, Bolas-Araya, & Polo-Garrido, 2015), a valid, reliable and credible source. In addition, the list being compiled by the European Research Institute on Cooperative and Social Enterprises (EURICSE), is also considered reliable (WCM, 2018). In the judgement of the authors of this study, the target sample (organizations 1-150 of the Global Top 300 cooperatives) comprising larger cooperatives, creates a more comprehensive overview of corporate reporting than would the use of smaller cooperatives appearing on the list. We have accessed the websites of the 150 cooperatives to download the corporate reports published for 2017 year. However, 33 of the cooperatives were not included, as they did not meet the language requirements of the study, where only reports available in English, Dutch, Italian or Spanish were included. Eight of the cooperatives were excluded, due to the size of the group, which prevented the researchers from drawing conclusions on the extent that the selected

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<sup>9</sup> The representation per sector is as follows: Agriculture and food industries (28.21%); Banking and financial services (11.5%); Wholesale and retail (12.82%); Insurance (47.4%).

cooperatives were represented in the published reports. Twenty cooperatives were excluded, due to insufficient financial information relating to listed instruments and the composition of equity. Finding the relevant website or accessing information substantiating the extent of the cooperatives' corporate reporting practices was not possible for another eight cooperatives, and those have therefore also been excluded from the study. Three of the cooperatives were not included, due to the organization no longer existing in the form documented on the list. It was therefore possible to include 78 of the cooperatives in the study.

## **5.1. Level of adoption of corporate reporting**

To obtain an understanding of the aggregate of the different kinds of corporate reports adopted, we performed a content analysis on all the reports published by the cooperatives in the sample and documented it using a codebook approach.

### **5.1.1. Research method and types of reports published**

#### **5.1.1.1. Research method**

Corporate reporting (CR) of the cooperatives was explored by means of a codebook that was established for categorising the reports published. The following categories were applied, and the findings were documented on a spreadsheet: annual reporting (AR); financial reporting (AFS); integrated reporting (IR), environmental and social reporting (ES); governance reporting (GR), and management reporting (MR). Any other type of reporting in a stand-alone report was classified as other stand-alone reporting (OS). The name of the report was considered the main attribute for categorising each report (stand-alone report or a report that was part of another report). In cases where the name of the report did not provide sufficient guidance for categorising the report, the main headings were used to categorize it.

#### **5.1.1.2. Findings on types of reports published**

##### *Annual reporting*

As presented in Table 1, 83.33% (n=65) of the 78 cooperatives published annual reports, but most of the cooperatives' (n=62, 79.49%) reports were not compiled in accordance with a standard and were not subject to assurance. Whilst both (n=2, 2.56%) of the cooperatives who published reports complying with a framework followed the GRI Standards, one of the two in addition to this, compiled the report according to the Dutch Civil Code and Dutch legal guidelines for management board reports, as well as according to the requirements of EU Directive 2014. One (n=1, 1.28%) cooperative published a report with limited assurance

provided by an external audit firm, for complying with G4 Guidelines (Core option) of the GRI. All 65 reports were stand-alone reports.

### *Financial reporting*

We found that 85.90% (n=67) of the 78 cooperatives published financial reports complying with a financial reporting framework and also subject to external assurance (refer Table 1). For the 67 cooperatives, all the assurance providers comprised external auditors and the existence of an audit report was also verified. The majority (n=64, 95.52%) of the 67 reporting entities' financial results were reflected in consolidated financial statements and a small minority were reflected in individual financial statements (n=3, 4.22%). Of the 67 reports, 39.00% (n=26) were stand-alone reports and 61.00% (n=41) formed part of another report. Only two of the latter cooperatives used an integrated report, while the remaining 39 used an annual report for financial reporting.

Table 2 illustrates that the majority of the 67 cooperatives comply with IFRS or IFRS and local GAAP (n=38, 56.42%), followed by local GAAP (n=16, 23.88%), and US GAAP (n=13, 19.40%). US GAAP was only applied by US cooperatives.

### *Integrated reporting*

Reports complying with the IIRC Framework were published by 6.41% (n=5) of the cooperatives and 1.28% (n=1) published a report referred to as an "integrated report" without complying with a framework (refer Table 1). Of the six reports published, 66.67% were standalone reports and 33.33% formed part of another report.

### *Environmental and social reporting*

Cooperatives who adopted environmental and social reporting amounted to 60.26% (n=47); 25.64% (n=20) of cooperatives also applied an environmental and social reporting framework; and 20.15% (n=16) of the cooperatives applied a framework with external assurance provided on compliance with the framework (refer Table 1). Of the 47 reports published, 53.19 % were stand-alone reports and 46.81% were part of another report. The application of a framework was statistically associated with the employment of stand-alone reports.<sup>10</sup> Table 2 illustrates

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<sup>10</sup> Chi-square test for association ( $\chi^2(1) = 3.875$ ,  $p = 0.049$ ), where all expected cell frequencies were greater than five.

that the vast majority of the cooperatives who applied a framework used the GRI reporting framework. Other frameworks referred to include the UN SDG's and UN Global Compact Index for CSR. One instance of Danish legislation providing guidance on environmental social reporting was also noted. For the 16 cooperatives whose reports were subject to assurance, the assurance providers constituted external auditors, and the existence of an assurance report was also verified. Similar to the findings of (KPMG, 2017b), the impact of the EU Directive was not visible for 2017 financial year, as many organizations had not adapted their internal reporting systems for the new reporting requirements at the time.

### *Governance reporting*

According to Table 1, 61.54% (n=48) of cooperatives engaged in governance reporting, while 35.90% (n=28) applied a corporate governance framework and 5.13% (n=4) obtained assurance on the compliance with the framework. Of the 48 reports published, 14.58 % were stand-alone reports and 85.42% were part of another report. No statistically significant association between applying a framework and publishing stand-alone reports was found to exist, however. As illustrated in Table 2, the vast majority (90.63%, n=29) of cooperatives who applied a framework, applied a code of governance published on a national level.<sup>11</sup> Three (9.38%) of the cooperatives applied governance principles prescribed by legislation in Italy and Sweden. Cooperatives who obtained external assurance on the governance reports made use of external auditors. Two of the cooperatives (both UK based), who published a report based on a code of governance, applied the Co-operative Corporate Governance Code, addressing cooperatives' specific needs for governance reporting (Co-operatives UK, 2019a).

### *Management reporting<sup>12</sup>*

Although brief messages and letters from management accompanied the financial statements of most cooperatives, management addressing stakeholders beyond that was only noted for 55.13% (n=43) of the 78 cooperatives (refer Table 1). The majority of the reports published did not apply any reporting framework (47.44%, n=37). A framework was applied by 3.85% (n=3) of the cooperatives; and 3.85% (n=3) of reports were based on a framework and subject to

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<sup>11</sup> Countries where codes of governance are published include: Japan, Finland, France, Switzerland, the Netherlands, Spain, Germany, England, New Zealand, Austria, Denmark, and Norway.

<sup>12</sup> Terminology used for referring to management reporting include: management report (Mamić Sačer, Meeh-Bunse, & Luer, 2019, p. 122); management's discussion and analysis of financial condition and results of operations (CNMV, 2013, p. 16); management commentary (Cavicchi et al., 2019, p. 1); and director's report (Day & Woodward, 2004, p. 45).

assurance. Of the six cooperatives who applied a framework for management reporting, two cooperatives referred to IIRC and/or GRI frameworks; two cooperatives applied guidance provided by the German Commercial Code (Mamić Sačer, Meeh-Bunse, & Luer, 2019); one organization domiciled in Spain, published a report based on the Guide for the Preparation of Management Reports of Listed Companies (CNMV, 2013); and one applied guidance provided by the Financial Stability Board in Canada. Where assurance was obtained on the reports, it was provided by an external auditor. Of the 43 reports published, 2.33% were stand-alone reports and 97.67% formed part of another report.

### *Other reports*

In addition to the categories discussed above, 32.05% (n=25) of the cooperatives published other reports (Refer Table 1). The vast majority of those reports were not based on specific frameworks. The main themes dealt with in those reports included interpretation and analysis of financial information. Two cooperatives reported on concepts related to the Basel Framework applying to internationally active banks, which set of standards on capital and liquidity rules (Howarth & Quaglia, 2013; Quaglia & Spendzharova, 2017).

Table 1. Types of corporate reports published.

Report published (N=78)	Annual reports	Annual financial statements	Integrated reports	Environmental and social reports	Governance reports	Management reports	Other stand-alone
Percentage: Not applying a framework	79.49	n/a	1.28	14.10	20.51	47.44	n/a
Percentage: Applying a framework	2.56	n/a	6.41	25.64	35.90	3.85	n/a
Percentage: Applying a framework, with assurance of compliance	1.28	85.90	0.00	20.51	5.13	3.85	n/a
Total percentage of organizations published	83.33	85.90	7.69	60.26	61.54	55.13	32.05

Source: The authors



Table 2. Reporting standards.

Standards applied	Financial reporting (N=67)	Environmental and social reporting standards applied (N=36)	Governance reporting standards applied (N=33)
Percentage: Annual financial statements complying with IFRS	41.49		
Percentage: Annual financial statements complying with IFRS and local GAAP	14.93		
Percentage: Annual financial statements complying with local GAAP	23.88		
Percentage: Annual financial statements complying with US GAAP	19.40		
Percentage: Environmental and social reports applying GRI		75.00	
Percentage: Environmental and social reports applying UN Global Compact Index for CSR		13.90	
Percentage: Environmental and social reports applying UN SDGs		8.30	
Percentage: Environmental and social reports applying the Danish Financial Statements Act; and United Nations Guiding Principles on Business and Human Rights		2.80	
Percentage: Applying national code of governance			90.63
Percentage: Applying governance legislation			9.38

Source: The authors

## 5.2. Determinants of the level adoption of corporate reporting

Scholars have established determinants for companies to publish some form of corporate report, including company size, the orientation of the country towards stakeholders, environmental sensitivity of the sector and companies operating in a financial sector. These studies have been performed mainly from the perspective of IOFs. Studies performed from the perspectives of cooperatives mainly investigated determinants for GRI and SDG based reporting, rather than accounting for other corporate reports. We hypothesise in the chapter below the determinants for corporate reporting of cooperatives that extend the extant literature.

### 5.2.1. Development of hypothesis

We explain size as a determinant for the adoption of corporate reporting using agency theory, legitimacy theory, and political cost theory, respectively. Agency theory in an organisational context describes the relationship and associated problems when the owners (principals) delegate operational responsibilities to managers (agents) (Jensen, 1986). Such problems can be attributed to owners and management not having similar goals or the same appetite towards

risk, with neither principle being always able to evaluate the agent's actions (Crutchley, Jensen, Jahera Jr, & Raymond, 1999; Eisenhardt, 1989). When larger organizations instead elect to adopt voluntary disclosure for bridging information asymmetry, this can be ascribed to the magnitude of agency costs caused by the separation between ownership and management (Chow & Wong-Boren, 1987; Healy & Palepu, 2001). Conflict of interest that is inherent to the relationship between owners and managers, for example, may be caused by management being rewarded for firm performance leading to unsustainable practices (Jensen, 1986). Whilst voluntary disclosure can manage such conflicts (Chow & Wong-Boren, 1987), it is notable that voluntary disclosure can also have a positive effect on firm value and performance (Enache & Hussainey, 2020; Tsang, Wang, Wu, & Lee, 2022).

Legitimacy theory relates to the social contract the organization has with society to act in an acceptable and legitimate manner, where not adhering to such expectations could threaten the survival of the organization (Deegan, 2002). Large companies are therefore under pressure to legitimise themselves as they receive public attention, and have many shareholders who are concerned about their social impact (Cowen, Ferreri, & Parker, 1987; Solikhah, 2016).

Large and profitable organizations who are publicly visible, are vulnerable to interference, such as from the government for redistribution of wealth or lobbying groups having certain demands, such as the nationalisation or regulation of such companies (Watts & Zimmerman, 1978). Management's concern would therefore, according to the political cost theory, relate to implicit or explicit taxes or other regulatory actions that could result from this (Healy & Palepu, 2001; Jensen & Meckling, 1976; Jensen & Meckling, 1978). Larger firms would, in response to this, disclose more information on their social and environmental performance, so as to reduce the potential impact of actions that could impact firm value, including additional regulation and taxes (Gamerschlag et al., 2011). In the case of cooperatives Bolla-Araya et al. (2019) found that large organizations that are visible to the public due to its social and environmental impact disclose more CSR information, which is explained by the legitimacy theory.

Overall, the proposal is that the size of cooperatives can determine the level adoption of corporate reporting, leading to the first hypothesis:

**H1** Larger cooperatives are more likely to adopt corporate reporting than smaller cooperatives.

The institutional- and legitimacy theories have been employed to explain the adoption of corporate reporting according to the orientation of the country towards stakeholders. As explained by the institutional theory, coercive isomorphism is an institutional change mechanism where the society or legal environment dictate organisational structure, behaviour or processes and practices, including annual and financial reporting (DiMaggio & Powell, 1983). Determinants to stakeholder management and relationships could therefore depend on the country (K. Kumar, Boesso, & Yao, 2017), rather than on the organization itself. Coercive pressures from shareholders or the government could, for instance, result in companies implementing environmental practices (Abd Razak, Ramli, & Rasit, 2020). Moreover, in countries with a legal system that protect stakeholders rights, stakeholders will most likely have a greater influence on firms to disclose more CSR information (Kolk & Perego, 2010; Martínez-Ferrero, Ruiz-Cano, & García-Sánchez, 2016; Prado-Lorenzo, Garcia-Sanchez, & Gallego-Álvarez, 2012).

According to the legitimacy theory, companies would tend to seek for acceptance of their activities from the society in which they operate (Branco & Rodrigues, 2008). In a stakeholder-orientated environment, companies are therefore expected to disclose more information on their social and environmental performance (Fernandez-Feijoo, Romero, & Ruiz, 2014). Organisations domiciled in stakeholder-orientated countries may also be more likely to issue CSR reports, due to social performance being more expected to have an effect on the financial performance of the organization than in stakeholder-orientated countries (Dhaliwal et al., 2012). Bolas-Araya et al. (2019) found that cooperatives operating in stakeholder-orientated countries are more likely to adopt CSR information, which they explain by leaning on institutional theory. Bolas-Araya et al., (2019) also found that cooperatives operating in stakeholder-orientated countries are more likely to adopt CSR information, which they explain by referring to institutional theory.

Overall, we propose that the orientation of the country towards stakeholders where the cooperative is domiciled could determine level of adoption of corporate reporting, leading to our second hypothesis:

**H2** Cooperatives domiciled in stakeholder-orientated countries are more likely to adopt corporate reporting than cooperatives in shareholder-orientated countries.

We have employed the legitimacy-, stakeholder- and political cost theories to explain adoption of corporate reporting according to the impact of the sector in which the organization operate on the environment. Companies operating in more environmentally sensitive sectors, tend to legitimise their actions with more CSR disclosure so as to minimise negative public responses (Tan, Benni, & Liani, 2016), for example by reporting on accomplishments and procedures in an attempt to reduce their footprint (Hrasky, 2012). Organisations legitimising themselves can sometimes even lead to the disclosure of environmental information in a manner that is more an attempt by them to control the environmental agenda than it is to improve their behaviour (Larrinaga-González, Carrasco-Fenech, Caro-González, Correa-Ruíz, & Páez-Sandubete, 2001). In the case of cooperatives, Bolla-Araya et al. (2019), found that the Global Top 300 cooperatives with high environmental and social impacts also tend to legitimise themselves by reporting on their CSR compared with cooperatives with lower environmental and social impact.

According to stakeholder theory, firms form part of society, and their actions can accordingly affect a broad array of people, groups and organizations (Bryson, 2004; Freeman, Harrison, Wicks, Parmar, & De Colle, 2010). Firms therefore have a moral obligation towards stakeholders and rely on them as they provide resources to the firm. Environmental disclosures constitute a way for the firm to respond to stakeholder needs (Huang & Kung, 2010). Firms in sectors with a higher impact in the environment, would therefore opt to disclose more information on their environmental performance in response to stakeholder demand (Solikhah, 2016).

Due to stakeholder pressure and resultant political costs, companies in industries with a higher impact on the environment tend to have a higher level of environmental disclosures. This is also explained by the political cost theory, as a higher level of disclosure is seen as an attempt to reduce the impact of political costs (i.e., occupational safety regulations and anti-pollution taxes) that could have a negative effect on firm value (Brammer & Millington, 2006; Gamerschlag et al., 2011). Bolla-Araya et al. (2019) found that cooperatives operating in sectors with more impact on the environment tend to disclose more CSR information, which they explain using legitimacy and stakeholder theories.

We explain the adoption of corporate reporting of financial institutions with the aid of legitimacy theory and stakeholder theory. IOFs in the financial sector tend to have

characteristics that stand out from other sectors (Elijido-Ten, 2004). IOFs in the financial sector are therefore more likely to legitimise themselves by disclosing voluntary information (Saha & Akter, 2013) by conforming to financial sector practices and reporting requirements (Oliveira, Rodrigues, & Craig, 2011). A recent study on cooperatives applying GRI G4 reporting, revealed that cooperatives in the financial services sector also tend to have higher disclosure levels of economic performance indicators than other sectors (Yakar Pritchard & Çalıyurt, 2021).

Globally, recent business scandals and an increasingly well-informed type of stakeholder are contributing factors to the increase of stakeholder demand for financial institutions to report on their corporate social performance (Uwuigbe, 2011). CSR disclosure for companies in a financial sector exceeding CSR disclosure of non-financial companies (Naseem, Rehman, Ikram, & Malik, 2017) is therefore also explained by stakeholder theory.

Overall, we propose that the sector in which the cooperative operate could determine the level of adoption of corporate reporting, leading to our third and fourth hypotheses:

**H3** Cooperatives domiciled in environmentally more sensitive sectors are more likely to adopt corporate reporting than cooperatives in environmentally less sensitive sectors.

**H4** Cooperatives in a financial sector are more likely to adopt corporate reporting than cooperatives in a non-financial sector.

## 5.2.2. Research method and determinants of the level of adoption of corporate reporting

### 5.2.2.1. Research method

For the dependent variable, we further measured the quality of reporting as documented in the codebook referred to in Chapter 5.1.1.1 by means of an index. For the index, we considered the application of a reporting framework and whether the report was audited, providing assurance on the report complying with the framework. The application of a framework does not only contribute to the transparency and comparability of information, but enhances accountability, holding management to account (IASB, 2018a). Moreover, formal reporting on sustainability related matters not only enhances credibility of reporting, but also enhances confidence in the organisation's ability to create value in the long-term (James, 2013). External assurance on the other hand, in particular when provided by accounting firms, greatly advances the quality of CSR reporting (Ballou, Chen, Grenier, & Heitger, 2018). The index is therefore a basic composite that capture coverage and quality of corporate reporting.

A weighting method, based on the index was used to establish the level of adoption for each type of reporting. For an FR=1 score, the index required a report to exist, in order to comply with a financial reporting framework, and to be subject to external assurance (auditing). In the absence of any of the latter, FR=0. For AR, IR, ES, GR and MR, the index differentiated between non-application or adoption of a code, standard, or framework, as well as third party assurance obtained on the report. Where no report existed, the allocated score = 0; where a report existed = 1; where a report existed that was based on a code, standard or framework = 2. Finally, where a report existed and was subject to external assurance of compliance with a code, standard or framework = 3. For an OS=1 score, the index required a standalone report to exist.

The total score for all categories was calculated as a continuous variable (also refer Table 3), reflecting the level of adoption of corporate reporting ( $CR=AR+FR+IR+ES+GR+MR+OS$ ) (refer to Appendix A for an illustrative example of the calculation). As recommended by (Neuendorf, Skalski, Cajigas, & Allen, 2017), the codebook was constructed in advance, based on the types of reports identified in the literature. For the construction of the codebook, the authors underwent a pilot coding phase that was subject to discussions, training, and revision (Neuendorf et al., 2017)

The following explanatory variables were investigated as proxies for the study's hypotheses, (also refer Table 3):

#### *Size of the cooperative*

The proxy for H1 is the size of the cooperative in terms of turnover (*SIZE*). Following Adams (2002), who found that organisational size could play a role in environmental reporting processes, it was determined whether larger cooperatives were more likely to adopt corporate reporting than smaller cooperatives. Larger and smaller categories were respectively classified in terms of organizations with a logarithm of turnover above and below the mean.

#### *Type of country*

The proxy for H2 is whether the cooperative is domiciled in a stakeholder or a shareholder orientated country (*COUNTRYTYPE*). Following Simnett, Vanstraelen, and Chua (2009), companies in stakeholder-orientated countries, as opposed to shareholder-orientated countries,

are more likely to publish sustainability reports, where the authors determined whether cooperatives domiciled in stakeholder-orientated countries were more likely to adopt corporate reporting or not. Determinants of stakeholder management and relationships could have a relationship to the entity's country (K. Kumar et al., 2017). Coercive pressures from shareholders or the government could, for instance, result in companies implementing/reporting on environmental practices (Abd Razak et al., 2020). Moreover, in countries with a legal system that protects stakeholders' rights, stakeholders will more likely exercise their influence on firms to disclose more CSR information (Kolk & Perego, 2010; Martínez-Ferrero et al., 2016; Prado-Lorenzo et al., 2012). Common law countries tend to provide more investor protection and require greater disclosure of financial information than is the case in civil law countries (Sun, Habib, & Bhuiyan, 2020). According to Simnett, Vanstraelen, and Chua (2009), companies in stakeholder-orientated<sup>13</sup> countries (common law dominates), as opposed to shareholder-orientated countries (civil law dominates), are more likely to publish sustainability reports. Also, organisations domiciled in stakeholder-orientated countries may also be more likely to issue CSR reports, because of the expectation that social performance is more likely to have an effect on the financial performance of the organisation in these jurisdictions than in non-stakeholder-orientated countries (Dhaliwal et al., 2012). For the purpose of this dummy variable, we distinguished between cooperatives domiciled in shareholder and stakeholder-orientated countries (shareholder orientated countries, the allocated score =0; stakeholder orientated countries, the allocated score =1).

#### *Type of industry*

The proxy for H3 is the impact of the sector in which a cooperative operate on the environment (SECTORTYPE), being classified as either more sensitive or less sensitive (Reverte, 2009). Companies operating in more environmentally sensitive sectors tend to publish more CSR disclosure documents to minimise negative public responses and to legitimise their actions (Tan et al., 2016). Following the findings made by (Bollas-Araya et al., 2019), we have based this dummy variable on the environmental sensitivity of the sector in which the cooperative operate in (for environmentally less sensitive sectors, the allocated score =0; for environmentally more sensitive sectors, the allocated score =1).

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<sup>13</sup> Shareholder-orientated countries: Australia, Canada, India, Ireland, New Zealand, Singapore, UK, US. Stakeholder-orientated countries: Argentina, Austria, Belgium, Brazil, Colombia, Czech Republic, Denmark, Finland, France, Germany, Italy, Japan, the Netherlands, Norway, Republic of Korea, South Korea, Spain, Sweden, Switzerland (Ball, Kothari, & Robin, 2000).

The proxy for H4 is whether the cooperative operate in a financial or non-financial sector. For the purposes of this dummy variable, we have included FIN\_NONFIN (financial sector, the allocated score =0; non-financial sector, the allocated score =1). Banks and insurance organizations are classified as organizations rendering financial services (Ferrarini, 2017).

Table 3. Descriptive statistics.

Continuous variable	N	Mean	Standard deviation	Min	Max
Corporate reporting score (CR)	78	5.22	3.061	1	16
Dummy variables					
COUNTRYTYPE	N	SECTORTYPE		N	
Shareholder orientated	33	Less environmental sensitive		47	
Stakeholder orientated	45	More environmental sensitive		31	
FIN_NONFIN	SIZE				
Financial sector	46	Below mean		46	
Non-financial sector	32	Above mean		32	

Source: The authors

#### 5.2.2.2. Determinants of the level of adoption of corporate reporting

In the analysis to follow, a linear regression model was conducted to determine statistically significant variables for the level of adoption of corporate reporting as illustrated in Table 4. The standard beta coefficient was used to illustrate the relative strengths of the explanatory variables in the model. The country type ( $p < 0.01$ ) was identified as the strongest determinant (std. beta = 0.471), followed by size ( $p = .040$ ; std. beta = 0.202) and the type of sector ( $p = .084$ ; std. beta = 0.198). H1, H2 accepted for the relevant proxies and H3 is accepted for SECTORTYPE.

The linear regression model was defined as follows:

$$CR = F(\text{SIZE}, \text{COUNTRYTYPE}, \text{SECTORTYPE}, \text{FIN\_NONFIN})$$

Table 4. Linear regression model.

Variables in equation	Standardised beta	Sig.
SIZE	0.202**	0.040
COUNTRYTYPE	0.471***	<.0001
SECTORTYPE	0.198*	0.084
FIN_NONFIN	-0.079	.479
Multiple R-square	0.329	
Adjusted R-square	0.292	
F	8.948	
P	0<.001	

Source: The authors

Note: \*\*\*, \*\*, and \* indicate significance at the 1%, 5% and 10% levels, respectively.



### 5.2.3. Conclusion

In spite of the importance of corporate reporting, and the reliance on it by cooperatives' members (García-Sánchez & Noguera-Gámez, 2017), we identified a low level of adoption in general by cooperatives. That some of the cooperatives did not publishing audited financial statements on their websites raises concern. Financial reporting remains relevant to a variety of stakeholders, and the fact that cooperatives' equity instruments are not being publicly traded to the same extent as those of IOFs fails as a justification for not publishing financial reports. Financial reporting objectives extend beyond users who are only interested in the value of equity (Barth, 2007). Forty-six percent of all cooperatives adopting environmental and social reporting in accordance with a framework, however, is still low in comparison with large companies like the global G250, who have a CSR adoption rate of 93% (KPMG, 2017). The findings on governance reporting reflected that that only 41% of cooperatives publish framework-based governance reports. Limited guidance on formal governance reporting for cooperatives could be a contributing factor, as the authors found only a few guides on governance practices acknowledging practices relevant to cooperatives, such as the Co-operative Corporate Governance Code (Co-operatives UK, 2019a). While governance structures are supportive of democratic order, thus mitigating conflict (Sacchetti & Tortia, 2016), a lack thereof could have an adverse effect on membership numbers and morale (Österberg & Nilsson, 2009).

The small minority of the cooperatives in the study have adopted integrated reporting is surprising, due to the potential integrated reporting offers to differentiate member-owned businesses from other organisations, through integrating their reporting on the economic, social, and environmental orientation of their business structures (Lodhia, 2014). Moreover, this was also surprising because member-owners who are strongly reliant on the organization expect cooperatives to illustrate how the needs and interests of all stakeholders are being met, as has been demonstrated by (Busco et al., 2013). Existing reporting frameworks that predominantly focus on IOFs (ICA, 2016) emphasise the need for cooperatives to consider alternative types of reporting. Management that communicates poorly with members can result in dissatisfaction with service delivery, and even disappointed members, which in turn can have an adverse effect on the cooperative's performance (Goodman, 1994; Peng, Hendrikse, & Deng, 2018). Ultimately, the legitimacy of cooperatives could also be at stake, if they are not

held accountable through the reflection of their social nature in their accounting practices (De Matteis & Preite, 2019).

We found that the orientation of the country provides the strongest determinant of corporate reporting, as revealed by institutional theory and legitimacy theory. Cooperatives in stakeholder-orientated countries tend to act in accordance with stakeholder expectations, and in response to the organisation's visibility to stakeholders. Followed by the country as the strongest determinant are the size of cooperatives and the sector type they operate in, as determinants for the adoption of corporate reporting. The size can be explained by the agency, legitimacy and political cost theories. Smaller organizations with lower levels of voluntary disclosure can be explained by the financial burden caused by voluntary disclosure, and lesser reliance on external capital providers, with no direct role in management (Healy & Palepu, 2001; Jensen & Meckling, 1976; Katarachia et al., 2018; Lang & Lundholm, 1993; Leuz & Wysocki, 2016). Smaller firms also tend to legitimise their actions less as opposed to larger companies that tend to disclose more CSR related information than smaller companies in response to the information needs of all stakeholders (Solikhah, 2016). Larger firm would from a political cost perspective also tend to disclose more information due to their visibility and exposure to risks such as government interference or regulatory actions (Gamerschlag et al., 2011; Watts & Zimmerman, 1978).

## CHAPTER SIX

### 6. DETERMINANTS OF THE LEVEL OF ADOPTION OF THE DIFFERENT CATEGORIES OF CORPORATE REPORTING BY COOPERATIVES

Scholars have identified determinants of companies' motivation to publish some form of corporate report as discussed in Chapter 5. To the best of the author's knowledge, cooperative-specific determinants such as the characteristics and the form of the enterprise, ownership structures and membership types, have not been investigated. We present, in the chapter below, hypotheses as to such determinants motivating corporate reporting by cooperatives.

#### 6.1. Development of hypotheses

As discussed in Chapter 4 and Chapter 5.2.1, stakeholder theory explains voluntary disclosure with reference to firms communicating how fiduciary duties towards stakeholders are met and how stakeholder needs are complied with (Cotter et al., 2011; Deegan, 2002). Cooperatives are also more focussed on stakeholder needs and their stakeholders are more likely to gain value from the organisation (Bauer et al., 2012; Fernandez-Guadaño et al., 2020). Therefore, it is expected that cooperatives with stronger identity are positively associated with corporate reporting. Also discussed in Chapter 5.2.1, legitimacy theory relates to the social contract an organisation has with society to act in an acceptable and legitimate manner, and where not fulfilling such expectations could threaten the survival of the organization (Deegan, 2002). According to legitimacy theory, companies tend to seek acceptance of their activities from the societies in which they operate (Branco & Rodrigues, 2008).

As explained by institutional theory, coercive isomorphism is an institutional change mechanism where the society or legal environment dictates organisational structure, behaviour, processes and practices, and this includes annual and financial reporting (DiMaggio & Powell, 1983). Cooperatives' efforts to achieve these cooperative values and principles are therefore expected to be communicated by means of corporate reporting.

Transaction cost theory argues that markets and hierarchies constitute alternative governance structures, where the choice between them depends on transaction costs (Coase, 1937). The cooperative identity and values are, in the context of economic theory, explained as mechanisms to reduce transaction costs to its members. These values are member characteristics, based on a set of values and norms, which serve to reduce uncertainty between

members, and between them and an uncontrollable business environment (Nilsson, 1996). For cooperatives to maintain their traditional values in an environment where market information is readily available, and where cooperatives compete with IOFs (Bijman, 2018), it is essential cooperatives enter into interactive dialogue with stakeholders. Sustainability accounting, based on the relevant accountability tools, has been proved to be an effective method to involve stakeholders, and also to enhance cooperative identity (Battaglia et al., 2015). Moreover, as S. Novkovic (2022) suggests, cooperative identity can serve as a benchmark for the development of contextual social indicators for sustainability reporting, with the aim to establish transformative change.

Overall, we propose that cooperative-specific characteristics could increase the adoption of corporate reporting, and this leads to our first hypothesis:

**H1** Cooperatives with more cooperative-specific characteristics are more likely to adopt corporate reporting.

Although the finance model of cooperatives has traditionally relied on members' capital contributions and retained income (Harris, Stefanson, & Fulton, 1996), access constraints to capital have become a common phenomenon, leading to cooperatives accepting non-member capital (Mamouni Limnios, Joannides, Watson, Mazzarol, & Soutar, 2016). A study of the debt and equity instruments of the Global Top 300 cooperatives revealed that 58% of those organisations use some form of external (non-member) equity (Andrews, 2015; Barton, 2004). Mechanisms used by cooperatives to obtain such equity include accessing external equity by means of public listed subsidiaries, where the original cooperative parent is transformed into a non-operating holding company. This is achieved through cooperatives owning holding companies with interests in operations that will attract investors (Andrews, 2015), and through the issuing of so-called investment<sup>14</sup> shares.

Agency theory explains the problems associated with management acting on behalf of external capital providers, without voting power, where it helps to observe that the respective parties do not have similar goals nor the same risk appetites. It is also not always possible for external

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<sup>14</sup> Fonterra, the New Zealand dairy co-operative, is an example of a cooperative that allows non-members to invest in investment shares through a private market. Cooperatives' shares are however only owned by supplier-members to ensure democratic control is preserved.

capital providers to evaluate management's actions (Crutchley et al., 1999; Eisenhardt, 1989; Jensen, 1986). Management also has more information about a firm's future value than do external capital providers. In order to ensure that the interests of managers, and external capital providers including shareholders and debt holders are aligned, monitoring and bonding devices are implemented by capital providers so as to reduce agency and information asymmetry problems. The employment of monitoring and bonding devices, such as the appointment of a board of directors and establishment of board committees, are however costly (Cotter et al., 2011; Fama & Jensen, 1983; Jensen & Meckling, 1976). Integrated reporting, which is regarded as the final frontier of corporate reporting, is an effective tool used to illustrate a company's ability to create value over time (Vitolla et al., 2020). Management would therefore have the incentive to adopt corporate reporting for reducing asymmetric information, and as a result, mitigate agency costs (Vitolla et al., 2020) .

From an information asymmetry perspective, investors in listed instruments would expect risks associated with lower levels of CSR to be reflected in the cost of capital (Benlemlih, 2017), whilst voluntary disclosure could potentially decrease the cost of capital and enhance stock liquidity (Healy & Palepu, 2001). For S&P 500 companies, it was found that the level of voluntary disclosure is associated with the extent of ownership by institutional investors (Schoenfeld, 2017).

Overall, we propose that cooperative structures accommodating non-members could increase the adoption of corporate reporting, leading to our second hypothesis:

**H2** Cooperatives with an ownership structure accommodating non-members are more likely to adopt corporate reporting.

Where members are part of an organization producing or supplying goods, members tend to be involved in the governance and decision making of the organization as well (Deng, Hendrikse, & Liang, 2021; Espelt, 2020). In the case of agricultural cooperatives which are classified as producer cooperatives, relationships with members are built on trust and commitment which could lead to a decrease in agency problems (Hakelius & Hansson, 2016). This leads to the statement of hypothesis 3.

**H3** Producer cooperatives are less likely to adopt corporate reporting because of members' direct involvement in the business.

## **6.2. Data analysis**

Based on the codebook discussed in Chapter 4, we employed ordinal regression models and binary logistic models to identify statistically significant determinants for the adoption of the different corporate reports, the use of reporting frameworks, and the completion of auditing or assurance. An ordered score was used for each scenario.

### **6.2.1. Dependent variables**

As part of the codebook as explained in Chapter 4, an ordered score was used to establish the level of adoption for each type of reporting. For an AFS=1 score, the requirement was for the financial report to exist, and that it complied with a recognised financial reporting framework, and that it had been subject to external assurance (auditing). In the absence of any of these requirements, the report was scored AFS=0. For reports designated AR, IR, ESR, GR and MR, the ordered scores differentiated between the application or failure to adopt a recognised code, standard, or framework, as well as whether third party assurance had been obtained on the report. Where no report existed, the allocated score = 0; where a report existed, the allocated score = 1; where a report existed *and* was based on a code, standard or framework, the allocated score = 2. Finally, where a report existed and was subject to external assurance of compliance with a code, standard or framework, the allocated score = 3. For an OS=1 score, the requirement was merely that a standalone report existed.

### **6.2.2. Explanatory variables**

The following explanatory variables were investigated as proxies for this chapter's hypotheses that were developed in Chapter 6.1.

#### **6.2.2.1. Cooperative identity (COOPIDBAGPERC)**

The first proxy for H1 is the extent to which cooperative values are pointed out in the letter to members from the president or CEO. We quantified this by means of a 'bag of words' approach (Zhang, Jin, & Zhou, 2010). References made to the following terms were counted and calculated as a percentage of the total number of words in the letter: cooperative/co-operative; cooperate; cooperation; openness; caring; honesty; solidarity; democracy; democratic; member; autonomy; education; training; and community. The calculations were performed on a verbatim copy of the letter in Microsoft (MS) Excel, utilizing MS Excel formulae to count the use of the words and to calculate the percentage of use.

#### 6.2.2.2.Distributions to members only (DISMEMBERONLY)

The second proxy for H1 is whether the distribution of profits was to members only. Following the application of principles including economic participation and democratic control by its members (Birchall, 1997) we identified cooperatives in our sample which distributed profits only to its members (i.e. dividends, patronage refunds and discounts). We identified all distributions made during the year (according to corporate reports), and distinguished between distributions to members and to non-members. Distributions made to members only was treated as a dummy variable (where distributions included non-members, or where there were no distributions to members, the allocated score =0; distributions made only to members, the allocated score =1).

The following variables relating to H2 are applied as proxies for ownership structure:

#### 6.2.2.3.Listed instruments (LINSTRUMENTS)

The first proxy for H2 is the existence of listed instruments as a form of equity. Members' shares, in the case of a cooperative, are not transferable and can therefore not be exchanged as an IOF's instruments can. Listed instruments on the other hand, can be owned by members, non-members and the general public. Public listings tend to increase public interest in organisations and to increase agency conflict between owners and managers (van Breuk, Renes, & Trompeter, 2020); thus, it was necessary to investigate the effect of listed instruments on the adoption of corporate reporting. The existence of listed instruments was verified by scrutinising the financial statements, and where necessary, any other reports and the cooperative's websites. The existence or absence of listed instruments was used as a dummy variable (No listed instruments, the allocated score =0; listed instruments existed, the allocated score =1).

#### 6.2.2.4.External equity as percentage of total equity (EEMERC)

The second proxy for H2 is the extent to which non-members form part of the capital structure. In light of the problems associated with a principal delegate's responsibilities to an agent (Jensen, 1986), we investigated whether cooperatives who issued capital to non-members were more likely to adopt corporate reporting. Equity issued, according to the statement of financial position, was categorized according to whether it was member-owned, or non-member owned, and was expressed as a percentage of total equity. The percentage of non-member ownership was then used as a continuous variable.

The following variable is applied as a proxy for type of membership, relating to H3:

#### 6.2.2.5.Type of membership (MEMBERTYPE)

The different cooperative membership types are classified as consumer, producer/supplier and worker cooperatives (Nelson et al., 2019). Agricultural cooperatives would typically have producer members (Candemir, Duvaleix, & Latruffe, 2021). For the purposes of this dummy variable, we distinguish between agricultural cooperatives (representing producer members), and other types of cooperative (representing other types of members) (for other types of cooperatives, the allocated score =0; agricultural cooperatives, the allocated score =1).

### 6.2.3. Control variables

We included five control variables that are likely to determine the adoption of corporate reporting.

#### 6.2.3.1.Size

Similar to (Mukherjeea, Birdb, & Duppatia, 2018), we have included size (TURNOVER\_LN) as a control variable in this study. Previous studies found that firm size could affect environmental reporting processes and decision making (Adams, 2002), and this also applies in the case of cooperative and mutual enterprises (Bollas-Araya, Polo-Garrido, & Seguí-Mas, 2018).

#### 6.2.3.2.Country

For reasons similar to those of (Krishnamurti, Shams, & Velayutham, 2018) we have included the type of country as a control variable (COUNTRYTYPE). Determinants of stakeholder management and relationships could have a relationship to the entity's country (K. Kumar et al., 2017). Bollas-Araya et al., (2019) also found that cooperatives operating in stakeholder-orientated countries are more likely to adopt CSR information, which they explain by referring to institutional theory. For the purpose of this dummy variable, we distinguished between cooperatives domiciled in shareholder and stakeholder-orientated countries (shareholder orientated countries, the allocated score =0; stakeholder orientated countries, the allocated score =1).



Following implementation of legislative requirements and EU initiatives, a gradual increase in the quality and quantity of sustainability reporting has been observed in the case of European countries (Kolk, 2003). We have, in response to this, included EUONLY as control variable where we distinguish between non-EU countries and EU countries (non-EU countries, the allocated score =0; EU countries, the allocated score =1).

#### 6.2.3.3. Industry

Similar to (Shaw, Raithatha, Krishnan, & Cordeiro, 2021), we also considered industry related determinants as control variables. Following the findings made by (Bollas-Araya et al., 2019), we included SECTORTYPE as a control variable, representing the environmental sensitivity of the sector (environmentally less sensitive sectors, the allocated score =0; environmentally more sensitive sectors, the allocated score =1).

IOFs in the financial sector tend to have unique characteristics leading to increased legitimisation of their actions by disclosure voluntary information. FIN\_NONFIN has thus been included as a control variable for rendering financial services (financial sector, the allocated score =0; non-financial sector, the allocated score =1). Banks and insurance organizations are classified as organizations rendering financial services (Ferrarini, 2017).

### 6.2.4. **Research method**

#### 6.2.4.1. Ordinal regression and binary logistic regression models

As mentioned earlier, the aim of this part of the study is to identify determinants for the level of adoption of the different categories of corporate reporting by cooperatives. To achieve this, we have defined the following ordinal regression and binary logistic regression models.

Table 5. Descriptive statistics.

Continuous variables	N	Mean	Standard deviation	Min	Max
TURNOVER_LN (control variable)	78	2.33	0.82	0.92	4.39
IDBAGPERC	78	5.57	10.82	0	5.11
EEPERC	78	12.69	19.88	0	99.63
<b>Dummy variables</b>					
COUNTRYTYPE (control variable)	N	SECTORTYPE (control variable)		N	
Shareholder orientated	33	Less environmental sensitive		47	
Stakeholder orientated	45	More environmental sensitive		31	
FIN_NONFIN (control variable)		LINSTRUMENTS			
Financial sector	46	With no listed instruments		57	
Non-financial sector	32	With listed instruments		21	
COOPDIR		MEMBERTYPE			
Not listed on directory	63	Agricultural		22	
Listed on directory	15	Other		56	
DISMEMBERONLY		EUONLY			
Distributions not to members only	40	Non-EU countries		44	
Distributions to members only	38	EU countries		33	

Source: The authors

### *Ordinal logistic regression models*

Ordinal regression using PLUM estimation (SPSS version 28) was conducted for annual reporting (AR), integrated reporting (IR), environmental and social reporting (ESR) governance reporting (GR) and management reporting (MR), as these dependent variables were ordinal variables with a score ranging from 0 – 3. Each category represents: no report published; a report published based on no framework; a report published based on a framework; and a report published based on a framework, also subject to external assurance. In SPSS, ordinal logit and probit models are estimated by the PLUM command (Hirk, Hornik, & Vana, 2020; Park, 2015).

$$[\text{Log}(P(Y \leq j))] / [(1 - P(Y \leq j))] = \alpha_j + \beta_1 x_1 + \beta_2 x_2 + \dots + \beta_p x_p, \quad j=1, \dots, J-1]$$

y = ESR; AR; IR; GR; and MR.

$\alpha$  = constant term

$\beta_1$  to  $\beta_5$  = regression coefficients for each independent variable of interest

x1 = LINSTRUMENTS (No listed instruments issued = 0; Listed instruments issued = 1)

x2 = DISMEMBERONLY (Distributions made include non-members/no distributions made to members = 0; distributions made to members only = 1)

x3 = MEMBERTYPE (Agricultural or producer members = 0; Other members = 1)

x4 = EEPERC (External equity as a percentage of total equity)

x5 = IDBAGPERC (Percentage of words relating to cooperative identity used in president's letter to members)

$\beta_6$  to  $\beta_{10}$  = regression coefficients for each independent control variable

x6 = EUONLY (Domiciled in non-EU country = 0; Domiciled in EU country = 1)

x7 = COUNTRYTYPE (Domiciled in shareholder orientated country = 0; Domiciled in stakeholder orientated country =1)

x8 = SECTORTYPE (Trading in less environmentally sensitive sector = 0; Trading in more environmentally sensitive sector = 1)

x9 = FIN\_NONFIN (Financial sector = 0; Non-financial sector =1)

x10 = TURNOVER\_LN (Size in terms of total revenue)

#### *Binary logistic regression models*

For AFS and OS, we conducted binary logistic regression as these were dummy variables. For an AFS=1 score, an externally audited report, based on a recognised financial reporting framework had to exist, otherwise, AFS=0. For an OS=1 score, the only requirement was for a report to exist, and in the case of no report, OS=0.

$$\ln\left[\frac{p}{1-p}\right] = \beta_0 + \beta_1x_1 + \beta_2x_2 \dots + e$$

#### 6.2.4.2.Results

We identified significant determinants of corporate reporting by means of ordinal and logistic regression models. The descriptive statistics are summarised in Table 5. Ordinal regression Model 1 is documented in Table 6 and discussed below. Ordinal regression Model 2 and Model 3 are included as robustness tests and documented in Table 7 and Table 8.

Table 6. Ordinal regression Model 1.

		Annual reporting (AR)	Integrated reporting (IR)	Environmental and social reporting (ESR)	Management reporting (MR)	Governance reporting (GR)
COUNTRYTYPE	Beta	-0.610	-21.585	-2.456***	-1.333**	-1.875***
	Odds ratio	0.543	0.000	0.086	0.264	0.153
	P-value	0.331	-	<.001	0.011	<.001
TURNOVELR_LN	Beta	-0.480	2.745**	0.117	0.223	0.109
	Odds ratio	0.619	15.565	1.124	1.250	1.115
	P-value	0.187	0.021	0.673	0.458	0.695
EEMPERC	Beta	-0.020	0.005	0.007	-0.020	0.002
	Odds ratio	0.980	1.005	1.007	0.980	1.002
	P-value	0.292	0.876	0.597	0.198	0.873
MEMBERTYPE	Beta	0.451	0.580	0.582	0.853	0.028
	Odds ratio	1.570	1.786	1.790	2.347	1.028
	P-value	0.543	0.727	0.265	0.132	0.957
LINSTRUMENTS	Beta	-1.320	-0.523	-1.033*	-1.593***	-1.672***
	Odds ratio	0.267	0.593	0.356	0.203	0.188
	P-value	0.120	0.739	0.062	0.010	0.004
DISMEMBERONLY	Beta	0.310	1.477	-0.023	0.952*	-0.117
	Odds ratio	1.363	4.380	0.977	2.591	0.890
	P-value	0.630	0.352	0.963	0.074	0.813
IDBAGPERC	Beta	0.847**	0.308	0.295	0.212	0.284
	Odds ratio	2.333	1.361	1.343	1.236	1.328
	P-value	0.015	0.731	0.255	0.431	0.268

Notes: \*\*\*, \*\*, and \* indicate significance at the 1%, 5% and 10% levels, respectively

Source: The authors

Table 7. Ordinal regression Model 2.

		Annual reporting (AR)	Integrated reporting (IR)	Environmental and social reporting (ESR)	Management reporting (MR)	Governance reporting (GR)
EUONLY	Beta	-0.655	-2.177	-2.585***	-2.041***	-1.531***
	Odds ratio	0.519	0.113	0.075	0.129	0.216
	P-value	0.379	0.114	<.001	<.001	0.004
TURNOVELR_LN	Beta	-0.472	2.189**	0.088	0.223	0.099
	Odds ratio	0.624	8.926	1.092	1.250	1.104
	P-value	0.194	0.012	0.749	0.458	0.715
EUPERC	Beta	-0.023	0.001	-0.003	-0.031*	0
	Odds ratio	0.977	1.001	0.997	0.969	1
	P-value	0.262	0.967	0.838	0.056	0.983
MEMBERTYPE	Beta	0.382	0.083	0.108	0.608	-1.86
	Odds ratio	1.465	1.087	1.114	1.836	0.1557
	P-value	0.611	0.955	0.839	0.296	0.728
LINSTRUMENTS	Beta	-1.265	-0.396	-0.724	-1.426**	-1.393**
	Odds ratio	0.282	0.673	0.485	0.240	0.248
	P-value	0.144	0.78	0.187	0.022	0.015
DISMEMBERONLY	Beta	0.262	0.498	-0.054	0.903*	-0.215
	Odds ratio	1.299	1.645	0.947	2.467	0.807
	P-value	0.686	0.716	0.913	0.093	0.658
IDBAGPERC	Beta	0.793**	-0.009	0.051	0.043	0.107
	Odds ratio	2.210	0.991	1.052	1.044	1.113
	P-value	0.025	0.992	0.84	0.878	0.667

Notes: \*\*\*, \*\*, and \* indicate significance at the 1%, 5% and 10% levels, respectively

Source: The authors

Table 8. Ordinal regression Model 3.

		Annual reporting (AR)	Integrated reporting (IR)	Environmental and social reporting (ESR)	Management reporting (MR)	Governance reporting (GR)
FIN_NONFIN	Beta	-0.163	1.802	-0.548	0.709	-0.188
	Odds ratio	0.850	6.062	0.578	2.032	0.829
	P-value	0.723	0.305	0.317	0.248	0.728
COUNTRYTYPE	Beta	-0.531	-22.465	-2.454***	-1.220**	-1.889***
	Odds ratio	0.588	0.000	0.086	0.295	0.151
	P-value	0.403	-	<.001	0.025	<.001
SECTORTYPE	Beta	-0.882	0.524	0.374	-1.891***	0.171
	Odds ratio	0.414	1.689	1.454	0.151	1.186
	P-value	0.253	0.675	0.489	0.003	0.756
TURNOVER_LN	Beta	-0.488	2.667**	0.110	0.101	0.114
	Odds ratio	0.614	14.397	1.116	1.106	1.121
	P-value	0.185	0.015	0.692	0.735	0.681
EEMPERC	Beta	-0.022	0.015	0.007	-0.020	0.002
	Odds ratio	0.978	1.015	1.007	0.980	1.002
	P-value	0.242	0.681	0.591	0.192	0.877
LINSTRUMENTS	Beta	-1.302	0.295	-1.056*	-1.403**	-1.700***
	Odds ratio	0.272	1.343	0.348	0.246	0.183
	P-value	0.130	0.864	0.059	0.025	0.004
DISMEMBERONLY	Beta	0.323	2.039	-0.250	0.956	-0.083
	Odds ratio	1.381	7.683	0.779	2.601	0.920
	P-value	0.618	0.245	0.961	0.097	0.866
IDBAGPERC	Beta	0.835**	0.389	0.232	0.137	0.289
	Odds ratio	2.305	1.476	1.261	1.147	1.335
	P-value	0.020	0.728	0.376	0.623	0.269

Notes: \*\*\*, \*\*, and \* indicate significance at the 1%, 5% and 10% levels, respectively

Source: The authors

Table 9. Model 1: Collinearity diagnostics.

Independent variable	Collinearity statistics <sup>a</sup>	
	Tolerance	VIF
COUNTRYTYPE	0.876	1.142
EEPERCPERCENTAGE	0.610	1.640
LINSTRUMENTS	0.800	1.251
TurnLn	0.978	1.023
MEMBERTYPE	0.852	1.174
COOPIDBAGPERC	0.915	1.093
DISMEMBERONLY	0.817	1.223

<sup>a</sup>Dependent variables: AR;IR; ESR; GR; MR

Source: The authors

### *Ordinal regression*

For identifying determinants for the categories of corporate reporting (AR, IR, ESR MR and GR) we have utilised Model 1<sup>15</sup>. We have disregarded variables that have correlated in the same model (>0.70 correlation coefficient). To address possible multicollinearity for Model 1, we have calculated the variance inflation factors (VIFs) between the independent and the dependent variables. All scores were low (VIF<4) except for with MEMBERTYPE with a slightly higher score (VIF<6). Also refer Table 9.

The variables of interest included in Model 1 are LINSTRUMENTS, DISMEMBERONLY, MEMBERTYPE, EEPERC, IDBAGPERC. The control variables included are COUNTRYTYPE and TURNOVER\_LN. Model 2 and Model 3 were utilised to test the robustness of Model 1. In Model 2, the control variable, COUNTRYTYPE. was replaced with EUONLY. Since MEMBERTYPE was highly correlated to FIN\_NONFIN and SECTORTYPE,

<sup>15</sup> As we have observational data, we addressed endogeneity, we tested if residuals are correlated with any independent variable (Hill, Johnson, Greco, O'Boyle, & Walter, 2021) in all regressions. In case of continuous independent variables, we calculated correlations and performed Pearson product-moment correlation test, in all cases correlations showed low values (less than 12%) and did not result significant in any case. In case of categorical independent, we performed a t-test to check the difference of means of residuals between groups of categorical independent variables distinguishing the cases of variance homogeneity and variance heterogeneity between groups. In all cases, the null hypothesis no difference of means between groups were not rejected. Therefore, we do not find endogeneity problems in our estimates.

we have in Model 3 excluded this variable of interest and included FIN\_NONFIN, COUNTRYTYPE, SECTORTYPE and TURNOVER\_LN as the control variables. Although some cells were empty, resulting in a warning for Model 1, it is known that it only affects the Pearson and Likelihood Ratio model goodness of fit tests, as they are asymptotic tests that assume large expected counts in the cells. However, parameter estimates and associated tests for statistical significance are not affected. Ordinal regression used the last category as a reference category; therefore, in the case of this study, the reference category represents the category coded as a 1, in the case of independent dummy variables. Table 6 shows the results.

We have in general found that the variables relating to market, country and institutional determinants, have a stronger influence than the variables that are idiosyncratic to cooperative identity. Nevertheless, we have still succeeded in identifying the idiosyncratic determinants of cooperative identity in some reports. Moreover, the control variables that are based on theoretical justification provided the expected results, thus further contributing to the reliability of the model (Becker et al., 2016; Spector, 2021).

For the adoption of annual reporting, the only determinant is an idiosyncratic variable. We have identified that cooperatives with identity being emphasised strongly in the president/CEO's letter to members, are "more likely" (odds ratio = 2.333), thus 2.333 times more likely, to move to a higher level of AR, than to remain on the same level (odds ratio). The fact that similar results were observed in Model 2 and Model 3, confirms the robustness of the finding. In Model 2, we replaced a control variable, COUNTRYTYPE, with EUONLY as control variable. In Model 3 we excluded a variable of interest, MEMBERTYPE, and the control variables included in the model were FIN\_NONFIN, COUNTRYTYPE, SECTORTYPE and TURNOVER\_LN.

Cooperatives in shareholder orientated countries were indicated as less likely (odds ratio = 0.086) to adopt environmental and social reporting and this was in accordance with expectation. Although the variable of interest, LINSTRUMENTS, indicates that cooperatives with no listed instruments are less likely (0.356) to adopt environmental and social reporting, it is surprising that only market/institutional factors, and no idiosyncratic determinants, are significant predictors for ESR. While literature indicates cooperatives as being less active with environmental and social reporting (as well as other forms of corporate reporting), this is not necessarily a true reflection of its actions in practice, nor its contributions towards sustainability (Gallardo-Vázquez et al., 2014; Sarracino & Fumarco, 2018). It is also found that globally,



CSR is driven by market and institutional factors, as well as socio-political factors and globalisation (Dartey-Baah & Amoako, 2021).

Cooperatives in shareholder orientated countries were found to be less likely (odds ratio = 0.264) to adopt management reporting, and this is in accordance with expectation. We have identified two significant determinants of interest for management reporting. Cooperatives with no listed instruments in their financial structure, are marginally less likely (odds ratio = 0.203) to adopt management reporting. This finding clearly illustrates that cooperatives can adapt to the needs of external shareholders. A variable of interest that is also idiosyncratic to cooperative identity is the distribution of profits to members only. We found that such cooperatives are 2.591 times more likely to adopt formal management reporting, indicating that management is serious about proper communication where primarily members rely on profit distribution. Model 2 and Model 3 reflect similar results, and this indicates that findings for both variables of interest are robust.

Governance reporting is not predicted by an idiosyncratic determinant; but the variable of interest, listed instruments, was significant as cooperatives with no listed instruments are less likely (odds ratio = 0.188) to adopt governance reporting. Cooperatives with listed instruments therefore being more likely, can be explained by the fact that governance reporting is a requirement for the vast majority (if not all) stock exchanges globally. Despite the potential interest of cooperatives in integrated reporting (as explained from the perspective of Vancity, a Canadian financial services cooperative (Robbins, 2018)), our results do not support the view that big cooperatives were considering it at the time when the data was gathered. Also notable are the recent changes regarding the IIRC, as explained earlier in Chapter 4.1 (O'Dwyer et al., 2024). Although `TURNOVER_LN` is a significant predictor for IR, we have found that only 8% of cooperatives in our sample published integrated reports (see Table 1).

Based on the findings in Model 1, the proxies accepted for H1, was `IDBAGPERC` for AR, and `DISMEMBERONLY` for MR. For H2, the proxy `LINSTRUMENTS` was accepted for ESR, MR and GR. No proxy was accepted for H3.

Table 10. Determinants of other reporting, environmental and social reporting, and governance reporting.

Variables		Annual financial reporting (AFS)	Other reporting (OS)
	Beta	0.559	0.153
COUNTRYTYPE	Exp (beta)	1.749	1.165
	P-value	0.470	0.775
	Beta	-0.167	0.109
TURNOVER_LN	Exp (beta)	0.846	1.115
	P-value	0.702	0.717
	Beta	-0.014	-0.004
EEMPERC	Exp (beta)	0.986	0.996
	P-value	0.631	0.791
	Beta	0.031	0.047
MEMBERTYPE	Exp (beta)	1.032	1.048
	P-value	0.971	0.337
	Beta	20.137	0.681
LINSTRUMENTS	Exp (beta)	5556127442	1.975
	P-value	0.998	0.259
	Beta	0.343	0.047
DISMEMBERONLY	Exp (beta)	1.409	0.912
	P-value	0.630	0.753
	Beta	0.186	-0.092
IDBAGPERC	Exp (beta)	1.205	0.912
	P-value	0.641	0.753
	Chi-square	9	3.189
Hosmer and Lemeshow: Chi-square	4.251	10.992	
Cox and Snell R-square	0.109	0.04	
Nagelkerke R-square	0.196	0.056	
Block 0: Overall percentage (cut-off point: 0.5)	85.9	67.9	
Block 1: Overall percentage (cut-off point: 0.5)	85.9	65.4	
Increase from block 0 to block	0%	-4%	
Specificity (cut-off point 0.50) <sup>a</sup>	11	51	
Sensitivity (cut-off point 0.50) <sup>b</sup>	67	25	

Notes: \*\*\*, \*\*, and \* indicate significance at the 1%, 5% and 10% levels, respectively

<sup>a</sup> the percentage of predictions that will be correct when predicting non-occurrence, considering all the variables

<sup>b</sup> the percentage of predictions that will be correct when predicting occurrence, considering all the variables

Source: The authors

### *Binary logistic regression*

In assessing the model for annual financial reporting and other reporting, Table 10 sets out the information regarding the determinants included in the model, and the information regarding overall model fit for the items. The Hosmer and Lemeshow test showed adequate fit for the model for annual financial reporting ( $p: 4.251 > 0.05$ ) and other reporting ( $p: 10.992 > 0.5$ ). The correct prediction classification remained unchanged for AFS but for OS it decreased from Block 0<sup>16</sup> (67.9%) to Block 1 (65.4.9%). The fairly low pseudo Nagelkerke  $R^2$  measures ranged between 0.196 and 0.056 for AFS and OS respectively. However, the pseudo  $R^2$  measure do not indicate variance explained exactly as in the  $R^2$  calculated for linear regression models but are rather used when comparing competing models. No significant predictor was however identified for annual financial reporting or other reporting. It is however important to note that, although annual financial statements would be mandatory based on the size of the cooperatives in the sample, we have been left with the view that stakeholders probably do not have easy access to that on the cooperatives' webpages. Although we have identified instances of cooperatives publishing other reports, it is important to note that the literature supports the notion that cooperatives produce only a limited range of reports, other than the types of corporate reports included in this study, because the guidance/frameworks available specifically for cooperatives are still inadequate.

Based on the findings in the binary logistic regression model, no proxies were accepted for H1, H2 or H3.

### **6.3. Conclusions**

Similar to other studies, we have identified determinants that are market, country and institutionally driven as determinants of the adoption of that reporting (Songini Lucrezia, 2020). In addition, we identified idiosyncratic determinants for the adoption of reporting which are specific to cooperatives (Bollas-Araya et al., 2019). From the identification of non-idiosyncratic determinants we have found that cooperatives are adaptable. Cooperatives issuing listed instruments are more likely to publish management, governance and environmental and social reports. The adoption of management and governance reports that are more likely, could be explained as a response to risks relating to information asymmetry. Management by increasing its voluntary disclosure, is seeking to manage the cost of capital and to enhance

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<sup>16</sup> The null model is the model that only includes the constant.

stock liquidity (Benlemlih, 2017; Healy & Palepu, 2001; Schoenfeld, 2017). The adoption of environmental and social reporting could be explained as cooperatives attempting to legitimising their operations to the general public (Deegan, 2002).

From the idiosyncratic determinants we found that cooperative identity can determine the level of adoption of corporate reporting by cooperatives. Cooperatives that limit distribution of profits to members only, are also more likely to increase the adoption of management reporting. This could indicate that management reporting is an important channel of communication with members. Cooperatives who more assertively draw attention to their identity are also more likely to adopt annual reporting. The adoption of management and annual reporting can further be explained as attempts to mitigate transaction costs with members, and this aligns well with cooperative characteristics (Battaglia et al., 2015; Nilsson, 1996) .

## CHAPTER 7

### 7. CONCLUSION

Cooperatives conform to a model that is different to what is normally understood to be an enterprise, with distinctive interpretations of property rights, governance, and values. A unique characteristic of cooperatives' corporate reporting is it essentially addresses member-owners, and not shareholders. Despite this, most scholars have previously addressed the adoption and determinants of corporate reporting from the perspective of IOFs (Ahmed et al., 2021; Barth, 2006; De Villiers et al., 2017; Ferrarini, 2017; Isidro et al., 2020; Lai & Stacchezzini, 2021). Studies with a specific emphasis on cooperatives have mainly investigated the adoption and determinants of reports based on the GRI Guidelines and UN SDGs. These studies do also not take into account idiosyncratic characteristics of cooperatives which could affect reporting (Bollas-Araya et al., 2019; Polo-Garrido, Bollas-Araya, et al., 2022; Yakar Pritchard & Çalıyurt, 2021).

The aims of this study was is to obtain an understanding on the corporate reporting by cooperatives with reference to the types of reports published as well as the standards and frameworks applied by cooperatives; to identify determinants for the level of adoption of corporate reporting in general by cooperatives that are market, country and institutional driven; to identify determinants for the level of adoption of the different types of corporate reports by cooperatives that are idiosyncratic to cooperative identity, ownership structures and member involvement; and to review the body of literature and research on cooperatives to evaluate the appropriateness of current research approaches and theories to address the demand of revisiting the concept of cooperative identity.

We found a lack of cooperative-specific reporting, where the most common categories of published corporate reports are still annual reports and annual financial statements. Approximately half of the cooperatives publish environmental and social reports, governance reports and management reports, while the vast minority publish integrated reports. For determinants, that are market, country and institutional driven, for the level of adoption of corporate reporting in general, the country type was identified as the strongest determinant, followed by the size of cooperatives and the type of sector where cooperatives operate in.

For the adoption of the different types of corporate reporting, determinants that are market, country and institutional driven as well as determinants that idiosyncratic to cooperative

identity and owner structure have been identified in this study. The types of corporate reporting that are determined by market, country and institutional determinants only, are governance reporting and environmental and social reporting. Reporting determined by idiosyncratic factors only is annual reporting, whilst management reporting could be predicted by market, country and institutional determinants as well as idiosyncratic determinants. The idiosyncratic determinants for the level of adoption corporate reporting is an indication that cooperatives are in some instances aware of the importance to report on their identity. Cooperatives' who's reporting is determined by market, country and institutional factors is an indication that cooperatives have the potential to adapt to an environment where they compete with IOFs.

With the review of the body of literature and research on cooperatives, despite for evidence that cooperative identity relates to the principles of sustainability, the importance of the reliable measurement and reporting on the achievement thereof has also been identified. Although cooperatives in some industries and countries are successfully achieving these objectives, the importance of educating the public and own members on cooperative principles are highlighted to ensure the resilience of cooperative identity. It also seems that empirical papers provide limited information on how to address a redefinition of cooperative principles and values and isomorphic pressures on cooperative values.

Limitations of the study include the fact that the research is based on the Global Top 300 cooperatives, and thus can only be readily generalised to large cooperatives, but not to medium and small ones. Additionally, the data are cross-sectional and therefore limited to a single financial year. Trends in the improvement of reporting practices are consequently not considered, nor has the information on how cooperatives communicate with their stakeholders via websites and newsletters been analysed. Due to the labour-intensive research approach adopted (hand-collecting and coding of all corporate reports), and the availability of data the sample was limited to seventy-eight.

In light of the results that showed the limited adoption of disclosure practices and the lack of cooperative-specific reporting standards, future research on the real effects of existing practices would be relevant (Leuz & Wysocki, 2016). The outcome of such research would not only indicate the relevance of existing reporting practices, but could also inform the development of cooperative-specific corporate reporting practices including new regulations, reporting on cooperative business models and the achievement of cooperative values and principles.

## BIBLIOGRPAHY

- Abd Razak, F. N., Ramli, A., & Rasit, Z. A. (2020). Organisation isomorphism as determinants of environmental management accounting practices in Malaysian public listed companies. *Humanities and Social Sciences Letters*, 8(1), 110-122.
- Adams, C. A. (2002). Internal organisational factors influencing corporate social and ethical reporting: Beyond current theorising. *Accounting, Auditing & Accountability Journal*, 15(2), 223-250.
- Adams, C. A. (2020). Sustainability reporting and value creation. *Social and Environmental Accountability Journal*, 40(3), 191-197.
- Adams, C. A., & Mc Nicholas, P. (2007). Making a difference: Sustainability reporting, accountability and organisational change. *Accounting, Auditing & Accountability Journal*, 20(3), 382-402.
- AECA. (2022). Nota Técnica nº 3 Prácticas de divulgación de información no financiera en las cooperativas españolas de mayor dimensión: recomendaciones. Comisión de Cooperativas y otras Empresas de la Economía. In. Madrid: AECA.
- Agostini, M., Costa, E., & Korca, B. (2022). Non-financial disclosure and corporate financial performance under directive 2014/95/EU: evidence from Italian listed companies. *Accounting in Europe*, 19(1), 78-109.

- Ahmed, R. I., Zhao, G., Ahmad, N., & Habiba, U. (2021). A nexus between corporate social responsibility disclosure and its determinants in energy enterprises. *Journal of Business & Industrial Marketing*, 37(6), 1255-1268.
- Ali, I., Lodhia, S., & Narayan, A. K. (2021). Value creation attempts via photographs in sustainability reporting: a legitimacy theory perspective. *Meditari Accountancy Research*, 29(2), 247-263.
- Anders, S. B. (2019). Sustainability Reporting. *The CPA journal*, 89(7), 72-73.
- Andrews, M. A. (2015). *Survey of Co-operative Capital*. Retrieved from <https://www.ica.coop/sites/default/files/publication-files/ica-survey-of-co-operative-capital-report-en-420015827.pdf>
- Badiru, I. O., Yusuf, K. F., & Anozie, O. (2016). Adherence to cooperative principles among agricultural cooperatives in Oyo State, Nigeria. *Journal of Agricultural Extension*, 20(1), 142-152.
- Baggio, J., Barnett, A., Perez-Ibarra, I., Brady, U., Ratajczyk, E., Rollins, N., . . . Aggarwal, R. (2016). Explaining success and failure in the commons: the configural nature of Ostrom's institutional design principles. *International Journal of the Commons*, 10(2).
- Ball, R., Kothari, S., & Robin, A. (2000). The effect of international institutional factors on properties of accounting earnings. *Journal of accounting and economics*, 29(1), 1-51.



- Ballou, B., Chen, P.-C., Grenier, J. H., & Heitger, D. L. (2018). Corporate social responsibility assurance and reporting quality: Evidence from restatements. *Journal of Accounting and Public Policy, 37*(2), 167-188.
- Bankovsky, M. (2018). Alfred Marshall on cooperation: restraining the cruel force of competition. *History of Political Economy, 50*(1), 49-81.
- Barth, M. E. (2006). Research, standard setting, and global financial reporting. *Foundations and Trends® in Accounting, 1*(2), 71-165.
- Barth, M. E. (2007). Standard-setting measurement issues and the relevance of research. *Accounting and Business Research, 37*(sup1), 7-15.
- Bartoll, X., Findlay, I., Obaa, B., Altman, M., & Spear, R. (2019). Review of international co-operation. *COOP International Co-operation Alliance*.
- Barton, D. G. (2004). *A comparison of traditional and newly emerging forms of cooperative capitalization*. Paper presented at the NCR-194 Research on Cooperatives Annual Meeting, Kansas City.
- Battaglia, M., Bianchi, L., Frey, M., & Passetti, E. (2015). Sustainability reporting and corporate identity: action research evidence in an Italian retailing cooperative. *Business Ethics: A European Review, 24*(1), 52-72. doi:10.1111/beer.12067

- Bauer, C. M., Guzmán, C., & Santos, F. J. (2012). Social capital as a distinctive feature of Social Economy firms. *International entrepreneurship and management journal*, 8, 437-448.
- Becker, T. E., Atinc, G., Breugh, J. A., Carlson, K. D., Edwards, J. R., & Spector, P. E. (2016). Statistical control in correlational studies: 10 essential recommendations for organizational researchers. *Journal of Organizational Behavior*, 37(2), 157-167.
- Benlemlih, M. (2017). Corporate social responsibility and firm financing decisions: A literature review. *Journal of Multinational Financial Management*, 42, 1-10.
- Bi, S., Liu, Z., & Usman, K. (2017). The influence of online information on investing decisions of reward-based crowdfunding. *Journal of Business Research*, 71, 10-18.
- Bierecki, D. (2020). Legal status and development trends of credit unions in Polish law and its compliance with the WOCCU standards and the international cooperative principles. *Boletín de la Asociación Internacional de Derecho Cooperativo*(56), 19-45.
- Bijman, J. (2018). Exploring the sustainability of the cooperative model in dairy: The case of The Netherlands. *Sustainability*, 10(7), 2498.
- Birchall, J. (1997). Co-operatives Values and Principles. *Journal of Co-operative Studies*, 30(2).
- Birchall, J. (2004). Cooperatives and the millennium development goals.

- Birchall, J. (2005). Co-operative principles ten years on. *Review of International Cooperation*, 98(2), 45-63.
- Birchall, J. (2012). A member-owned business approach to the classification of co-operatives and mutuals. *The Co-operative Model in Practice*, 67.
- Blustein, D. L. (2011). A relational theory of working. *Journal of Vocational Behavior*, 79(1), 1-17.
- Boaventura, P. S. M., Abdalla, C. C., Araújo, C. L., & Arakelian, J. S. (2018). Value co-creation in the specialty coffee value chain: the third-wave coffee movement. *Revista de Administração de Empresas*, 58, 254-266.
- Bollas-Araya, H. M., Polo-Garrido, F., & Seguí-Mas, E. (2018). Determinants of CSR Reporting and Assurance: An Analysis of the Top Cooperative and Mutual Organisations. *Australian Accounting Review*, 00(0).
- Bollas-Araya, H. M., Polo-Garrido, F., & Seguí-Mas, E. (2019). Determinants of CSR reporting and assurance: an analysis of top cooperative and mutual organisations. *Australian Accounting Review*, 29(4), 692-707.
- Bonus, H. (1986). The cooperative association as a business enterprise: a study in the economics of transactions. *Journal of Institutional and Theoretical Economics (JITE)/Zeitschrift für die gesamte Staatswissenschaft*, 310-339.

- Borzaga, C., Galera, G., Franchini, B., Chiomento, S., Nogales, R., & Carini, C. (2020). Social enterprises and their ecosystems in Europe. *Comparative synthesis report*.
- Brammer, S., & Millington, A. (2006). Firm size, organizational visibility and corporate philanthropy: An empirical analysis. *Business Ethics: A European Review*, 15(1), 6-18.
- Branco, M. C., & Rodrigues, L. L. (2008). Factors influencing social responsibility disclosure by Portuguese companies. *Journal of Business Ethics*, 83(4), 685-701.
- Bretos, I., Errasti, A., & Marcuello, C. (2020). Is there life after degeneration? The organizational life cycle of cooperatives under a 'grow-or-die' dichotomy. *Annals of public and cooperative economics*, 91(3), 435-458.
- Broberg, P., Tagesson, T., & Collin, S.-O. (2010). What explains variation in voluntary disclosure? A study of the annual reports of corporations listed on the Stockholm Stock Exchange. *Journal of Management & Governance*, 14, 351-377.
- Bryson, J. M. (2004). What to do when stakeholders matter: stakeholder identification and analysis techniques. *Public management review*, 6(1), 21-53.
- Busco, C., Frigo, M. L., Quattrone, P., & Riccaboni, A. (2013). Redefining corporate accountability through integrated reporting. *Strategic Finance*, 95(2), 33.
- Byrne, N. (2022). Understanding co-operative identity through relationality. *Journal of co-operative Organization and Management*, 10(1), 100169.

- Candemir, A., Duvaleix, S., & Latruffe, L. (2021). Agricultural cooperatives and farm sustainability—A literature review. *Journal of Economic Surveys*, 35(4), 1118-1144.
- Carpenter, J. P. (2007). Punishing free-riders: How group size affects mutual monitoring and the provision of public goods. *Games and Economic Behavior*, 60(1), 31-51.
- Catalfo, P., & Wulf, I. (2016). Intangibles disclosure in management commentary regulation in Germany and Italy: a semantic approach. *Journal of Intellectual Capital*, 17(1), 103-119.
- Cavicchi, C., Oppi, C., & Vagnoni, E. (2019). On the feasibility of integrated reporting in healthcare: a context analysis starting from a management commentary. *Journal of Management and Governance*, 23(2), 345-371.
- Chaddad, F. R., & Cook, M. L. (2004). Understanding New Cooperative Models: An Ownership-Control Rights Typology. *Review of Agricultural Economics*, 26(3), 348-360. doi:10.1111/j.1467-9353.2004.00184.x
- Chow, C. W., & Wong-Boren, A. (1987). Voluntary financial disclosure by Mexican corporations. *Accounting review*, 533-541.
- CNMV. (2013). *Guide for the preparation of management reports of listed companies*. Barcelona: Comisión Nacional del Mercado de Valores.
- CNMV (Comisión Nacional del Mercado de Valores). (2018). *Corporate Governance Report of issuers of securities admitted to trading on regulated markets. Financial year 2018*.

Retrieved from Madrid:

[https://www.cnmv.es/DocPortal/Publicaciones/Informes/IAGC\\_2018en.PDF](https://www.cnmv.es/DocPortal/Publicaciones/Informes/IAGC_2018en.PDF)

Co-operatives UK. (2017). A Framework & Guidance for Co-operatives: Narrative Reporting. Retrieved from <https://www.uk.coop/sites/default/files/2020-10/narrative-reporting-report-final-web.pdf>

Co-operatives UK. (2019a). *Co-operative Corporate Governance Code*. Manchester.

Co-operatives UK. (2019b). A Framework & Guidance for Co-operatives: Key Performance Indicators. Retrieved from [https://www.uk.coop/sites/default/files/2020-10/KPI\\_report.pdf](https://www.uk.coop/sites/default/files/2020-10/KPI_report.pdf)

Coase, R. H. (1937). The nature of the firm. *economica*, 4(16), 386-405.

Collins, J. (1999). Turning goals into results: The power of catalytic mechanisms. *Harvard business review*, 77, 70-84.

Cook, M. L. (1995). The future of US agricultural cooperatives: A neo-institutional approach. *American Journal of Agricultural Economics*, 77(5), 1153-1159.

Cornforth, C. (2004). The governance of cooperatives and mutual associations: A paradox perspective. *Annals of Public and Cooperative Economics*, 75(1), 11-32.

- Corrigan, L. T., & Rixon, D. (2017). A dramaturgical accounting of cooperative performance indicators. *Qualitative Research in Accounting & Management*, 14(1), 60-80.  
doi:10.1108/QRAM-08-2016-0060
- Costa, E., & Agostini, M. (2016). Mandatory disclosure about environmental and employee matters in the reports of Italian-listed corporate groups. *Social and Environmental Accountability Journal*, 36(1), 10-33.
- Cotter, J., Lokman, N., & Najah, M. M. (2011). Voluntary disclosure research: which theory is relevant? *Journal of Theoretical Accounting Research*, 6(2), 77-95.
- Cowen, S. S., Ferreri, L. B., & Parker, L. D. (1987). The impact of corporate characteristics on social responsibility disclosure: A typology and frequency-based analysis. *Accounting, Organizations and Society*, 12(2), 111-122.
- Crutchley, C. E., Jensen, M. R., Jahera Jr, J. S., & Raymond, J. E. (1999). Agency problems and the simultaneity of financial decision making: The role of institutional ownership. *International review of financial analysis*, 8(2), 177-197.
- Cuomo, F., Mallin, C., & Zattoni, A. (2016). Corporate governance codes: A review and research agenda. *Corporate Governance: An International Review*, 24(3), 222-241.
- Curl, J. (2010). The cooperative movement in century 21. *Affinities: A journal of radical theory, culture, and action*.

- Dartey-Baah, K., & Amoako, G. K. (2021). Global CSR, drivers and consequences: a systematic review. *Journal of Global Responsibility*, 12(4), 416-434.
- Davis, P., & Worthington, S. (1993). Cooperative values: Change and continuity in capital accumulation the case of the British Cooperative Bank. *Journal of Business Ethics*, 12(11), 849-859. doi:10.1007/BF00871666
- de las Américas, C. (2019). Balance Social Cooperativo: certificación de Cooperativas de las Américas en Responsabilidad Social Cooperativa. *Recuperado de <https://www.aciamericas.coop/Balance-Social-Cooperativo-2394>*.
- De Matteis, F., & Preite, D. (2019). The Potential Role of Social Reporting in the Decision-Making Process of Cooperatives. In *Modernization and Accountability in the Social Economy Sector* (pp. 115-131): IGI Global.
- De Villiers, C., Cho, C. H., Turner, M. J., & Scarpa, R. (2021). Are shareholders willing to pay for financial, social and environmental disclosure? A choice-based experiment. *European Accounting Review*, 1-28.
- De Villiers, C., & Dimes, R. (2021). Determinants, mechanisms and consequences of corporate governance reporting: a research framework. *Journal of Management and Governance*, 25(1), 7-26.
- De Villiers, C., Venter, E. R., & Hsiao, P. C. K. (2017). Integrated reporting: background, measurement issues, approaches and an agenda for future research. *Accounting & Finance*, 57(4), 937-959.



- Deegan, C. (2002). Introduction: The legitimising effect of social and environmental disclosures—a theoretical foundation. *Accounting, Auditing & Accountability Journal*, 15(3), 282-311.
- Deller, S., Hoyt, A., Hueth, B., & Sundaram-Stukel, R. (2009). Research on the economic impact of cooperatives. *University of Wisconsin Center for Cooperatives*, 231(2209), 232-233.
- Deng, W., Hendrikse, G., & Liang, Q. (2021). Internal social capital and the life cycle of agricultural cooperatives. *Journal of Evolutionary Economics*, 31, 301-323.
- Dhaliwal, D. S., Radhakrishnan, S., Tsang, A., & Yang, Y. G. (2012). Nonfinancial disclosure and analyst forecast accuracy: International evidence on corporate social responsibility disclosure. *The accounting review*, 87(3), 723-759.
- Diamantopoulos, M. (2022). Bridging co-operation's communication gap: The Statement on the Co-operative Identity, the sociology of co-operative education's shifting terrain, and the problem of public opinion. *Journal of co-operative Organization and Management*, 10(1). doi:10.1016/j.jcom.2021.100161
- DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American sociological review*, 147-160.
- DotCooperation LLC. (2023). The COOP Marque. Retrieved from <https://identity.coop/marque/>

Dumay, J., Bernardi, C., Guthrie, J., & Demartini, P. (2016). Integrated reporting: a structured literature review. *Accounting Forum*, 40(3), 166-185.

EFRAG. (2021). Project news. Retrieved from <https://www.efrag.org/News/Project-489/EFRAG-welcomes-its-role-in-the-European-Commissions-proposal-for-a-new-CSR>

EFRAG. (2023a). EFRAG-GRI Joint statement of interoperability. Retrieved from <https://efrag.org/news/public-444/EFRAG-GRI-Joint-statement-of-interoperability->

EFRAG. (2023b). The ESRS per delegated act (adopted on 31 July 2023). Retrieved from <https://www.efrag.org/lab6?>

Egia, E. G., & Etxeberria, G. M. (2019). Training of cooperative values as a decisive element in new jobs to be created by 21st century cooperatives. *Boletín de la Asociación Internacional de Derecho Cooperativo*(54), 97-114. doi:10.18543/baidc-54-2019pp97-114

Eisenhardt, K. M. (1989). Agency theory: An assessment and review. *Academy of Management Review*, 14(1), 57-74.

El-Said, O., Aziz, H., Mirzaei, M., & Smith, M. (2022). Mapping corporate social responsibility practices at the international level: Systematic review and content analysis approach. *Sustainability Accounting, Management and Policy Journal*(pre-print).

- Elijido-Ten, E. (2004). *Determinants of environmental disclosures in a developing country: an application of the stakeholder theory*. Paper presented at the Fourth Asia Pacific Interdisciplinary Research in Accounting Conference.
- Enache, L., & Hussainey, K. (2020). The substitutive relation between voluntary disclosure and corporate governance in their effects on firm performance. *Review of Quantitative Finance and Accounting*, 54(2), 413-445.
- Espelt, R. (2020). Agroecology presumption: The role of CSA networks. *Journal of Rural Studies*, 79, 269-275.
- Essene, J. C. (1953). How Japanese accounting systems for cooperatives have been revised under the allied occupation. *Journal of Accountancy (pre-1986)*, 95(000003), 336.
- EU. (2014). *Directive 2014/95/EU of the European parliament and of the council of 22 October 2014 amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups*. European Union.
- EU. (2017). Guidelines on non-financial reporting (methodology for reporting non-financial information). Retrieved from [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52017XC0705\(01\)&from=EN](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52017XC0705(01)&from=EN)
- EU. (2022). DIRECTIVE (EU) 2022/2464 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 14 December 2022 amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as regards

corporate sustainability reporting. Retrieved from <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32022L2464>

Fairbairn, B. (1994). *The meaning of Rochdale: The Rochdale pioneers and the co-operative principles*. Retrieved from <https://ideas.repec.org/p/ags/uscoop/31778.html>

Fairbairn, B. (2000). Co-operative Values and the Cold War: The Rebuilding and Undermining of the German Consumer Movement, 1945–1955. *Annals of public and cooperative economics*, 71(4), 637-663.

Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *The Journal of Law and Economics*, 26(2), 301-325.

Fernandez-Feijoo, B., Romero, S., & Ruiz, S. (2014). Effect of stakeholders' pressure on transparency of sustainability reports within the GRI framework. *Journal of Business Ethics*, 122(1), 53-63.

Fernandez-Guadaño, J., Lopez-Millan, M., & Sarria-Pedroza, J. (2020). Cooperative entrepreneurship model for sustainable development. *Sustainability*, 12(13), 5462.

Ferrarini, G. (2017). Understanding the role of corporate governance in financial institutions: A research agenda. *European Corporate Governance Institute (ECGI)-Law Working Paper*(347).

Fischer, E. F., Victor, B., & Asturias de Barrios, L. (2021). Quality versus solidarity: Third Wave coffee and cooperative values among smallholding Maya farmers in Guatemala. *The Journal of peasant studies*, 48(3), 640-657.

Flecha, R., & Ngai, P. (2014). The challenge for Mondragon: Searching for the cooperative values in times of internationalization. *Organization*, 21(5), 666-682.  
doi:10.1177/1350508414537625

Flower, J. (2015). The International Integrated Reporting Council: A story of failure. *Critical Perspectives on Accounting*, 27(5), 1-17.

Forney, J., & Häberli, I. (2017). Co-operative values beyond hybridity: The case of farmers' organisations in the Swiss dairy sector. *Journal of Rural Studies*, 53, 236-246.  
doi:10.1016/j.jrurstud.2017.04.003

Freeman, R. E., Harrison, J. S., Wicks, A. C., Parmar, B. L., & De Colle, S. (2010). *Stakeholder theory: The state of the art*: Cambridge University Press.

Friedman, M. (1970). The Social Responsibility of Business is to Increase its Profits. *The New York Times Magazine*. Retrieved from  
<http://www.colorado.edu/studentgroups/libertarians/issues/friedman-soc-resp-business.html>

Fulton, M. E. (2001). New Generation Co-Operative Development In Canada. *Centre for the Study of Co-operatives*, University of Saskatchewan.

- Gallardo-Vázquez, D., Gonçalves das Neves, J., Patrícia Duarte, A., Simões, E., Sánchez-Hernández, M. I., & Castilla-Polo, F. (2014). Theoretical and methodological framework for the qualitative validation of an explanatory model of social responsibility in cooperatives societies. *Management Research: Journal of the Iberoamerican Academy of Management*, 12(3), 259-287. doi:10.1108/mrjiam-10-2013-0524
- Gamerschlag, R., Möller, K., & Verbeeten, F. (2011). Determinants of voluntary CSR disclosure: empirical evidence from Germany. *Review of Managerial Science*, 5(2-3), 233-262.
- García-Sánchez, I. M., & Noguera-Gámez, L. (2017). Integrated reporting and stakeholder engagement: The effect on information asymmetry. *Corporate Social Responsibility and Environmental Management*, 24(5), 395-413.
- Gergen, K. J. (2009). *Relational being: Beyond self and community*: Oxford University Press.
- Giannakas, K., Fulton, M., & Sesmero, J. (2016). Horizon and free-rider problems in cooperative organizations. *Journal of Agricultural and Resource Economics*, 372-392.
- Giner, B., & Luque-Vílchez, M. (2022). A commentary on the “new” institutional actors in sustainability reporting standard-setting: a European perspective. *Sustainability Accounting, Management and Policy Journal*(pre-print).

- Goel, S. (2013). Relevance and potential of co-operative values and principles for family business research and practice. *Journal of co-operative Organization and Management*, 1(1), 41-46. doi:10.1016/j.jcom.2012.11.002
- Goforth, C. R. (2001). Application of the federal securities laws to equity interests in traditional and value-added agricultural cooperatives. *Drake J. Agric. L.*, 6, 31.
- Goodman, J. (1994). It's a matter of governance: The angry members may be Right. *Management Quarterly*, 35, 2-2.
- GRI. (2023). Get ready for enhanced sustainability reporting. Retrieved from <https://www.globalreporting.org/news/news-center/get-ready-for-enhanced-sustainability-reporting-with-gri/>
- Guzmán, C., Santos, F. J., & Barroso, M. d. I. O. (2020). Analysing the links between cooperative principles, entrepreneurial orientation and performance. *Small Business Economics*, 55(4), 1075-1089.
- Guzmán, I., & Arcas, N. (2008). The usefulness of accounting information in the measurement of technical efficiency in agricultural cooperatives. *Annals of public and cooperative economics*, 79(1), 107-131.
- Hahn, R., & Kühnen, M. (2013). Determinants of sustainability reporting: a review of results, trends, theory, and opportunities in an expanding field of research. *Journal of Cleaner Production*, 59, 5-21.

- Hakelius, K., & Hansson, H. (2016). Members' attitudes towards cooperatives and their perception of agency problems. *International food and agribusiness management review*, 19(4), 23-36.
- Haller, A., Link, M., & Groß, T. (2017). The term 'non-financial information'—a semantic analysis of a key feature of current and future corporate reporting. *Accounting in Europe*, 14(3), 407-429.
- Hansmann, H. (1996). *The Ownership of Enterprise* (1996). Cambridge Mass.
- Hansmann, H. (1999). Cooperative firms in theory and practice. *LTA*, 48(4), 387-403.
- Hansmann, H. (2013). All firms are cooperatives—and so are governments. *Journal of Entrepreneurial and Organizational Diversity*, 2(2), 1-10.
- Harris, A., Stefanson, B., & Fulton, M. E. (1996). New generation cooperatives and cooperative theory. *Journal of Cooperatives*, 11(1142-2016-92720), 15-28.
- Healy, P. M., & Palepu, K. G. (2001). Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature. *Journal of accounting and economics*, 31(1), 405-440.
- Hellman, N., Nilsson, H., Tylaite, M., & Vural, D. (2022). The Impact of an IFRS for SMEs-based Standard on Financial Reporting Properties and Cost of Debt Financing: Evidence from Swedish Private Firms. *Forthcoming at European Accounting Review*.



- Hicks, E., Maddocks, J., Robb, A., & Webb, T. (2007). *Perspectives on the Accounting and Reporting Needs of Co-operatives and Co-operators: A Preliminary Examination*. Paper presented at the CIRIEC Conference, Victoria.
- Hill, A. D., Johnson, S. G., Greco, L. M., O'Boyle, E. H., & Walter, S. L. (2021). Endogeneity: A review and agenda for the methodology-practice divide affecting micro and macro research. *Journal of management*, 47(1), 105-143.
- Hilson, M. (2011). A consumers' international? The international cooperative alliance and cooperative internationalism, 1918–1939: A Nordic perspective. *International Review of Social History*, 56(2), 203-233.
- Hirk, R., Hornik, K., & Vana, L. (2020). mvord: an R package for fitting multivariate ordinal regression models. *Journal of Statistical Software*, 93, 1-41.
- Howarth, D., & Quaglia, L. (2013). Banking on stability: the political economy of new capital requirements in the European Union. *Journal of European Integration*, 35(3), 333-346.
- Hoyt, A. (2021). *Report on the 33rd world cooperative of the congress international cooperative alliance*. Retrieved from World cooperative congress:
- Hrasky, S. (2012). Carbon footprints and legitimation strategies: symbolism or action? *Accounting, Auditing & Accountability Journal*, 25(1), 174-198.

- Huang, C.-L., & Kung, F.-H. (2010). Drivers of environmental disclosure and stakeholder expectation: Evidence from Taiwan. *Journal of Business Ethics*, 96(3), 435-451.
- Hummel, K., & Schlick, C. (2016). The relationship between sustainability performance and sustainability disclosure—Reconciling voluntary disclosure theory and legitimacy theory. *Journal of Accounting and Public Policy*, 35(5), 455-476.
- IASB. (2018a). *The annotated IFRS standards: Standards issued 1 January 2018 reflecting changes not yet required*. London: IFRSF.
- IASB. (2018b). *Conceptual Framework for Financial Reporting*. London: IFRSF.
- ICA. (1995). International Cooperative Alliance Statement on the cooperative identity. Retrieved from <https://ica.coop/en/cooperatives/cooperative-identity>
- ICA. (2015). *Guidance Notes to the Co-operative Principles*. Retrieved from [www.ica.coop](http://www.ica.coop): <https://www.ica.coop/sites/default/files/publication-files/ica-guidance-notes-en-310629900.pdf>
- ICA. (2016). *Sustainability Reporting for Co-operatives: A Guidebook*. In (pp. 32). Retrieved from <https://ica.coop/sites/default/files/publication-files/ica-sustainability-reporting-guidebook-1575997496.pdf>
- ICA. (n.d.-a). Cooperative Principles. Retrieved from <https://www.ica.coop/en/cooperatives/cooperative-identity>

ICA. (n.d.-b). Cooperative Principles. Retrieved from

<https://www.ica.coop/en/cooperatives/cooperative-identity>

ICA. (n.d.-c). Facts and figures. Retrieved from [https://www.ica.coop/en/cooperatives/facts-](https://www.ica.coop/en/cooperatives/facts-and-figures#toc-database-of-cooperative-statistics)

[and-figures#toc-database-of-cooperative-statistics](https://www.ica.coop/en/cooperatives/facts-and-figures#toc-database-of-cooperative-statistics)

ICA Asia-Pacific. (2019). Cooperatives in Japan. Retrieved from

<https://icaap.coop/ICANew/President/assets/Cooperatives%20in%20Japan-Country%20Brochure.pdf>

IFRSF. (2010). IFRS Practice Statement 1 Management Commentary A framework for

presentation. Retrieved from <https://www.ifrs.org/issued-standards/list-of-standards/management-commentary-practice-statement/>

IFRSF. (2020). Consultation Paper on Sustainability Reporting. Retrieved from

<https://cdn.ifrs.org/content/dam/ifrs/project/sustainability-reporting/consultation-paper-on-sustainability-reporting.pdf?>

IFRSF. (2022a). IFRS Foundation and GRI sign agreement. Retrieved from

<https://www.ifrs.org/news-and-events/news/2022/03/ifrs-foundation-signs-agreement-with-gri/>

IFRSF. (2022b). Sustainability-related Reporting. Retrieved from

<https://www.ifrs.org/projects/completed-projects/2021/sustainability-reporting/#about>

IFRSF. (2023). Supporting materials for IFRS Sustainability Disclosure Standards. Retrieved from <https://www.ifrs.org/supporting-implementation/supporting-materials-for-ifrs-sustainability-disclosure-standards/>

IIRC. (2011). *Towards Integrated Reporting: Communicating Value in the 21st Century*. Retrieved from [https://integratedreporting.org/wp-content/uploads/2011/09/IR-Discussion-Paper-2011\\_spreads.pdf](https://integratedreporting.org/wp-content/uploads/2011/09/IR-Discussion-Paper-2011_spreads.pdf)

IIRC. (2013). *The International <IR> Framework: Integrated Reporting*. In. Retrieved from <https://integratedreporting.org/wp-content/uploads/2013/12/13-12-08-THE-INTERNATIONAL-IR-FRAMEWORK-2-1.pdf>

Iliopoulos, C., & Valentinov, V. (2022). Cooperative governance under increasing member diversity: Towards a new theoretical framework. *Scandinavian Journal of Management*, 38(1), 101192.

International Cooperative and Mutual Insurance Federation (ICMIF). (2024). Sustainability and social responsibility. Retrieved from <https://www.icmif.org/sustainability-and-social-responsibility/>

International Labour Organization. (2002). R193 - Promotion of Cooperatives Recommendation, 2002 (No. 193). In (Vol. 193). [www.ilo.org](http://www.ilo.org): International Labour Organization.

- IoDSA. (2009). *King Report on Governance for South Africa 2009*. Retrieved from [https://cdn.ymaws.com/www.iodsa.co.za/resource/resmgr/king\\_iii/King\\_Report\\_on\\_Governance\\_fo.pdf](https://cdn.ymaws.com/www.iodsa.co.za/resource/resmgr/king_iii/King_Report_on_Governance_fo.pdf)
- IOSCO. (2019). Sustainable finance in emerging markets and the role of securities regulators.
- Isidro, H., Nanda, D. D., & Wysocki, P. D. (2020). On the relation between financial reporting quality and country attributes: Research challenges and opportunities. *The accounting review*, 95(3), 279-314.
- Iyer, B., Gopal, G., Dave, M., & Singh, S. (2021). Centering cooperatives and cooperative identity within the social and solidarity economy: Views from the Asia-Pacific cooperative apexes and federations. *Journal of co-operative Organization and Management*, 9, 100145.
- Jaffar, N., Nor, A. S. M., & Selamat, Z. (2018). Analysis of Voluntary Disclosure Before and after the Establishment of the Integrated Reporting Framework. *Acc. Fin. Review*, 3(4), 105-113.
- James, M. L. (2013). Sustainability and integrated reporting: Opportunities and strategies for small and midsize companies. *The Entrepreneurial Executive*, 18, 17.
- Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *The American economic review*, 76(2), 323-329.

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs, and ownership structure. *Journal of financial economics*, 3(4), 305-360.

Jensen, M. C., & Meckling, W. H. (1978). Can the corporation survive? *Financial Analysts Journal*, 34(1), 31-37.

Joseph, G. (2007). Implications of a stakeholder view on corporate reporting. *Accounting and the Public Interest*, 7(1), 50-65.

Katarachia, A., Pitoska, E., Giannarakis, G., & Poutoglidou, E. (2018). The drivers of corporate governance disclosure: the case of Nifty 500 Index. *International Journal of Law and Management*, 1.

Kolk, A. (2003). Trends in sustainability reporting by the Fortune Global 250. *Business Strategy and the Environment*, 12(5), 279-291.

Kolk, A., & Perego, P. (2010). Determinants of the adoption of sustainability assurance statements: An international investigation. *Business Strategy and the Environment*, 19(3), 182-198.

KPMG. (2017). *Survey of Corporate Sustainability Reporting*. Retrieved from [kpmg.com/crreporting](https://www.kpmg.com/crreporting)

KPMG. (2020a). *Survey of Corporate Sustainability Reporting*. Retrieved from <https://assets.kpmg/content/dam/kpmg/xx/pdf/2020/11/the-time-has-come.pdf>

KPMG. (2020b). *Towards net zero*. Retrieved from

<https://assets.kpmg/content/dam/kpmg/xx/pdf/2020/11/towards-net-zero.pdf>

Krishnamurti, C., Shams, S., & Velayutham, E. (2018). Corporate Social Responsibility and Corruption Risk: A Global Perspective. *Journal of Contemporary Accounting & Economics*, 14, 1-21.

Kumar, K., Boesso, G., & Yao, J. (2017). Cultural values, institutional arrangements and stakeholder management culture: a cross-national study. *Review of International Business and Strategy*, 27(4), 450-465.

Kumar, V., Wankhede, K., & Gena, H. (2015). Role of cooperatives in improving livelihood of farmers on sustainable basis. *American journal of educational research*, 3(10), 1258-1266.

Lai, A., & Stacchezzini, R. (2021). Organisational and professional challenges amid the evolution of sustainability reporting: a theoretical framework and an agenda for future research. *Meditari Accountancy Research*, 29(3), 405-429.

Lang, M., & Lundholm, R. (1993). Cross-sectional determinants of analyst ratings of corporate disclosures. *Journal of Accounting Research*, 31(2), 246-271.

Larrinaga-González, C., Carrasco-Fenech, F., Caro-González, F. J., Correa-Ruíz, C., & Páez-Sandubete, J. M. (2001). The role of environmental accounting in organizational change-An exploration of Spanish companies. *Accounting, Auditing & Accountability Journal*, 11(4), 723-740.

- Leuz, C., & Wysocki, P. D. (2016). The economics of disclosure and financial reporting regulation: Evidence and suggestions for future research. *Journal of Accounting Research, 54*(2), 525-622.
- Levy, D. L., Szejnwald Brown, H., & De Jong, M. (2010). The contested politics of corporate governance: The case of the global reporting initiative. *Business & Society, 49*(1), 88-115.
- Littan, S. (2022). The future of responsible reporting. *Strategic Finance, 103*(8), 19-20.
- Liu, L., Zhang, J. Z., He, W., & Li, W. (2021). Mitigating information asymmetry in inventory pledge financing through the Internet of things and blockchain. *Journal of Enterprise Information Management, 34*(5), 1429-1451.
- Lodhia, S. (2014). Exploring the Transition to Integrated Reporting Through a Practice Lens: An Australian Customer Owned Bank Perspective. *Journal of Business Ethics, 129*(3), 585-598. doi:10.1007/s10551-014-2194-8
- Lopatta, K., Canitz, F., & Tideman, S. A. (2022). Abnormal CSR and financial performance. *European Accounting Review, 1*-27.
- López-Espinosa, G., Maddocks, J., & Polo-Garrido, F. (2012). Co-operatives and the equity-liabilities puzzle: concerns for accounting standard-setters. *Accounting Horizons, 26*(4), 767-787.



- López-Espinosa, G., Maddocks, J., & Polo-Garrido, F. (2009). Equity-Liabilities Distinction: The case for Co-operatives. *Journal of International Financial Management & Accounting*, 20(3), 274-306.
- Mähönen, J. (2020). Comprehensive approach to relevant and reliable reporting in Europe: A Dream impossible? *Sustainability*, 12(13), 5277.
- Mamić Sačer, I., Meeh-Bunse, G., & Luer, K. (2019). Croatian and German Accounting—A Guiding Overview of Regulations Against the Background of the Accounting Directive 2013/34/EU. *InterEULawEast: Journal for the International and European Law, Economics and Market Integrations*, 6(2), 116-133.
- Mamouni Limnios, E. A., Joannides, C. C. V., Watson, J., Mazzarol, T., & Soutar, G. N. (2016). Financial instruments and equity structures for raising capital in co-operatives. *Journal of Accounting & Organizational Change*, 12(1), 50-74. doi:10.1108/jaoc-01-2013-0006
- Martínez-Ferrero, J., Ruiz-Cano, D., & García-Sánchez, I. M. (2016). The causal link between sustainable disclosure and information asymmetry: The moderating role of the stakeholder protection context. *Corporate Social Responsibility and Environmental Management*, 23(5), 319-332.
- Mattila, M. (2009). Corporate social responsibility and image in organizations: for the insiders or the outsiders? *Social Responsibility Journal*, 5(4), 540-549.

- Mazzarol, T., Clark, D., Reboud, S., & Limnios, E. M. (2018). Developing a conceptual framework for the co-operative and mutual enterprise business model. *Journal of Management & Organization*, 24(4), 551-581.
- McKillop, D., French, D., Quinn, B., Sobiech, A. L., & Wilson, J. O. (2020). Cooperative financial institutions: A review of the literature. *International review of financial analysis*, 71, 101520.
- Mellor, M. (2012). Co-operative Principles for a Green Economy. *Capitalism Nature Socialism*, 23(2), 108-110. doi:10.1080/10455752.2012.675237
- Meyer, J. W., & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. *American journal of sociology*, 83(2), 340-363.
- Miller, M. G. (1937). The Democratic Theory of Coöperation. *The ANNALS of the American Academy of Political and Social Science*, 191(1), 29-37.
- Molina, E. C., Poveda, M. P., Córdova, J. D., Nuela, D., Meza, E. Z., & Tobar, C. (2018). *Social Responsibility Web System as a Management and Dissemination Tool for Cooperative Principles*. Paper presented at the 2018 International Conference on eDemocracy & eGovernment (ICEDEG).
- Mondragon Corporation. (2024). Retrieved from <https://www.mondragon-corporation.com/en/about-us/>

- Morales Gutierrez, A. C. (2005). A comparative synthesis of 20th century agricultural cooperative movements in Europe. *Journal of rural cooperation*, 33(886-2016-64564), 47-65.
- Mukherjee, A., Bird, R., & Duppatia, G. (2018). Mandatory Corporate Social Responsibility: The Indian experience. *Journal of Contemporary Accounting & Economics*, 14, 254-265.
- Naseem, M. A., Rehman, R. U., Ikram, A., & Malik, F. (2017). Impact of board characteristics on corporate social responsibility disclosure. *Journal of Applied Business Research (JABR)*, 33(4), 801-810.
- Neamtan, N. (2002). The social and solidarity economy: Towards an 'alternative' globalisation.
- Nelson, T., Nelson, D., Huybrechts, B., Dufays, F., O'shea, N., & Trasciani, G. (2019). Emergent identity formation and the co-operative: theory building in relation to alternative organizational forms. In *Entrepreneurial Identity and Identity Work* (pp. 110-134): Routledge.
- Neuendorf, K. A., Skalski, P. D., Cajigas, J. A., & Allen, J. C. (2017). *The content analysis guidebook* (Second edition. ed.). Thousand Oaks, California: SAGE.
- Nilsson, J. (1996). The nature of cooperative values and principles: Transaction cost theoretical explanations. *Annals of public and cooperative economics*, 67(4), 633-653.

- Nilsson, J. (2001). Organisational principles for co-operative firms. *Scandinavian Journal of Management*, 17(3), 329-356.
- Nilsson, J., & Ollila, P. (2013). Cooperative values in internationalized operations. In (Vol. 29, pp. 1-2): Wiley Online Library.
- Nishitani, K., Unerman, J., & Kokubu, K. (2021). Motivations for voluntary corporate adoption of integrated reporting: A novel context for comparing voluntary disclosure and legitimacy theory. *Journal of Cleaner Production*, 322, 129027.
- Noble, M., & Ross, C. (2021). From principles to participation: 'The Statement on the Cooperative Identity' and Higher Education Co-operatives. *Journal of co-operative Organization and Management*, 9(2). doi:10.1016/j.jcom.2021.100146
- Novkovic, S. (2006). Co-operative business: The role of co-operative principles and values. *Journal of Co-operative Studies*, 39(1), 5-16.
- Novkovic, S. (2022). Cooperative identity as a yardstick for transformative change. *Annals of public and cooperative economics*, 93(2), 313-336.
- Novkovic, S., & Power, N. (2005). Agricultural and rural cooperative viability: A management strategy based on cooperative principles and values. *Journal of rural cooperation*, 33(1), 67-78.

- Novkovic, S., Puusa, A., & Miner, K. (2022). Co-operative identity and the dual nature: From paradox to complementarities. *Journal of co-operative Organization and Management*, 10(1). doi:10.1016/j.jcom.2021.100162
- O'Dwyer, B., Humphrey, C., & Rowbottom, N. (2024). From institutional integration to institutional demise: The disintegration of the International Integrated Reporting Council (IIRC). *Critical Perspectives on Accounting*, 99, 102699.
- O'Sullivan, N., & Diacon, S. R. (2003). Board composition and performance in life insurance companies. *British Journal of Management*, 14(2), 115-129.
- O'donovan, G. (2002). Environmental disclosures in the annual report. *Accounting, Auditing & Accountability Journal*, 15(3), 344-371.
- Oczkowski, E., Krivokapic-Skoko, B., & Plummer, K. (2013). The meaning, importance and practice of the co-operative principles: Qualitative evidence from the Australian co-operative sector. *Journal of co-operative Organization and Management*, 1(2), 54-63.
- Oliveira, J., Rodrigues, L. L., & Craig, R. (2011). Voluntary risk reporting to enhance institutional and organizational legitimacy: Evidence from Portuguese banks. *Journal of Financial Regulation and Compliance*, 19(3), 271-288.
- Österberg, P., & Nilsson, J. (2009). Members' perception of their participation in the governance of cooperatives: the key to trust and commitment in agricultural cooperatives. *Agribusiness: An International Journal*, 25(2), 181-197.

Ostrom, E. (1990). *Governing the commons: The evolution of institutions for collective action*: Cambridge university press.

Oxford English Dictionary. (2012). Idiosyncratic. Retrieved from <https://www.dictionary.com/browse/idiosyncratic>

Park, H. M. (2015). Regression models for ordinal and nominal dependent variables using SAS, Stata, LIMDEP, and SPSS.

Parrales Choez, C. G., Valls Martínez, M. d. C., & Martín-Cervantes, P. A. (2022). Longitudinal Study of Credit Union Research: From Credit-Provision to Cooperative Principles, the Urban Economy and Gender Issues. *Complexity*, 2022.

Peetz, D. (2005). Co-operative values, institutions and free riding in Australia - Can it learn from Canada? *Relations Industrielles*, 60(4), 709-736+818-819.  
doi:10.7202/012341ar

Peng, X., Hendrikse, G., & Deng, W. (2018). Communication and innovation in cooperatives. *Journal of the Knowledge Economy*, 9(4), 1184-1209.

Piterou, A., & Coles, A. M. (2021). A review of business models for decentralised renewable energy projects. *Business Strategy and the Environment*, 30(3), 1468-1480.

Pizzi, S., Rosati, F., & Venturelli, A. (2021). The determinants of business contribution to the 2030 Agenda: Introducing the SDG Reporting Score. *Business Strategy and the Environment*, 30(1), 404-421. doi:10.1002/bse.2628

- Polo-Garrido, F., Bolas-Araya, H. M., & Bravo-Sellés, M. (2022). *SDGs and cooperatives entities: a study of the biggest financial cooperatives*. Paper presented at the 33rd CIRIEC International Congress, Valencia.
- Polo-Garrido, F., Mantzari, E., McCulloch, M., Piñeiro-Harneckner, C., & Rixon, D. (2022). *Financial reporting in Co-operatives: An international perspective*. Paper presented at the 33rd CIRIEC International Congress, Valencia.
- Polo-Garrido, F., & Meliá-Martí, E. (2021). Business combinations in cooperatives. A critical view of accounting standards. *Economic research-Ekonomska istraživanja*, 34(1), 2522-2538.
- Porter, P. K., & Scully, G. W. (1987). Economic efficiency in cooperatives. *The journal of law and Economics*, 30(2), 489-512.
- Prado-Lorenzo, J., Garcia-Sanchez, I., & Gallego-Álvarez, I. (2012). Effects of activist shareholding on corporate social responsibility reporting practices: An empirical study in Spain. *Journal of Economics, Finance & Administrative Science*, 17(32).
- Puusa, A., Hokkila, K., & Leppänen, S. (2016). *The appeal and correspondence of co-operative values and personal values of the youth*. Paper presented at the European Conference on Innovation and Entrepreneurship.
- Puusa, A., & Varis, A. (2016). *Interpretation and Construction of Co-Operative Identity at Ideological Level*. Paper presented at the European Conference on Innovation and Entrepreneurship.

Quaglia, L., & Spendzharova, A. (2017). Post-crisis reforms in banking: Regulators at the interface between domestic and international governance. *Regulation & Governance*, 11(4), 422-437.

Rabong, G., & Radakovics, S. (2020). The uniform co-operative value core – Evidence from Austria. *Journal of co-operative Organization and Management*, 8(2).  
doi:10.1016/j.jcom.2020.100118

Reverte, C. (2009). Determinants of corporate social responsibility disclosure ratings by Spanish listed firms. *Journal of Business Ethics*, 88(2), 351-366.

Richman, L. D., Bakst, D. S., Gray, R. F., Hermsen, M. L., Pinedo, A. T., & Schuette, D. A. (2019). SEC adopts rules to modernize and simplify disclosure. *Journal of Investment Compliance*. doi:10.1108/JOIC-04-2019-0022

Richmond, B. J., Mook, L., & Jack, Q. (2003). Social accounting for nonprofits: Two models. *Nonprofit Management and Leadership*, 13(4), 308-324. doi:10.1002/nml.2

Robbins, J. (2018) *Integrated Reporting - Julia Robbins, Vancity*. 2018 Experts Meeting on Co-operative Accounting and Reporting: Co-operative Socio-economic Transformation.

Roelants, B., Dovgan, D., Eum, H., & Terrasi, E. (2012). The resilience of the cooperative model. *CECOP-CICOPA: Brussels, Belgium*.



- Roszkowska-Menkes, M., & Aluchna, M. (2017). Institutional isomorphism and corporate social responsibility: towards a conceptual model. *Journal of Positive Management*, 8(2), 3-16.
- Rupley, K. H., Brown, D., & Marshall, S. (2017). Evolution of corporate reporting: From stand-alone corporate social responsibility reporting to integrated reporting. *Research in Accounting Regulation*, 29(2), 172-176.
- Sacchetti, S., & Tortia, E. (2016). The extended governance of cooperative firms: inter-firm coordination and consistency of values. *Annals of public and cooperative economics*, 87(1), 93-116.
- Saha, A. K., & Akter, S. (2013). Corporate governance and voluntary disclosure practices of financial non-financial sector companies in Bangladesh. *Journal of Applied Management Accounting Research*, 11(2), 45-61.
- Sarkar, A., Wang, H., Rahman, A., Qian, L., & Memon, W. H. (2022). Evaluating the roles of the farmer's cooperative for fostering environmentally friendly production technologies-a case of kiwi-fruit farmers in Meixian, China. *Journal of Environmental Management*, 301, 113858.
- Sarracino, F., & Fumarco, L. (2018). Assessing the non-financial outcomes of social enterprises in Luxembourg. *Journal of Business Ethics*, 1-27.
- SASB. (2017). SASB Conceptual Framework. Retrieved from <https://www.sasb.org/standards/conceptual-framework/>

- Savova, K. (2021). Differences in application of accounting standards - current aspects. *Economic and Managerial Spectrum*, 15(1), 111-123.
- Schoenfeld, J. (2017). The effect of voluntary disclosure on stock liquidity: New evidence from index funds. *Journal of accounting and economics*, 63(1), 51-74.
- Seguí-Mas, E., Bolas-Araya, H. M., & Polo-Garrido, F. (2015). Sustainability assurance on the biggest cooperatives of the world: An analysis of their adoption and quality. *Annals of Public and Cooperative Economics*, 86(2), 363-383.
- Seo, J., & Choi, W. (2021). Classification of co-operative member shares as equity or liabilities: The case of consumer co-operatives in South Korea. *Annals of Public and Cooperative Economics*, 92(2), 283-305.
- Shaw, T. S., Raithatha, M., Krishnan, G. V., & Cordeiro, J. J. (2021). Did mandatory CSR compliance impact accounting conservatism? Evidence from the Indian Companies Act 2013. *Journal of Contemporary Accounting & Economics*, 17(3), 100280.
- Shehata, N. F. (2014). Theories and determinants of voluntary disclosure. *Accounting and Finance Research (AFR)*, 3(1).
- Simnett, R., Vanstraelen, A., & Chua, W. F. (2009). Assurance on sustainability reports: An international comparison. *The accounting review*, 84(3), 937-967.

- Skouloudis, A., Evangelinos, K., & Kourmoussis, F. (2010). Assessing non-financial reports according to the Global Reporting Initiative guidelines: evidence from Greece. *Journal of Cleaner Production*, 18(5), 426-438. doi:10.1016/j.jclepro.2009.11.015
- Smith, A. (1937). *The wealth of nations [1776]* (Vol. 11937): na.
- Solikhah, B. (2016). An overview of legitimacy theory on the influence of company size and industry sensitivity towards CSR disclosure. *International Journal of Applied Business and Economic Research (IJABER)*, 14(5), 3013-3023.
- Songini Lucrezia, L. (2020). Integrated Reporting Quality: An Analysis of Key Determinants. *Non-Financial Disclosure and Integrated Reporting: Practices and Critical Issues*, 175.
- Spear, R. (2004). From co-operative to social enterprise: trends in European experience. *Trends and challenges for co-operatives and social enterprises in developed and transition countries*, 99.
- Spector, P. E. (2021). Mastering the use of control variables: The hierarchical iterative control (HIC) approach. *Journal of Business and Psychology*, 36(5), 737-750.
- Stechemesser, K., & Guenther, E. (2012). Carbon accounting: a systematic literature review. *Journal of Cleaner Production*, 36, 17-38.

- Sun, X. S., Habib, A., & Bhuiyan, M. B. U. (2020). Workforce environment and audit fees: International evidence. *Journal of Contemporary Accounting & Economics*, 16(1), 100182.
- Sundaram, A. K., & Inkpen, A. C. (2004). The corporate objective revisited. *Organization Science*, 15(3), 350-363.
- Szadziewska, A., Spigarska, E., & Majerowska, E. (2018). The disclosure of non-financial information by stock-exchange-listed companies in Poland, in the light of the changes introduced by the Directive 2014/95/EU. *Zeszyty Teoretyczne Rachunkowości*(99 (155)), 65-95.
- Tan, A., Benni, D., & Liani, W. (2016). Determinants of corporate social responsibility disclosure and investor reaction. *International Journal of Economics and Financial Issues*, 6(4S).
- Tsang, A., Wang, K. T., Wu, Y., & Lee, J. (2022). Nonfinancial corporate social responsibility reporting and firm value: International evidence on the role of financial analysts. *European Accounting Review*, 1-36.
- Tshipa, J., Brummer, L., Wolmarans, H., & Du Toit, E. (2018). The impact of flexible corporate governance disclosures on value relevance. Empirical evidence from South Africa. *Corporate Governance: The international journal of business in society*, 18(3), 369-385.

UN General Assembly: Economic and Social Council. (2021). Resolution adopted by the General Assembly on 16 December 2021 Cooperatives in social development, A/RES/76/135.

Unda, L. (2022). Cooperative values and the development of the credit union movement in Australia. *Journal of Management History*. doi:10.1108/JMH-04-2022-0012

Unerman, J., Bebbington, J., & O'dwyer, B. (2018). Corporate reporting and accounting for externalities. *Accounting and Business Research*, 48(5), 497-522.

UNGA. (2023). Report of the Secretary General (A78/187).

Ushkarenko, I., & Soloviov, A. (2020). World Economic Order: Evolution of the Cooperative Sector. *Philosophy and Cosmology*, 25, 139-152.

Uwuigbe, U. (2011). An empirical investigation of the association between firms' characteristics and corporate social disclosures in the Nigerian financial sector. *Journal of Sustainable Development in Africa*, 13(1), 60-74.

Valentinov, V., & Iliopoulos, C. (2021). Social capital in cooperatives: an evolutionary Luhmannian perspective. *Journal of Evolutionary Economics*, 31(4), 1317-1331.

van Brenk, H., Renes, R., & Trompeter, G. M. (2020). Auditing in the public interest: Reforming the profession by building on the strengths of the existing accounting firms. *Critical Perspectives on Accounting*, 102184.

- van Rijn, J. (2022). The cooperative identity at US credit unions. *Journal of co-operative Organization and Management*, 10(1), 100152.
- Vasyl'eva, T., Leonov, S., & Makarenko, I. (2017). Modern methodical approaches to the evaluation of corporate reporting transparency. *Scientific bulletin of Polissia*, 2(1 (9)), 185-190.
- Vitolla, F., Raimo, N., & Rubino, M. (2020). Board characteristics and integrated reporting quality: an agency theory perspective. *Corporate Social Responsibility and Environmental Management*, 27(2), 1152-1163.
- Waring, T., Lange, T., & Chakraborty, S. (2022). Institutional adaptation in the evolution of the 'co-operative principles'. *Journal of Evolutionary Economics*, 32(1), 333-365.
- Watts, R. L., & Zimmerman, J. L. (1978). Towards a positive theory of the determination of accounting standards. *Accounting review*, 112-134.
- WCM. (2018). *Exploring the Cooperative Economy Report 2018*. Retrieved from <https://monitor.coop/en/media/library/research-and-reviews/world-cooperative-monitor-2018en>
- Westwood, J. (2014). Co-operative Accountability. Vancity integrated reporting model. *International Journal of Co-operative Management*, 7(1), 73.

Whyman, P. B. (2012). Co-operative principles and the evolution of the ‘dismal science’: The historical interaction between co-operative and mainstream economics. *Business History*, 54(6), 833-854.

Wilson, A., Hoyt, A., Roelants, B., & Kumar, S. (2021). *Examining our cooperative identity*. Paper presented at the 33rd World Cooperative Congress, Seoul.

Yakar Pritchard, G., & Çalıyurt, K. T. (2021). Sustainability Reporting in Cooperatives. *Risks*, 9(6), 117.

Zeuli, K. A., Cropp, R., & Schaars, M. A. (2004). Cooperatives: Principles and practices in the 21st century. In: University of Wisconsin Center for Cooperatives.

Zhang, Y., Jin, R., & Zhou, Z.-H. (2010). Understanding bag-of-words model: a statistical framework. *International journal of machine learning and cybernetics*, 1, 43-52.

## Example of corporate reporting score calculation

(Cooperative number 87)

Name of reports downloaded from website	Stand-alone	Included to other report	Classification code	Reporting framework applied	Assurance provided	Score
Annual financial statements (Consolidated)	x		AFS1	International financial reporting standards (IFRS)	Reasonable assurance	1
Sustainability report		x	ESR2	Global Reporting Initiative (GRI) standards (2016)	Limited assurance	3
Report of the president and CEO Report of the board of directors		x	MR2	n/a	n/a	1
Corporate governance statement	x		GR1	Corporate Governance Code for Finnish listed companies issued by the Securities	n/a	2



				Market Association		
Sustainability from the forest			OS1	n/a	n/a	OS1 =1
<b>Total score corporate reporting (CR) score</b>						<b>8</b>