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Navigating Economic Uncertainty: Exploring
Financing Preferences and Member Utility in
Cooperatives

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A Case Study of Nordic Agri-food Cooperatives

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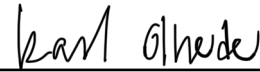
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Abstract

The economic uncertainty of 2022/2023 has presented several financial challenges. High inflation and rapidly increasing interest rates have caused modern and unaccustomed corporations to experience recessive conditions, challenging them to acquire the skills necessary for effective navigation during an economic downturn. Given this context, this thesis aims to investigate how financing preferences of nordic cooperatively owned agri-food firms are affected by the economic uncertainty of 2022/2023. Even though previous research has shown that economic uncertainty can affect financing preferences, nordic cooperatives are not widely covered in prevailing literature. Hopefully, this novelty can contribute value to existing literature. In order to answer a research question regarding preferences, a rich understanding of firms' actions and thought processes are important, hence a qualitative method was used. This thesis conducted case studies on four Nordic agri-food firms: Lantmännen, Coop, Arla and Norrmejerier. The results suggest a general preference for internal financing in line with the pecking order theory, and limited agreement with the trade off theory. However, cooperatives are inclined to sidestep preferences and instead exploit debt in order to enhance patronage dividends. Furthermore, in times of economic uncertainty, the results show that cooperatives tend to prioritize short-term needs of members at the expense of the firm's financial position, if possible. Cooperatives' ability and incentive to prioritize member-utility over own profitability is reliant on strong finances and members' position in their collective supply chain. The thesis concludes that during uncertain economic market conditions cooperatives still prefer internal financing, but due to members' short-term focus, firms become more reliant on debt to continue their quest of member value maximization.

Key words: Financing preference, cooperative, economic downturn, agri-food industry.

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1. Introduction

Since the outbreak of the Covid-19 pandemic in early 2020 the global macroeconomic environment has experienced increased volatility and uncertainty. The aftermath of the pandemic combined with the initiation of the Ukraine-war have led to increased inflation, forcing central banks to rapidly increase interest rates over the last year to curb inflation (SCB, 2023). This has created a new economic climate, with threats of an upcoming recession, in which firms must learn to navigate. One of the industries that have been hit hard by the current macroeconomic environment is the nordic agri-food sector, which largely consists of firms with cooperative ownership structure (Livsmedelsföretagen, 2023). Cooperatives normally experience financing constraints due to their prioritization of member utility and limited access to new equity. Consequently, financing constraints combined with economic uncertainty raises questions regarding cooperatives optimal sources of financing and actual sources of financing.

1.1. Background

This paper consists of four major fundamental concepts and how their external and internal correlation affect specific aspects of a modern and complex corporate environment. To simplify an ambiguous matter into a perspicuous frame, the background diverges all four concepts into separate areas to develop a perceptive understanding and provide further depth. The fundamental concepts refers to agri-food firms, financing preferences, economic conditions and cooperative ownership structure.

Three out of this papers four participants primarily operate on the nordic agricultural market, whilst the remaining participant operate within the nordic food industry. Consequently, the examined industry is defined as agri-food. The agri-food industry includes all firms within the supply chain of agricultural products (EU, 2009). The vast involvement of agricultural firms also provides relevance to previous financing studies conducted on agricultural firms. The examination of corporate investment preferences and financial orientation is often linked with well-established theories based on perfect capital markets, such as the pecking order theory, trade off theory and the cost of capital theory. However, during economic uncertainty, the utilization of theories based on perfect capital markets and various homogenous circumstances decreases. As inflation causes the real value of monetary assets to decline, rising interest rates leading to costlier bank loans and the overall economic uncertainty relinquishes investment incentives, the prioritization of financing means increases in complexity.

Corporate environments are currently experiencing recessive conditions, something that modern and unaccustomed corporations are forced to accommodate. In Sweden, the annual inflation has as of October 2022 reached 10.9 percent, exceeding the set inflation objective of 2 percent by a large

margin (SCB, 2023). This has forced the central national bank to raise the bank rate to 3 percent, the highest directorial rate since 2008 (Riksbanken, 2023). Inflation rates as of late 2022 are presented to coincide with the analyzed firms fiscal year (2022). As of April 2023, the national bank of Sweden anticipates further directorial interest raises, as they are experiencing that the established increases have been unsuccessful towards curbing inflation. Forecasts expect directorial interest rates to stay over 3 percent for a foreseeable future (Riksbanken, 2023). The Swedish institution of economy also forecasts the start of a recession during 2023 (Dawod, 2022, December 21th). Consequently, recessive economic circumstances will lead to inflated interest payments and reductive assets which puts pressure on firms' performance, as the risk of financial distress increases (Liou & Smith, 2007). The choice of financing can be crucial towards a firm's profit margin and is consequently directly correlated to performance.

The terminology inflation represents a congregation of individual factors and their collective impact on national and international economies. However, by segmenting inflation by sub-groups, there are noticeable differences between various products and services. Food related goods is currently the greatest inflation-incused category, with an annual inflation rate of 17.2 percent as of October 2022 (SCB, 2022). The source of this statistic cannot be derived from one singular factor and the pertinence between various factors differ immensely. An initiating and patently distinguished cause of the current economic climate was the covid-19 pandemic. Lockdowns caused by the pandemic led to lower consumption and the downfall of many firms. When the corporate environment started to accommodate a lower level of consumption, society opened up. Extensive pressure was put on supply chains to satisfy the rapidly increasing demand on the market, which led to a case of demand pull-inflation where central banks started to conduct a highly expansive monetary policy as the directorial interest rate was close to zero (Entrepreneur, 2023). When the ukraine-war emerged, a deficiency arose in the supply of essential commodities, causing an already healing economy to struggle furthermore (Entrepreneur, 2023). The current economic climate is a direct reflection of these events. Nevertheless, in this instance the source of inflation is not to be examined. Focus will instead be directed towards the impact of inflation on the agri-food industry. Vast business-to-consumer price increases tend to cause a significant shift in consumption. Less consumption causes lower turnover, forcing firms to raise prices to maintain their initial cash flows.

Up until now, Agri-food firms have had issues related to the current volatile economic environment. The primary aspects affected are profitability, purchasing costs and production costs. As of late 2022, Swedish agri-food firms had an average raw material cost of 40 percent greater than the previous year. During the same period, profitability was down 30 percent (Eckerdal, 2022). Only 9 percent of Swedish Agri-food firms claimed that they had been monetarily compensated for the increased production costs during 2022, which means that 91 percent had lower profitability than the year

before. Suppliers will consequently have to choose between increasing their prices and losing volume or keeping their prices and losing profit margins (Eckerdal, 2022). The intriguing incidence towards this matter is to analyze the eventual alteration in financial behavior of firms with direct or indirect connections to food-related goods. Lower free cash flows leads to inferior opportunities to exploit the advantages of internal financing. As internal financing aggravates through lower cash flows and rising interest rates disincentivizes firms from bank loans, the prioritization of financing turns disputable. The current economic conditions discussed above will as of this point forward be referred to as 2022/2023:s economic uncertainty.

Developing this approach furthermore, the orientation of this paper intends to focus on cooperatively owned nordic firms. This is interesting due to a lack of previous coverage of this subject in the prevailing literature. The cooperatively driven firm is closely related to the structure of an economic association. The fundamental purpose of the organization is to provide a specific product or service, not necessarily towards maximizing profits. It is created to facilitate the interests of its members, which are also the organization's owners (Bolagsverket, 2020). To make sure that their interests are achieved accordingly, members appoint a board of directors that intends to fulfill the set goals of the organization (Bolagsverket, 2020). This is conducted at an annual meeting of members, where each member has one vote, regardless of their monetary contribution towards the organization. The requirements of becoming a member in cooperatives are specified in the statutes of limitation and the organization is generally open towards any individual that satisfies the requirements. The owners of a cooperative can attain different roles in which they interact with the firm, most commonly as either consumers or suppliers (Bolagsverket, 2020).

Since the cooperatively driven firm is owned by its members, their financing alternatives differ significantly from that of other owner structures. Furthermore, dividends in a cooperative are called patronage dividends and are often expressed as discounts or credits (Centner, 1984). Equity financing is often not an alternative and profits are generally given back into the organization, which means that the average monetary value of patronage dividends decreases significantly compared to investor-owned firms. The equity that firms do derive is taxable, which again leads to a decreased value in patronage dividends (Cheng & Katchova, 2019). The members of the organization are however incentivized to contribute in any way they see fit. The user-owner principle is a common phenomenon which states that the benefits of cooperative firms are exploited by the same individuals that own and finance the corporation. Thus, a cooperative firm's availability to investors and their access to capital markets are limited, which suggests that cooperative firms historically relied extensively on debt financing. The limited access towards a cooperative's ability to gather equity is often regarded as an infirmity (Cheng & Katchova, 2019). As there is limited equity financing available and the purpose rarely refers to maximizing profits, a cooperative's business orientations are

often reflected on their capital structure. Depending on what supply chain level the firms focus their resources towards, the accumulated value of equity changes and the equity ratio alternates (Cheng & Katchova, 2019) .

1.2. Problem Analysis

One of the fundamental issues within corporate finance concerns firms' choices of capital structure. Relevant literary work highlights countless studies on financing strategy, where different capital structure theories are tested for investor-owned firms (IOFs). However, previous research on agri-food cooperatives is relatively limited. Simultaneously, the Swedish agri-food industry is the country's third largest industry measured in turnover (Livsmedelsföretagen, 2023) and has over the last years seen a strong growth in the number of new cooperatives (Svensk Kooperation, 2018). In addition, previous research argues that financial constraints are one of the main factors behind failure of cooperatives in the agri-food sector (Chaddad, Cook & Heckeley, 2005). This is presumably due to a significant prioritization of member utility along with limited access to new equity. In light of these constraints and recent changes in the macroeconomic climate, questions regarding cooperatives optimal sources of financing arise. The availability to maintain member utility may also be dependent on the size of the cooperative.

The defining characteristics of cooperatives are that they operate according to the user-owner principle. They are obliged to pay out accumulated allocated equity to members, and their main objective in operational decisions is often not profit maximization, but rather patronage dividends and to maximize total member value (Li, Jacobs & Artz, 2015). Operating with the user-owner principle limits cooperatives access to capital markets which will have implications on leverage, equity and financial management decisions. Decisions within cooperatives are made jointly by members that both use and invest into the firm. However, this depends on the individual implementation of the user-owner principle. Some cooperatives operate with their owners as suppliers, whilst others operate with their owners as consumers. This could affect a cooperative's financial behavior, as they attain different power-dynamical relationships with their owners. Nevertheless, joint decisions put limitations on the available pool of investors, whilst patronage payouts decrease the rate of equity accumulation (Cheng & Katchova, 2019). Cooperative equity doesn't appreciate in line with the broader market, since it is not publicly traded. This can further diminish members' willingness to invest in cooperatives, especially when facing high opportunity costs (Soboh, Lansik & Van Dijk, 2012).

As mentioned before, the “user-owner principle” advocates large patronage dividends in order to maximize member utility. Furthermore, since the owners of cooperatives are often the suppliers or consumers of the firm, favorable payment terms towards owners may cause more internal funds to be

tied up in working capital. Consequently, cooperatives risk having less internal funds available which limits their ability to exploit advantages of internal financing. Even though internal financing may be the preferred source of financing for investments, the availability may be a limiting factor. If a cooperative decides to accumulate a large source of internal funds through either liberating working capital or decreasing patronage dividends, conflicts of interest between managers and owners may occur. Since theories like the pecking order theory states that internal financing generally is the preferred source of financing, a dilemma emerges. Will cooperatives accumulate internal investment funds at the expense of their members? This approach is further developed when considering the current economic presumptions. Reduced value in assets disincentives firms from accumulating internal funds whilst increased interest payments makes debt financing more expensive. Simultaneously, members become more reliant on their patronage dividends and favorable payment terms as a consequence of inflative prices and pressed margins. This creates a contradicting incentive for cooperatives firms to prioritize internal financing, whilst members prioritize increased patronage dividends and improved payment terms.

Cooperatives require profitability in order to effectively serve their members, but maximizing profit is not necessarily their ultimate objective. Nonetheless, the choice of objective will impact the cooperative's financing decisions and will be reflected on their capital structure. If the firm aims to maximize members' profits, the cooperative will risk slower equity accumulation and more debt financing. On the contrary, if maximizing profits for the cooperative is the objective, equity accumulation tends to be faster and equity financing is used more frequently (Cheng & Katchova, 2019). Based on the preceding arguments, cooperatives are frequently viewed as being capital constrained and may rely more extensively on debt to finance their operation. However, it remains uncertain how cooperatives respond to increased cost of debt due to rising interest rates. Apart from capital limitations faced by cooperatives, the agri-food sector has traditionally been vulnerable to economic downturns (Livsmedelsföretagen, 2023). Consequently, the current market uncertainty could have a substantial effect on cooperatives' internal financing choices and investment activities. Therefore, it is interesting to delve into the prevailing financing preferences of agri-food cooperatives and establish connections with the existing literature.

1.3. Purpose and Research Question

The purpose of this thesis is to receive a better understanding of how the prevailing financing preferences of cooperative agri-food firms are affected by the uncertain macroeconomic circumstances during 2022/2023, such as high inflation and increasing interest rates. The research aims to examine nordic agri-food cooperatives through a qualitative case study to better understand how their financing decisions align with existing theoretical frameworks. This ultimately determines how relevant the implementation of established general literature is on cooperatively owned firms

during uncertain economic conditions. Because of deficient literary studies on this subject, this paper also intends to provide new insights to existing literature, and ultimately hopes to benefit managers of cooperatives on how to navigate financing decisions during economic uncertainty.

The thesis is conducted to answer the following research question:

“How does the economic uncertainty of 2022/2023 affect the financing preferences of cooperatively owned nordic agri-food firms?”

An extensive and complex research question has been formulated above. To provide comprehensible congregations of the material required to present conclusions to the research question, the overall thesis has been fractionated into three sub-categories. The three sub-categories will be expressed as supplementary questions and will represent a significant focus area of this thesis. Furthermore, supplementary questions also provide further depth to the research question and facilitates the process of establishing accurate conclusions. This also allows the literature review and empirical material to be structured accordingly. The supporting questions can be found below.

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- 1. What financing alternatives do the cooperatively driven firms usually have? How do they distribute their patronage dividends? Do conflicts of interest occur?*
 - 2. How does limited equity financing impact cooperatives' financing decisions, and how does this differ from e.g. Investor-owned firms (IOF:s)?*
 - 3. What impact does uncertain market conditions have on cooperatives' financial behavior, and how does it impact financing preferences?*
-

1.4. Project Scope

To fulfill the overriding purpose of this paper, a distinct scope is necessary. Primary focus is directed towards financing preferences and although capital structure can be categorized as a subsidiary, it's not the essential area of examination. Financing preferences is defined as the preferred source of monetary assets used in investments, and can be divided into internal or external means of financing. This thesis focuses on the economic uncertainty during the period of 2022/2023 and includes all

economic prerequisites that may affect the financing preferences of cooperatively driven firms, with inflation and interest rates constituting a major part of the concept. Furthermore, to highlight the effects of an economic downturn, the analyzed firms' outgoing financial metrics of 2022 are compared to 2021:s outgoing financial metrics. Thus, the period of 2021-2023 is primarily to be examined. The analyzed cooperatives will also recurrently be compared to investor-owned firms to highlight relevant differences and underline limitations. Investor-owned firms are in this thesis defined as profit maximizing corporations and will be denominated as IOF:s.

1.5. Thesis Contribution

This thesis will provide an explanation of cooperatively driven nordic agri-food firms' financing preferences, and how they are affected by an economic downturn. Qualified individuals provide subjective information and practical approaches on a current issue, allowing legitimate and useful conclusions to emerge. Industry-related constraints as well as firm-related constraints will be presented, highlighting primary user-owner limitations to cooperatives financing alternatives. Suggestions on necessary actions during an economic downturn will contribute to the limited prevailing literature, as the complex significance of member utility continuously reflects a cooperative's financing preferences. Several possible challenges and primary drivers of financing preferences have been identified, which will hopefully contribute towards cooperatively driven agri-food firms goal of value maximization.

2. Literature Review

The procurement and accommodation of relevant theories is necessary in providing a descriptive foundation on which empirical material is analyzed. The literature review is structured in line with this paper's three supporting questions. First of all, eligible financing alternatives are presented, followed by conflicts of interest related to user-owner operations and cooperative financial behavior theory. Subsequently, general financing preferences of cooperatives are presented, showcasing practical limitations in accumulating sources of financing. This is culminated through a review of cooperatives financing preferences during economic uncertainty. Throughout this section, significant focus is directed towards the aspects in the literature relevant to the purpose of this paper. Consequently, this provides an opportunity towards a subsequent analytical examination whilst simultaneously allowing possible results to emerge. Key insights from the literature review is highlighted in a concluding synthesis.

2.1 Financing Alternatives for Cooperatives

Fischer (1984) states that a recurring deviation exists between a cooperative's optimal source of financing and their actual source of financing. Decision-makers have to be adequately informed on available financing alternatives and the associated costs before deciding an optimal financial orientation. Similar to IOF:s and profit maximizing firms, a cooperative's available financing alternatives refers to equity, debt and internal financing. However, sources of financing attain an alternative definition in cooperatively driven firms. Equity financing is defined as invested capital that provides access to patronage dividends and is primarily attained through entrance fees, voluntarily invested capital from owners and other types of private interest-incused placements (Boland & Barton, 2013). Equity is rarely achieved through retained earnings, since the owners receive residual cash flows as patronage dividends. Consequently, excessive earnings and retrieved equity can be achieved through profitable business strategies (Barton, 2011a). Furthermore, Dahl & Dobson (1976) suggested other equity programmes such as increasing patronage dividends to incentivize future investments by owners, reducing revolving periods, and retiring equity from members who exit, retire or pass away. According to Bolland & Barton (2013), incentivizing investments from owners is a better alternative towards gathering equity, as mandatory equity assembling programmes contradicts the overall purpose of the organization. Furthermore, members tend to seek benefits generated through a cooperative business model but are reluctant to add value and accept the corresponding obligations of ownership and control, which is the responsibility of providing equity during downturns (Barton, Bolland, Chaddad & Eversull, 2011b).

Similar to IOF:s, debt financing refers to the external procurement of capital through selling debt instruments (Investopedia, 2022). However, since a cooperative has limited access to capital markets,

financial leverage is often used to cover insufficient equity. Despite this, cooperatives reduced their level of financial leverage between 1980-1998 (Pedersen, 1998). Furthermore, Barton (2011a) suggests that debt can be used as a financial tool to maintain minimum liquidity levels and equity ratio, whilst ensuring financial stability. Debt financing can also enhance the patronage dividends of members, but are receptive towards unforeseen expenses such as inflative interest payments (Pokharel, Featherstone & Archer, 2019).

Internal financing within cooperatives is defined similarly to that of IOF:s and refers to a procedure in which a firm uses their internal assets as a source of capital towards investing in existing or new operations. Internal assets are congregated from either owners' funds, through selling assets or through retained earnings (Blackwell, 2019). By using internal financing for investments, a firm minimizes transaction costs caused by information asymmetry when involving external actors (Myers & Majluf, 1984). Furthermore, no collateral is required, removing conveyed consequences and allowing a greater level of flexibility in financial activities. However, the usage of internal funds within a cooperative isn't always a possibility. As mentioned previously, residual cash flows are distributed as patronage dividends to create member utility (Barton, 2011a). Consequently, since internal financing results in decreased liquidity and eventual decreased patronage dividends (Blackwell, 2019), a cooperative is disincentivized from using internal funds as a source of financing investments. However, Royer (2017) suggests that retained earnings is an important source towards accumulating equity, which isn't a possibility if the firm devotes their retained earnings as a source of investment or towards patronage dividends. Retained earnings cannot be assigned towards specific members of a cooperative, meaning that there exists no required return and is consequently the lowest cost-source of capital (Yen, Miranda & Katchova, 2020).

2.1.1 Conflicts of Interest

A recurring issue concerning internal financing refers to the feasible agency conflicts within a cooperative that an increased cash flow could entail. Fischer (1984) suggests that management regularly prioritizes investing in growth opportunities, whilst owners prioritize their patronage dividends. Managers are expected to exploit their financial control in a way which displeases the members of the cooperative. For example, managers are incentivized towards decreasing members' patronage dividends to finance growth. This claim is supported by the free cash flow theory (Jensen, 1986), which suggests that substantial increases in a firm's cash flow cause divisive conflicts of interest amongst managers and owners regarding the usage of free cash flows. However, this theory suggests that if a firm's retained earnings exceeds the cost of all designated projects, managers tend to overinvest the residuals in unprofitable organizational opportunities.

The free cash flow theory introduces the complex subject of agency conflicts between managerial authority and owners' demands. Another agency conflict within cooperatives refers to equity management. Establishing a mandatory equity accumulation programme may result in a conflict of interest between managers and owners, since they are often reluctant towards providing equity capital, but are quick towards exploiting the advantages that a cooperative owner structure entails (Barton et.al, 2011b). Additionally, since the owners are also the suppliers or consumers of the cooperative, increasing prices to improve profits during times of decreased margins may also result in a conflict of interest, which may cause members to exit the union (Pokharel et al, 2019). Conclusively, Cook (1994) claims that managerial posts within cooperatively driven firms require extended qualifications and more versatile individuals, as it puts greater pressure on leadership abilities because conflicts of interest between managers and owners are more likely to emerge.

2.1.2 Cooperative Financial Behavior Theory

According to Griffin et al. (1980) a majority of cooperatives rely on invested capital from owners when contemplating investment sources. Other differences cooperatives have to contend with is that of differing dividend policies and limited access to new equity. Yen et al. (2020) state that size is a significant factor in the financing of cooperatives, adding that small and medium sized cooperatives must contend with a higher degree of capital constraint than large cooperatives. Since cooperatives in practice cannot rely on equity financing their external financing largely consists of debt, reducing future room for new debt, thus making cooperatives more reliant on internal financing. Furthermore, increasing internal financing can be used as a measure to partly relieve cooperatives of their capital constraint (Yen et al. 2020).

Before introducing practical financial behavior of cooperatives, a presentation of two general financing theories are necessary. First, the trade off theory depicts a theoretical framework for determining a firm's optimal capital structure, based on individual presumptions. The fundamental theory suggests that corporate leverage is decided through balancing the benefits of leverage with default costs (Myers, 1984). Consequently, equity issuance is excluded as a direct influencing factor when deciding a firm's capital structure, establishing an analytical foundation where cooperative financing preferences are applicable. Furthermore, the pecking order theory states that firms prefer internal financing to external financing. However, when financing via internal means isn't possible, firms are required to seek financing from external sources. When firms are in need of external financing they seek the cheapest option, which is generally debt financing, leaving equity financing as a last resort (Myers & Majluf, 1984).

Cheng & Katchova (2019) studied agricultural cooperatives under normal market conditions to examine the degree in which they adhere to the tradeoff theory and the pecking order theory, to

ultimately understand which theory best describes their financing preferences. The study describes that cooperatives tend to freely adjust their short and long term debt in order to reach an optimal equity ratio, supporting the argument for the tradeoff theory. However, significant pecking order behavior was not observed (Cheng & Katchova, 2019). Before the agricultural downturn, pecking order behavior was observed. But when the downturn occurred, pecking order behavior ceased to exist. Thus, suggesting that cooperatives do not possess strong preferences in sources of funding, instead they tend to finance themselves in order to reach a target equity ratio (Cheng & Katchova, 2019). Mateos-Ronco & Guzmán-Asunción (2018) also studied agri-food cooperatives and gave an opposing viewpoint regarding the pecking order theory. They state that agri-food cooperatives behave more in line with the pecking order theory rather than the tradeoff theory. Agri-food cooperatives tend to only seek external financing when internal means are not sufficient, hence indicating an underlying preference among sources of financing (Mateos-Ronco & Guzmán-Asunción, 2018).

2.2 Financing Preference Theory

A cooperative exploits several different financing alternatives, all of which must accommodate the unusual prerequisites a cooperative owner structure entails. As previously mentioned, the financing alternatives primarily refers to equity, debt and internal financing. Unlike IOF:s, these standardized sources of financing attain a slightly different definition when discussed in the context of a cooperative firm. Down below, practical implementation of cooperatives main sources of financing is presented, showcasing general approaches and preferences. As cooperatives' access to capital markets are restrained, acquiring necessary growth to meet members' needs whilst keeping equity levels proportional constitutes two major issues for agricultural cooperatives. In addition, more equity capital may be needed to re-enforce liquidity levels after experiencing a downturn (Barton et.al, 2011b). Assembling equity in a cooperative can be conducted through two approaches, allocated or unallocated equity. Allocated equity belongs to a certain member and is collected through equity management programmes such as revolving credits, invested capital, base capital plans and percentage pools (Boland & Barton, 2013). Allocated equity is generally assembled through incentivizing involvement and retiring equity from former members (Dahl & Dobson, 1976). Unallocated equity refers to retained earnings not distributed as patronage dividends, which ends up as permanent equity (Boland & Barton, 2013). Actively decreasing patronage dividends in order to collect unallocated equity is a relatively new phenomena and is not regularly used (Dahlgren, 2008).

In addition to equity financing, cooperatives tend to exploit the advantages of debt financing. Yen et al. (2020) describes debt as critical for cooperatives in facilitating their investment strategies and growth, regardless of size. Long term debt is commonly used to finance fixed assets such as properties and various equipment. Amortization of long-term debt is generally supported via net income and can be considered one of the costlier financing alternatives due to interest payments, hence why internal

financing is arguably the preferred alternative (Yen et al. 2020). For growth oriented investments Yen et al. (2020) found that close to 50 percent were financed either through equity or short term debt, highlighting short term debt as the most important source of external financing for cooperatives. Cooperatives generally hold less long-term debt compared to IOFs, while total debt tends to be higher and as such cooperatives generally exhibit lower equity-ratios. Li et al. (2015) speculates that this could be attributed to the higher level of capital constraint experienced by cooperatives, suggesting a higher reliance on debt financing. This reliance may also be due to a preference for cheaper sources of financing (Li et al. 2015). Soboh, Lansink & Van Dijk (2011) argues this point and states that equity ratios of cooperatives tend to be higher compared to IOFs. In conclusion, previous research argues that cooperatives tend to rely on debt for investment and growth since their access to new equity is limited. Furthermore, previous research agrees that cooperatives are more reliant on debt financing than a comparable IOF due to equity constraints.

As previously discussed, cooperative ownership structure poses capital constraints. This is especially prominent in small/medium sized cooperatives, who have limited access to cheap debt financing compared to larger firms. As a result, retained earnings constitute an important source of low-cost capital. In recent years, cooperatives have increasingly turned to internal financing through retained earnings as a way to counter capital constraints (Yen et al. 2020). According to the pecking order theory, firms should favor internal financing ahead of external alternatives (Myers & Majluf, 1984). However, conflicts of interest between members and management alter the conditions for cooperatives. While managers seek to use retained earnings to fund investments in future growth, owners prioritize member utility through substantial patronage dividends (Barton, 2011a), which limits the room for internal financing. In addition, cooperatives tend to be less profitable than comparable IOFs, which adds further constraints on cooperatives access to internal financing (Soboh et al. 2011). However, Yen et al. (2020) argues that small/medium sized growth firms favor internal financing, since external capital is costlier, while larger firms with less capital constraints can rely more on debt financing.

2.3 Financing Preferences during Economic Uncertainty

In times of economic uncertainty, firms often face reduced cash flows, whilst increasing interest rates increases the cost of debt. Previous economic downturns, such as the financial crisis 2008, have proven to have a substantial effect on cooperatively driven firms. Briggeman (2010) conducted a study concluding that the effects of financial distress have a tendency to escalate quickly in cooperatives operating in high inflation environments. Cook (1976) found that the value of equity held by members gradually diminishes due to inflation, thereby placing increasing emphasis on accelerated equity turnover in cooperatives. Iqbal & Kume (2014) state that economic downturns have proven to have a substantial effect on all firms' leverage ratios. According to Iqbal & Kume (2014),

firms generally try to reduce their financial leverage during downturns in order to strengthen their financial resilience. Residual cash flows, if available, are used for amortization to reduce the firm's cost of capital and non-essential investments are abstained, resulting in lowered debt ratios (Mirza, Yan & Iqbal, 2017). Availability of residual cash flow offers firms flexibility to alter their financing strategies during economic downturns. As a result, larger firms are often more resilient to downturns in the economy, compared to smaller firms. With more tangible assets and steady cash flows, larger firms can secure cheaper external financing through posting their assets as collateral (Lyubov & Heshmati, 2017).

Mateos-Ronco & Guzmán-Asunción (2018) suggests that agri-food cooperatives financing preferences during normal circumstances are in line with the pecking order theory. However, according to Cheng & Katchova (2019) this does not hold true during economic downturns. Unlike other types of firms, cooperatives have a responsibility to allocate a significant portion of their generated cash flow towards distributing patronage dividends to their owners. Furthermore, Cheng & Katchova (2019) argues that patronage dividends are positively correlated with short- and long-term debt. The cooperative ownership structure induces incentives to retain dividend levels during times with reduced generated cash flows. As a result, agri-food cooperatives tend to turn to debt financing to uphold dividend levels. By freely adjusting their short- and long-term debt, the firm can adjust their debt ratio according to established targets (Cheng & Katchova, 2019). This behavior is more in line with the trade-off theory. Regardless of whether debt ratios increase or decrease during a period of crisis, ratios tend to revert back to pre-crisis levels after an adjustment period (Iqbal & Kume, 2014).

2.4 Synthesis

The literature presented above argues that cooperatives experience limitations in their financing alternatives, which could cause dissimilar presumptions during economic uncertainty. The preferred source of financing during regular circumstances is incoherent and literary works argue whether external sources are preferred or if the deficiency of internal funds forces cooperatives to turn to external sources. Patronage dividends constitute a large financial commitment for cooperatives, which drains internal funds and increases dependency on external sources. Internal conflicts of interest between owners and managers are present in decisions concerning dividends, where owners tend to prefer debt financing to enable extensive patronage dividends. Managers on the other hand might prioritize internal financing. If internal financing is not the preference, the cooperative should instead focus towards obtaining an optimal equity ratio. Since the opportunity of issuing equity is often limited, cooperatives are better off deciding their equity ratio through comparing the pros and cons of debt financing. Although the availability towards equity is limited, it should be mentioned that some cooperatives operate successful large equity programmes. An already complex issue becomes more complex when the dimension of economic uncertainty is added. During high inflation and rising

interest rates, firms generally tend to either increase their debt levels and function as usual or use residual cash flow to amortize debt and invest less in new projects. A cooperative's prerequisites differ slightly, since a large part of their cash flow is deposited as patronage dividends. This suggests that cooperatives will prepare themselves to attain larger amounts of debt during the upcoming recession, whilst using their residual cash flow to distribute large patronage dividends to their members.

3. Method

The methodology briefly introduces the used research method and scientific approach, and highlights their relevance to this thesis. Next, methods for data collection are discussed, including sources of primary data, interview preparation, and validity of the empirical material. Conclusively, selection criterias for the analyzed firms are presented together, followed by limitations to this study.

3.1. Methodology

In this thesis a qualitative study is conducted to answer the formulated research question regarding cooperatives' financing preferences during times of macroeconomic hardship. Qualitative studies explore complex problems in-depth by use of non-numerical data, which provides a rich understanding and leaves room for interpretation (Patel & Davidson, 2019). Furthermore, a qualitative study enables analysis of underlying interdependent factors of firms' financing preferences. The method considers context, in contrast to pure analysis of numerical data, and includes interpretation of both firms' actions and their thought process. The intent of firms' financing strategies is in general to increase competitiveness from a certain perspective, hence a deeper understanding of underlying motives is important to develop a further understanding of financing preferences. However, a qualitative study entails certain limitations, mainly concerning subjectivity and the possibility of developing border generalized conclusions (Bryman & Bell, 2017). These issues may be tackled by instead conducting a quantitative study which would bring more objectivity and enable more general conclusions if the sample size is sufficient. However, the challenges with a quantitative study in this case is lack of sufficient numerical data on preferences as well the need for deeper interpretation of non-numerical information, which leads to the conclusion that a qualitative study is preferable.

The qualitative approach is implemented by conducting case studies on four nordic agri-food firms. The use of case studies enables in-depth understanding of specific complex problems (Bryman & Bell, 2017). However, critics argue that case studies have a limited ability to provide general conclusions and insights. Flyvbjerg (2003) disagrees and claims that case studies are an important source for the development of practical insights. By combining a set of case studies, more general conclusions can be developed by identifying discrepancies between cases, which enables an analysis under which premises selected theories apply (Bryman & Bell, 2017). Conducting case studies on different cooperatives provide a variety of perspectives and enable separation of firm-specific insights and general insights on financing preferences of cooperatives.

In addition to the methodology used in this thesis, a research design must also be selected. A research design is a plan consisting of subsequent steps to be taken to answer the formulated research question. This thesis adopts a deductive approach, where conclusions are drawn based on previous research and

established premises. This approach follows a sequential structure that begins with the establishment of a theoretical foundation, followed by the collection and analysis of empirical data. The empirical findings are subsequently compared against selected theories, with the potential to prompt revisions to prevailing theoretical frameworks (Patel & Davidson, 2019). The established theoretical foundation is centered around firms' financing preferences. This research hopes to extend the prevailing literature by examining preferences of cooperatives under uncertain economic conditions. Similar research has been done on IOFs, hence drawing from prevailing literature to identify differences in preferences of cooperatives is likely a sane strategy. In contrast, using an inductive approach would instead favor new ideas not limited by previous work (Patel & Davidson, 2019). However, since the premises of IOFs and cooperatives are largely comparable, it is reasonable to assume that their behaviors will have some level of correlation, hence favoring the deductive approach.

3.2. Data Collection

Effective methods for collecting data are important to provide well-supported answers to the research question. The primary source of data consists of empirical material from interviews and the respondents' annual reports. Furthermore, conclusions are developed by comparing gathered empirical material with the established theoretical framework from the previous chapter, hence following a deductive approach as previously mentioned. Interviews pose as the main source of empirical material to provide relevant and useful primary information. Direct digital interviews were conducted with Lantmännen, Coop and Norrmejerier, whereas Arla decided not to participate. Consequently, empirical material on Arla is solely based on their annual report of 2022. The respondents have answered a resembling collection of questions with minor individual adjustments based on prior knowledge of the respective firm. The reasoning behind the adjustments contemplates from varying informative annual reports and organizational differences. A generalized interview guide with questions can be found in appendix B. Validation of the interview guide is important to ensure effective collection of data. The interview questions were formulated to provide insights on the three supporting questions listed in the first chapter. By cross-reference to the respective firm's annual report, the relevance of the interview guide could be validated before the interviews.

Relatively uncharted areas often require a receptive structural approach in order to develop an understanding on the subject. Since previous literature on financing preferences of agri-food cooperatives is limited, the interviews required an informal structure. The direct digital interviews were conducted through a semi-structural approach. This means that a generalized form of questions were used in all interviews, but the implementation was dependent on the respondents answers (Abhabi & Anozie, 2017). The formulated questions act as guidance in receiving predetermined desired information whilst possessing a high level of flexibility, meaning that more nuanced and developed questions are formulated successively during the interview. This approach provides an

open discussion, leaving room for further information, interpretation and discovery of eventual influencing externalities. However, since one respondent has decided not to participate, the outlined research technique has been adjusted for empirical material on Arla towards a more structural approach. This approach provides most of the sought after information, but lacks flexibility, casualty and information about firm specific preferences (Abhadi & Anozie, 2017). As a result, adjacent subjects and eventual externalities risk being disregarded, hence limiting the analytical discussion. To counteract this, the empirical material on Arla was compiled after completing the other three interviews to enable adjustment based on insights and learnings from proceeding interviews. This offered an opportunity to develop a better understanding before examining Arla's annual report.

The three individuals interviewed occupy accrediting treasury positions within their respective organization, such as head of treasury, head of controlling and corporate finance manager. Contact has been established through reaching out to each firm directly and receiving recommended individuals. Their separate views on financing preferences, together with their long experience in the field provide a credible foundation which constitutes the majority of the empirical material. In order to approach empirical saturation, interviews are complemented with quantitative and qualitative data from each firm's official annual report. Furthermore, it is important to ensure sufficient verification and credibility of the gathered empirical material, therefore two main measures have been put into place. Firstly, by cross-referencing interview material with annual reports it was possible to validate samples of the gathered data. Secondly, all interviews were recorded and transcribed to increase credibility and offer an objective recount of what was said during each interview. Conclusively, the overall purpose of conducting interviews is to gather several subjective views on how cooperative agri-food firms prioritize their means of financing during uncertain economic circumstances.

3.3 Company Selections

It's crucial to select firms that fit certain criterias in order to provide credible conclusions to the research question. The first selection criteria is that the selected firms must be cooperatives in the agri-food industry. This is to ensure that the information received can be analyzed in a comparable manner. Secondly, only nordic firms are considered. This criteria is defined to ensure that the thesis captures and contributes to a further understanding of a comparable region. Emphasis is placed on Nordic cooperatives since it is geographically underrepresented in the literature. The last selection criteria is that the firm's members must be either suppliers or consumers, i.e. the firm and its members operate within the same supply chain. The idea behind this is to gain an insight on the differences between these two subcategories of cooperative ownership. Overall, the selected firms serve to provide a representable sample of nordic agri-food cooperatives, and to provide further insight concerning financing preferences of cooperatives.

Given the developed selection criterias, the first firm analyzed is Lantmännen. Lantmännen is a Swedish agri-food conglomerate focused on the entire value chain connected to grain and their members are suppliers to the firm, i.e the farmers. The next two firms are Arla and Norrmejerier, whom both are focused on dairy products and both firms' member base consists of their suppliers. However, the two cooperatives differ significantly in size with Arla as the largest dairy cooperative in the Nordic region, while Norrmejerier is smaller with a more local footprint. This is interesting since it provides insights on how size impacts cooperatives financing preferences. The last analyzed firm is Coop. The main difference between Coop and the other firms is that Coop's member base consists of consumers rather than suppliers. This may provide further understanding of how the ownership structure of cooperatives affects their financing preferences, both in general and during a tough economic climate. It should also be mentioned that some of the chosen firms' subsidiaries formally display themselves as limited companies. However, the parent company of each firm is classified as a cooperative, meaning that their subsidiaries along with the rest of the organization, operate with cooperative constraints in all areas relevant to this paper. Consequently, all chosen firms can be classified as cooperatives from a financing preference perspective.

3.4 Limitations to Study

In order to further ensure validity and credibility in the findings from the case studies, it is important to recognize limitations to the study. One important limitation is the absence of an interview with Arla. As discussed previously, this leaves the empirical material to consist solely of public data from annual reports, hence leaving out internal preferences and unofficial guidelines, which somewhat limits that depth of the analysis. This is to some degree balanced by interviews with Lantmännen and Norrmejerier, whom both are similar firms in many aspects. Another limitation to the study is the scarcity of previous studies on cooperatives financing preferences, especially how they change during economic downturns. Research on Nordic cooperatives is also limited, thus the theoretical material assembled is primarily international. This partly aggravates validation of empirics concerning Nordic cooperatives' behavior as a result of the current economic climate, as well as limits the possibility to link findings to prevailing literature in the analysis. However, this offers a possibility towards providing novelty to existing literature. Finally, the study is limited to four firms which may partly limit the ability to form broad generalized conclusions. However, a limited selection of firms may also enable a deeper analysis on each firm's preferences, rather than a more shallow understanding of a larger set of firms. Combining three comprehensive interviews with additional data from annual reports has provided this paper with sufficient empirical saturation.

4. Empirics

In this chapter, empirical material from interviews and annual reports of four different nordic cooperatives are presented. The gathered empirical material is divided into three sub-categories, which represents this paper's three supporting questions.

4.1. Lantmännen

The following empirical material presented is derived from an interview with Lantmännens corporate finance manager and complemented with data from 2022:s annual report. Lantmännen's key financial metrics can be found under appendix A and their member base consists of their suppliers.

4.1.1. Financing Alternatives and Patronage Dividends

In an interview with Lantmännen's corporate finance manager, insights on financing preferences and influencing factors were presented. Lantmännen generally prioritizes three sources of financing: retained earnings, bank loans and bonds. The central part of their organization acts as an internal source of financing, providing all separate divisions with funds through a collective cash pool. Since they are limited from issuing equity, an important part of Lantmännen's financing revolves around their availability towards attaining bank loans. To enhance their opportunities towards procuring bank loans, they require an equity ratio of at least 40 percent. Furthermore, the firm operates a listed green bond programme worth approximately one billion SEK as of today, and intends to issue another three billion SEK within a foreseeable future. Since the cash flow from the green bond programme is devoted towards environmental-friendly investments, the usage of these funds are limited. The respondent instead claims that Lantmännen prioritizes bank loans to finance new investments.

Lantmännen operates as an economic association with the overall goal to generate economic value to its members. To take part in Lantmännens patronage dividends each member pays a members fee, with the option to invest additional emitted capital. This, combined with the members' annual trading with Lantmännen, decides the size of the members' patronage dividend. Because their business revolves around their members' success, their emitted capital programme cannot be used as a source to gather equity during difficult periods. Especially during the current economic downturn, with high inflation, which puts extensive pressure on firms operating in the agri-food sector. In addition, Lantmännen operates within several divisions, making their diversified stream of income more resilient towards a decline in the agricultural sector. Consequently, if capital is required, Lantmännen issues debt and does not turn to members for new emitted capital. However, if the firm were to issue too much debt and override their set equity ratio target, then theoretically they could raise equity through emitted capital from members. Furthermore, all assets invested as investment capital are

devoted towards colloquial operational activities and are spent similarly during today's economic uncertainty compared to previous years.

Even though Lantmännen increased their turnover during 2022, inflative prices caused their cash flow to drop significantly. The residual cash flow was directed towards new investments and the largest distribution of patronage dividends in the firm's history. However, acquisitions were mainly funded by external funds. Lantmännen distributes 100 percent of their net earnings from division agriculture and 40 percent of their accumulated net earnings from the remaining operations as patronage dividends to their 18,256 members. In 2022, this amounted to 1,080 MSEK. The respondent states that conflicts of interest occur regarding the size of the patronage dividends. Members argue for greater patronage dividends, whilst managers argue for reinvestments and long term value creation for members, thus subsequently greater dividends. However, since agriculture is a long-term business operation and many involved individuals occupy a similar agricultural interest, members often have the cooperative's best interest in mind.

4.1.2. Effect of No Access to Capital Markets

One of the main differences between cooperatives and IOFs is cooperatives inability to raise new capital through issuance of new shares. According to the respondent, it is still theoretically possible for cooperatives like Lantmännen to raise funds from their members. However, in practice equity financing is rarely used although Lantmännen has a number of alternatives for gathering equity. One alternative is to raise funds through publishing shares which are classified as hybrid capital and available for non-active owners. In the annual report of 2022 the publishing shares amounted to 250 MSEK and constituted roughly one percent of the total equity. The correspondent explains that using publishing shares as means to raise funds in financing hardship is challenging due to the time consuming process.

In addition to publishing shares, Lantmännen could theoretically ask their members for additional investment capital. In practice this would potentially be carried out in times of dwindling cash flows and financial distress, typically as a consequence of subsequent limited harvests. The respondent explains that Lantmännen has a well diversified business compared to many of its members. Hence, in times of uncertainty they could theoretically turn to members for additional funds, but it is likely that members' own businesses are suffering even more. Therefore, Lantmännen is limited from raising new equity through additional investment capital from members when the industry faces challenges. A third alternative for Lantmännen to raise funds from their members is to regulate their incentives to invest additional funds by varying the interest rate offered to members. In contrast, the respondent explains that there could be two exceptions to the impractical nature of raising funds from members. First, Lantmännen could theoretically use additional investment capital to finance a large acquisition

of another cooperative in times of strong economic conditions. Second, the cooperative could turn to members to help sustain the targeted equity ratio in conjunction with larger investments financed with new debt. However, the respondent points out that neither have ever been done by Lantmännen and that acquisitions are frequently financed by internal funds or debt.

The absence of share issuance on capital markets implies a larger risk associated with cooperatives compared to IOFs, *ceteris paribus*. The increased risk is considered when banks evaluate a firm's credit rating. Worse credit rating is linked to higher cost of debt. The respondent furthermore explains that Lantmännen has a larger equity ratio than what would have been necessary for an IOF to compensate for the additional risk associated with their cooperative ownership structure. As mentioned in the previous section, Lantmännen relies heavily on debt financing to be able to maintain their dividend levels to members when cash flows are insufficient. Hence, Lantmännen's intention is to maintain an equity ratio larger than 40 percent to ensure a strong credit rating over time. Over the past five years the equity ratio has never fallen short of the targeted level. The respondent points out that the targeted equity ratio is not determined based on computational methods, which e.g. consider pros and cons with debt to find an optimal debt ratio. Instead the required equity ratio is determined based on prior experience, business acumen, and lenders expectations.

4.1.3. Response to Volatile Market Conditions

In preparing for an eventual economic downturn, Lantmännen maintains a large capacity for new debt. They have also confirmed their facilities to use as collateral in order to cover short term capital needs, and the respondent points out that they are well situated to cover such short-term needs. With rising interest rates, the alternative cost for holding cash is high. To manage their cash flow during a downturn, their focus will be to amortize debt rather than accumulating cash. Overall, Lantmännen recurrently takes measures to secure their financial position. They maintain a strong relationship with their financiers, and have a strategy in place to manage potential capital and cash needs. Working capital is highlighted as a key metric for Lantmännen, especially given the economic uncertainty of 2022/2023. Firms' inflation-incused assets are heavily depreciated, which have led to the highest interest rates in Sweden since the 2008 global economic crisis. From a commercial benefit perspective, working capital should preferably be minimized. However, Lantmännen would be inclined to increase working capital if their members get extensively affected by a recessive economy. If a situation like this occurs, the respondent states that extended payment durations to members could work as a balancing activity towards increasing their utility. This would decrease accounts payables and thereby increase working capital.

Externalities have a big effect on Lantmännens investment preferences. They actively follow the market in order to determine a fair price, which is then used to evaluate the attractiveness of eventual

bond issuance. During the first quarter of 2023, issuing new bonds is not attractive due to increased interest rates. The respondent goes on to explain that Lantmännen can afford greater short term interest rates, instead of committing to long term bonds with higher yield. The respondent concludes that green bonds are an important source of external financing for Lantmännen, but given the current state of the market, bank loans are generally favored to issuing bonds with long durations and high yield.

4.2. Coop / KF

The following empirical material is derived from an interview with Coops Head of treasury and complemented with data from 2022:s annual report. Coop's key financial metrics can be found under appendix A and their member base consists of individual consumers represented by local associations.

4.2.1 Financing Alternatives and Patronage Dividends

Coop's extensive market share combined with their cooperative ownership structure entails an unusual internal procedure in financing decisions. The Swedish grocery store is one of six organizations under the cooperative union (KF) and constitutes approximately 99.2 percent of the union's total turnover. Furthermore, Coop is owned by 3.8 million individual consumers which are represented through 30 local consumer associations. Details on Coop's financing have been provided through an interview with their Head of treasury. The firm's internal financing primarily consists of retained earnings, funds from selling assets, and through liberating working capital. Coop also operates an internal cash pool which distributes funds to all subsidiary consumer associations. Internal means of financing is the preferred alternative when proceeding with new investment opportunities. Consequently, major portions of Coop's retained earnings are reinvested into the organization.

Even though internal financing is frequently prioritized, ensuring availability towards attaining external financing is crucial when operating during uncertain economic circumstances. The firm's main sources of external financing refers to bank loans from both internal and external banks, investment capital, loans from adjacent cooperatives, and publishing shares. Coop frequently procure bank loans from external sources, but also exploits available funds from MedMera bank, which is owned by the cooperative union. Even though bank loans constitute the majority of the firm's external financing, the respondent highlights loans from adjacent cooperatives as a frequently used and viable alternative. Another external source of financing refers to the obligatory annual investment capital from all local consumer associations. Each local consumer association must initially transfer a minimum of 10 000 SEK as investment capital. Furthermore, 67 percent of each consumer association's annual earnings must be transferred to their investment capital account. If the cooperative union accounts for excessive retained earnings, local consumer associations receive a 1 percent interest rate on this amount, which is paid out as the firm's official patronage dividend. The

remaining third of earnings are disclosed as the cooperative union's equity. Local consumer associations then distribute their patronage dividends to individual consumers as bonuses and discounts. Further involvement in Coop is possible through investing in publishing shares, which are available for members as well as external actors.

A cooperative owner structure combined with a large market share also incentivizes conflicts of interest. The respondent highlights the size of patronage dividends as a recurring conflict amongst owners and managers within the organization. The local consumer associations would prefer increased patronage dividends, but as the firm often prioritizes retained earnings in funding new investments, a conflict of interest occurs. Another existing conflict of interest refers to working capital and payment terms. If further investment funds were to be required, the firm could liberate working capital through providing shorter payment due dates to their retailers. However, since the local consumer associations represent the owners of the organization, this would entail a conflict of interest. Ultimately, the cooperative union must consider the beneficial aspects of multiple actors in financing decisions.

4.2.2 Effect of No Access to Capital Markets

As covered in previous sections, Coop is limited from raising new equity on capital markets. However, the respondent explains that there are two main ways for Coop to raise new equity. The first alternative is to raise new investment capital from the local associations, which are Coop's owners and represent the members of the cooperative. The second alternative is new equity through publishing shares, which enable the firm to raise capital from others than Coop's local associations. Historically, equity financing through publishing shares have mainly involved other closely related cooperatives and have been unavailable for individual investors.

Questions concerning firms' equity ratio are often high on the agenda for management and it's of interest to further understand the links between cooperative ownership and equity ratio. During 2022, Coop saw a substantially increased equity ratio, which over recent years had been declining (see appendix A). The increase follows from a strong bottomline due to large asset sales during 2022. The respondent points out that Coop has no set targeted equity ratio, but argues that the firm has a relatively strong capital structure. In general, the agri-food industry is a stable industry with quite low operating risk. However, the respondent argues that Coop experiences a larger volatility compared to the industry, hence it might be wise to maintain a higher equity ratio. Given that volatility of profits were reduced, there would potentially be room for lowering the equity ratio. In general, a sufficient equity ratio is an important factor in a firms' credit rating. The respondent points out that Coop lacks an official credit rating, but that they still are unofficially evaluated by financiers when raising external capital. Compared to IOFs, Coop are limited from issuance of shares on capital markets,

which limits flexibility and potentially adds additional risk from a financiers point of view. Debt financing is central for Coop, hence maintaining a sufficient equity ratio is important for the firm.

Recently, Coop made a large new investment which was financed with internal funds. Due to a large sale of fixed assets Coop had a large surplus of cash on their balance sheet. The respondent explained that when excess cash is available, the firm sees no rationale behind taking on more debt to finance new investments, and instead internal funds are used. When internal cash flows are insufficient to finance large investments, Coop turns to external financing, mainly using bank loans since their access to new equity is limited.

4.2.3 Response to Volatile Market Conditions

Like most firms in today's uncertain market, Coop faces financial challenges. The respondent highlights cash management as a difficult task to handle during the economic uncertainty of 2022/2023. With high inflation compared to previous years, the alternative cost for cash is rising, incentivizing not to build excessive cash. Furthermore, as a substitute to holding cash, the firm prioritizes bank loans as a source of financing during economic uncertainty. This means that Coop prioritizes maintaining capacity for new debt, which is also a reason why they used internal funds as a means of investment. Coop closely monitors their working capital and takes measures to ensure that their liquidity is sufficient. The respondent mentions several methods on how working capital could be reduced in theory. One such option is to lengthen payment durations to their suppliers, effectively freeing capital from operations that could be used elsewhere. Another option is limiting the outward flow of capital, for example delaying patronage dividends or non-essential investments in order to strengthen liquidity. While these options may be exercisable in theory, a short term reduction of working capital may be complex to accomplish, since Coop would risk upsetting suppliers and members on a competitive market.

As previously mentioned, Coop has limited options in equity financing, hence securing access to debt financing is important. In order to achieve this, Coop focuses on equity ratio management. The firm has increased the equity ratio substantially during 2022, effectively leaving more room to attain new debt in the future. The respondent also outlined several options aimed at lessening financial risk in case of a negative shock in the market. The current market situation is more serious for Coop than the 2008 global economic crisis because of high inflation rates, which is the main influencing factor for the firm. Since Coop sells groceries, their demand profile is highly elastic. This means that customers will stop consuming groceries as a last resort, opting out of luxuries first. While the overall economy suffered in 2008, rapidly rising prices in groceries were not as prevalent as they are today. This poses an ethical dilemma for Coop on how to maintain member utility and simultaneously keep their market share and profits, when experiencing declining margins due to increased costs. Conclusively, Coop

works preemptively with risk management. This work is highlighted within equity ratio management and inflation awareness, as well as looking into other alternative solutions.

4.3. Arla

The following empirical material presented below is gathered from Arla's annual report of 2022 and other sources on their website. Any key financial metrics discussed can be found under appendix A and their member base consists of their suppliers.

4.3.1. Financing Alternatives and Patronage Dividends

In Arla's annual report of 2022, their CEO highlights the increased global inflation as a primary source of current issues. Increased prices on raw material and input material have caused the final product to inflate, leading to enhanced complexity in managing the supply chain effectively. During regular circumstances, Arla exploits both internal and external means of financing. Their internal sources of financing primarily consist of retained earnings. Furthermore, cash pools are used to operate 95 percent of the firm's daily cash management. Arla's external financing is constituted of long-term bank loans, short-term bonds and investment capital. In previous years, internal funds have been the primary source towards investments. However, a significantly decreased cash flow this year has forced the firm to use bank loans as a substitute. Despite this, their patronage dividends increased. Consequently, the firm prioritizes internal funds towards investments, but are inclined to exploit bank loans if facing a cash deficiency. This means that Arla can maintain their level of patronage dividends, whilst allowing themselves to conduct operational activities as usual.

Since Arla's suppliers are the firm's owners, their cooperative ownership structure affects their operational and financial decisions. For example, an incentive towards offering favorable payment terms exists, meaning that working capital may increase as a result. In their annual report, Arla displays the usage of their retained earnings as a fund to cover multiple expenditures. First of all, retained earnings are used towards covering investments and increased working capital. Subsequently, the firm's annual result is showcased before presenting their patronage dividends. Dividends are distributed amongst the firm's members as a portion of Arla's result. The size of the individual owner's patronage dividend is based on payback from transactions with Arla and interest on their deposited investment capital. Because of an increased annual result, their patronage dividends increased during 2022. Arla also increased the commodity price to their members by 40.5 percent from 0.31 eurocent to 0.52 eurocent/kg, effectively increasing the commodity price premium. Because of a challenging year, Arla decided to partially distribute their patronage dividends in advance. Roughly 25 percent of 2022:s total patronage dividends was paid out six months prematurely to help members conduct necessary investments, which enabled members to manage the economic volatility.

Once patronage dividends have been distributed, the remaining result is allocated to the firm's equity, where one third is portioned as individual investment capital and two thirds as collective capital. Furthermore, Arla intends to increase their patronage dividends to incentivize environmental-friendly activities. Members will be compensated through increased commodity prices if they decrease their polluting activities in line with Arla's guidelines. This is estimated to cost Arla approximately 500 MSEK annually.

4.3.2. Effect of No Access to Capital Markets

Similar to most cooperatives, Arla cannot turn to capital markets to raise new equity, which imposes a constraint on their equity financing abilities. The firm's equity consists of common capital and individual capital. Common capital constitutes close to 80 percent of the total equity and is mainly accumulated by allocating 66 percent of net profits after supplementary payments to owners. The common capital is unallocated to individual members, hence is not reimbursed if they decide to leave, and consist of the capital amount and the reserve for special purposes. The common capital serves as a strong financial foundation and prohibits excessive dividend payments to owners, but can be used to compensate owners' losses under extraordinary circumstances. Individual capital is allocated to members and is mainly accumulated through the remaining 34 percent of net profits after supplementary payments. Owners receive annual interest on their individual capital, which is part of the value proposition together with supplementary payments. Should they decide to leave, then their individual capital is reimbursed. To raise new equity, Arla have two main alternatives: ask members to contribute additional individual capital to the firm, or find new members that contribute injected individual capital upon entry. Over the last 5 years, Arla has not turned to owners to raise additional funds, instead their financing has been financed by profits.

Due to Arla's ownership form, they cannot raise new equity on capital markets, leaving debt financing as the most realistic option to cover liquidity deficits in current times. Consequently, they continuously ensure that future access to debt financing, especially access to bank loans, is secured to cover volatility in cash flows. A strong financial position is closely linked to firms having a sufficient equity ratio. Arla annually establishes an equity ratio target interval for the next fiscal year. For 2023, the targeted range for the equity ratio has been increased to strengthen the firm's financial position further, which will leave room for taking on more debt if required in the future.

4.3.3. Response to Volatile Market Conditions

Arla has faced challenges imposed by the current economic climate and foresees a difficult 2023. The firm has seen inflation affect both inbound and outbound cash flows. Arla have successfully transferred these price increases to their customer base, largely maintaining their margins. Simultaneously, the firm has increased the premium on the commodity price offered to members.

Based on their future expectations several measures have been taken to prepare for potential financial challenges. Arla operates a collective capital account that amounts to 2,150 MSEK. Besides this, the firm maintains a large liquidity reserve, approximately 1,000 MSEK mainly in the form of unused loan commitments. This allows Arla to endure unforeseen liquidity requirements that may arise during a downturn. Despite potential challenges, Arla is optimistic in their ability to keep generating member utility.

Liquidity management has been a focus of Arla during the past year, balancing new investments with increases in working capital. In order to finance their investment activities, whilst maintaining a positive net cash flow, Arla had to acquire 810 MSEK of new debt. They have also increased their use of derivatives in order to secure future cash flows and mitigate potential risks associated with low liquidity. However, Arla has also undertaken measures to manage their increased working capital. The firm has identified inventory and accounts receivable as the main drivers of increased working capital, caused by high inflation. In their annual report, Arla express their commitment to support their members in challenging times.

4.4. Norrmejerier

The following empirical material presented is derived from Norrmejerier's annual report of 2022 and complemented with an interview with their head of controlling. Norrmejeriers key financial metrics can be found in appendix A and their member base consists of their suppliers.

4.4.1. Financing Alternatives and Patronage Dividends

Norrmejerier adds an uncharted element as they differ significantly in size compared to previous participants. The respondent argues that one of the main challenges with a cooperative ownership structure is the firm's substantial focus on short-term goals. The firm's internal financing consists almost exclusively of retained earnings, which provides constraints when experiencing a cash flow deficiency. External sources of financing primarily refers to bank loans and invested capital from owners. In addition, the firm has recently started to exploit the advantages of leasing. Norrmejerier's bank loans mainly consist of a checking account, which increased during 2022. Invested capital from owners is derived through two sources, regular investment capital and emitted capital. During regular circumstances, investors earn interest on their deposited capital. Norrmejerier has during previous years prioritized an equal split of retained earnings and bank loans to finance their investments, whilst also using bank loans to amortize long term debt and leftover retained earnings to distribute patronage dividends. However, since the bottomline of 2022 was negative, the firm increased the checking account to finance investments and amortize debt, whilst deprioritizing patronage dividends. Consequently, the firm exploits bank loans during times of cash deficiency. Furthermore, the

respondent states that member value always holds the higher priority, but without profitability the firm will cease to exist.

The firm compensated their deprioritization of patronage dividends by increasing the premium on the commodity price by 30 percent, which resulted in an increase from 0.34 eurocent/kg to 0.44 eurocent/kg. The respondent regards this distribution as a better type of compensation than regular patronage dividends, since residual cash flows is nevertheless given back to the cooperative's owners. Consequently, if profits were to be displayed, an originally greater commodity price could have been provided, making the firm reluctant towards displaying profits. Norrmejerier can therefore be seen as a facilitator of value to its members. In order to implement the increased compensation, Norrmejerier conducted savings in production and increased the price of their end-products. Despite this, savings have yet to cover their increased costs. An internal goal of the firm is to provide their members with a higher price over time than main competitors Arla. This is in order to keep a competitive advantage since Arla, to a certain extent, sets the market price of their joint commodity. Furthermore, Norrmejerier lost 10 percent of their total members during 2022, which was due to retirement and closures according to the respondent. Conflicts of interest regarding the size of patronage dividends rarely occur within Norrmejerier since the size of their cash flows doesn't incentivize divided opinions on the purpose of the residual cash flows. Furthermore, Norrmejerier normally distributes the vast majority of their result.

4.4.2. Effect of No Access to Capital Markets

Norrmejerier is limited to raising new equity from members, leaving them with one main way to raise additional equity, which is invested capital from members through either invested capital or through emitted capital. However, the respondent states that equity financing is almost never an option, since their owners rarely operate with a sufficient amount of capital to invest. Members receive interest on their invested capital as part of their dividends but in times of financial distress the firm has the mandate to cancel dividends to members, which was the case in 2022. The majority of Norrmejerier's equity consists of restricted equity, the rest is accumulated profits that can be used for e.g. dividends. In practice, Norrmejerier cannot rely on additional equity from members when facing insufficient liquidity, leaving debt financing as their most used option over the last years.

As previously mentioned, Norrmejerier has been hit hard by the economic uncertainty of 2022/2023 and has seen their equity ratio decline from 40.7 to 32.2 percent since 2020. The respondent states that their targeted equity ratio is 40 percent, but the economic uncertainty of 2022/2023 have required extensive financial measures which have caused them to fall short of this objective. The main drivers behind the declining equity ratio have been new debt and reduced equity due to a negative bottomline, despite additions from untaxed reserves. The increased debt level is attributed to significant increases

in accounts payables (+31%) and utilized checking accounts (+42%). Both are consequences of liquidity problems driven by increased working capital. Inventory values have increased substantially due to inflation, forcing Norrmejerier to increase accounts payables to balance their liquidity. Increasing accounts payables at the expense of their members is something they wouldn't normally be inclined to do. In addition, to further cover the significant deficit in liquidity, Norrmejerier also increased long-term debt through the use of checking accounts. During 2022 the utilized credit increased and brought them close to the credit limit. In addition, the firm has decided to cancel dividends to owners to tackle short term distress, but are optimistic about a positive bottomline in 2023.

4.4.3. Response to Volatile Market Conditions

Norrmejerier expresses their primary concern regarding the economic uncertainty during 2022/2023 as the increasing interest rates. The firm has attempted to transfer the price increases to consumers. However, their product catalog isn't well-diversified and is defined by luxury items, which made the transfer difficult but not impossible. Consequently, operating costs are possible to transfer to consumers, whilst the respondent states that increased interest payments are significantly harder to transfer to consumers. Looking forward, Norrmejerier expects 2023 to be a strong year financially and hopes that the peak has been reached in regards to prices. The respondent states that the agri-food industry is a very stable market with few deviations. However, the economic uncertainty of 2022/2023 has caused a drop in consumption, which is highly unusual.

Norrmejerier's negative bottomline during 2022 has aggravated the procedure of exploiting external sources of financing. This caused Norrmejerier to reduce investments, retrieve advances, cancel dividends and increase their credit on checking accounts, in order to maintain sufficient liquidity. The respondent explains that Norrmejerier have forsaken the majority of their profit to patronage dividends during a long period of time. This has prevented them from accumulating unallocated equity, which could have been useful during the economic uncertainty of 2022/2023. In the future, Norrmejerier will have to prioritize profit to a certain extent in order to prepare themselves for future downturns. Inflation has significantly impacted Norrmejerier's working capital, forcing them to tie substantial capital mainly in inventory. In order to lessen the burden of tied up capital, Norrmejerier has put part of the burden on their members. They have increased their accounts payable to members by 43 percent, compared to 25 percent for non-members. The respondent states that tying capital at the expense of members' has never been an option, but during the economic uncertainty of 2022/2023 it was necessary. This kind of financing puts pressure on the owners of the cooperative, as they risk facing bankruptcy if their revenue is compromised. Consequently, this type of financing is rarely an option unless the firm is facing financial distress.

5. Analysis and Discussion

This chapter presents the analysis of the empirical and theoretical material. The chapter starts by discussing the size of patronage dividends, followed by the use and access to external sources of financing. After that, the cooperative's objective to maximize member utility and how that is affected by market conditions is discussed. The chapter concludes with a discussion of cooperatives' financing preferences, before and during economic uncertainty. This structure is based on primary findings from the empirical material, deviating from the previous structure based on the supplementary questions presented in the first chapter.

5.1. Determining Size of Patronage Dividends

During regular circumstances, it's evident that Lantmännen, Arla and Norrmejerier distribute large amounts of their net result to their owners, which is reasonable considering the overarching objective of the cooperative ownership structure to maximize member value. However, Coop did not distribute any patronage dividends during 2021 and operates more like an IOF, displaying clear tendencies of free cash flow behavior (Jensen, 1986). The organization prioritizes growth opportunities and equity accumulation whilst deprioritizing patronage dividends, showcasing behavior in line with Fischer (1984) which stated that increased cash flow causes managers to prioritize growth over patronage dividends. The remaining analyzed cooperatives often do not display tendencies in line with this, which could depend on the placement of their owners in their collective supply chain. Coop's member base consists of their consumers, meaning that Coop perhaps are not as dependent on their members as cooperatives with suppliers as members. In conclusion, cooperatives with consumers as owners seem to occupy greater leverage in financial decision-making, whilst cooperatives with suppliers as owners seem to be more dependent on them and are consequently provided with less leverage in financial decision-making.

2022 was a tough year for all four cooperatives. Despite this, Arla, Lantmännen and Coop increased their patronage dividends. However, Norrmejerier deprioritized patronage dividends and increased their accounts payable to their members by 42 percent, which is not in line with member utility maximization and leads to the conclusion that the firm is acting irrationally because of financial distress. Despite experiencing financial distress, the firm increased their commodity price to their suppliers by 30 percent which resulted in a price of 0.44 eurocent/kg. However, this does not compensate for the 42 percent increase in accounts payable and is still inferior to market competitor Arla's commodity price (0.52 eurocent/kg). Since Arla sets the preliminary commodity market price, Norrmejerier are forced to accommodate in order to maintain their competitive advantage. This type of increase during economic uncertainty puts pressure on Norrmejerier's financial ability to raise prices and may affect their internal funds available for spending, leaving them more dependent on

external sources of financing. Conclusively, the difference between the increased commodity price and increased accounts payables can be seen as an overall price decrease between Norrmejerier and their owners. This is in line with Pokharel et al. (2019) stating that decreased prices to cover lost margins may result in conflicts of interest, causing members to exit the union. Norrmejerier has lost 10 percent of their total members during the economic uncertainty of 2022/2023, which may be a result of their irrational behavior. This is however explained by Norrmejerier as retirements and closures.

Arla, Lantmännen and Coop were however able to increase their patronage dividends during 2022, which could be a result of size advantages, as Norrmejerier is significantly smaller than the other firms. Another reason as to why the firms distributed increased patronage dividends could be an effect of depreciating assets. Since the high inflation causes monetary assets to decline, accumulating liquidity could be unprofitable. Nonetheless, a cooperative showcasing decreased cash flow whilst increasing their patronage dividends displays behavior in line with the free cash flow theory (Jensen, 1986). As firms' cash flow increases, managers are incentivized towards investing the residuals in organizational opportunities. Conversely, this could mean that when cash flows are insufficient, managers are disincentivized to invest in organizational opportunities, meaning that patronage dividends may increase because of less contradiction towards owners' urge to increase their patronage dividends. This could also be a way to capitalize on the opportunity to incentivize owners to invest further capital in the future (Barton, 2011b). Furthermore, this is contended by Fischer (1984) who suggests that managers in this case would deprioritize patronage dividends to finance growth opportunities. This is however not the case as Norrmejerier was the only cooperative to decrease their patronage dividends, which was most likely because of financial distress.

Increased patronage dividends had consequences on some of the firms' financial behavior. Arla and Lantmännen obtained more bank loans than usual in order to finance their large patronage dividends. However, this isn't necessarily a negative thing, as Pokharel et.al (2019) states that increased usage of debt financing can enhance the patronage dividends to members. Using internal funds to finance patronage dividends leaves the cooperative dependent on other sources of financing. Thus, Arla and Lantmännen usually exploit bank loans to finance their colloquial operation whilst distributing large dividends, which is in line with Pokharel et al. (2019) and depicts intentions to maximize member value as this is not in line with the pecking order theory (Myers & Majluf, 1984). Coop takes a different approach and prioritizes internal funds towards financing their operation, stating that: "we do not see a reason to use any other sources of financing if internal funds are available". This statement matches Yen et al. (2020) theory suggesting that retained earnings within a cooperative is not assigned to a specific member of the firm, making it a cheap source of financing. Furthermore, despite a

positive result in 2021, Coop decided not to distribute any patronage dividends, showcasing intentions to prioritize growth in line with Fischer (1984).

Conflicts of interest regarding the size of patronage dividends seems to be a recurring issue within the cooperatives during regular circumstances. Lantmännen and Coop both experience that their members argue for greater patronage dividends, whilst managers of the firm argue for reinvestments and subsequently greater patronage dividends. The firms however differ in how they manage this type of conflict. Coop acts more in line with Fischer (1984) and prioritizes growth, whilst Lantmännen acts more in line with free cash flow theory (Jensen, 1986), meaning that greater levels of cash flow cause divisive conflicts rather than necessary actions. Consequently, differing approaches may depend on what level their members are placed in their collective supply chain. This conflict seems to remain similar with regards to current economic conditions. However, the economic uncertainty of 2022/2023 has been a challenging period for the cooperatives' owners, which supports their argument for greater patronage dividends if possible. This leads to a dilemma between maximizing member value or the firm's profitability during tough times. Norrmejerier have had a tough year where they had to deprioritize patronage dividends to cover other expenses. However, Norrmejerier's operation is significantly smaller than the other observed cooperatives, meaning that low cash flows doesn't entail any conflicts of interest regardless of economic conditions, since there are less monetary assets to argue about.

5.2. Accumulation of Debt

Cooperatives, like many firms, require access to external capital to fulfill their overarching objective. However, the nature of cooperative ownership structure entails certain equity constraints. Therefore, one can argue that access to debt financing is more important to cooperatives than IOFs, especially in times of economic uncertainty, where internal funds tend to decline and IOFs in contrast to cooperatives are able to issue new equity to cover capital needs. As suggested by Barton (2011a) cooperatives utilize debt as a tool to control liquidity levels and their equity ratio to ensure financial stability. This claim largely corresponds with the gathered empirical material, with behavior inline with Barton (2011a) claim regarding debt utilization, which is a common denominator of the studied cooperatives. During regular economic conditions the empirical material suggests that the studied cooperatives utilizes debt as a tool to enable activities that cannot be funded solely with retained earnings. This indicates that cooperatives possess a hierarchical preference towards internal versus external capital in line with Myers and Majluf (1984) pecking order, suggesting that it would be irrational to turn to debt if financing via internal means is available, due to the lower cost profile. Despite this, cooperatives seem inclined to prioritize debt to enhance their ability to distribute patronage dividends to members. This suggests that there exists a deviation between a cooperative's optimal source of financing and their actual source of financing (Fischer, 1984).

As stated, during normal circumstances the utilization of debt serves as a complement to internal financing, which seems to prove the claim made by Mateos-Ronco & Guzmán-Asunción (2018) that pecking order behavior can be observed during normal circumstances. However, during economic uncertainty, cooperatives rely more on debt to maintain large patronage dividends. This is partially in line with Cheng & Katchova (2019) who suggests that during economic uncertainty firms tend to divert from pecking order behavior and instead turn to trade off behavior. However, trade off behavior is not observed since the cooperatives doesn't weigh the pros and cons of accumulating debt. Instead their willingness to accumulate debt is determined by their main objective of maximizing member value. As previously stated, the limited options for equity financing increases the importance of securing access to debt for cooperatives. Access to debt is partially secured via the firm's equity ratio. Building a stronger equity ratio during normal circumstances as a precautionary action is a commonly observed behavior amongst all studied firms. The targeted equity ratio differs between the observed firms, and is determined mainly by intuition. Lantmännen has a substantially higher equity ratio than the other firms, showcasing size benefits in line with Lyubov & Heshmati (2017) as Lantmännen operates with a diversified stream of income. However, calculating an optimal equity ratio based on theoretical frameworks could be beneficial to the overall financial performance, since it could enhance tax benefits and decrease bankruptcy costs (Myers, 1984).

Another way to secure access to debt financing is through bonds. Lantmännen intends to increase their green bond programme by 300 percent, which means that they will accumulate a significant amount of debt within a foreseeable future through bonds. This contradicts Iqbal & Kume (2014) which stated that cooperatives generally try to reduce their financial leverage during downturns to strengthen their financial resilience. Furthermore, the current economic climate reduces firms' incentives to issue bonds due to high yields over long durations. However, Lantmännen can leverage their size advantage to evade these consequences. Consequently, issuing bonds during economic uncertainty evidently requires a significant amount of debt capacity to be a viable option. Lyubov & Heshmati (2017) propose another measure to secure access to debt. They state that firms with a significant amount of tangible assets can access cheaper external capital through the usage of collateral. This is a recurring observation throughout the empirical material, where the cooperatives have confirmed their assets as collateral before it is needed. By doing this, firms can increase the speed of which external capital can be accessed in a downturn. However, Norrmejerier has started using leasing as opposed to buying tangible assets. If leasing develops into the primary way to procure tangible assets, future access to debt may be compromised as there are no tangible assets to use as collateral. Consequently, although a viable short-term alternative, a cooperative should not exploit leasing to procure tangible assets, since it drains internal funds and may decrease patronage dividends.

The economic uncertainty of 2022/2023 increased the importance of accumulating debt. During regular economic conditions, all observed cooperatives except Lantmännen seem reluctant towards exploiting debt as a primary source of investment, which could be a consequence of size. This is supported by Yen et al. (2020) stating that smaller cooperatives favor internal financing. However, during the economic uncertainty of 2022/2023, all cooperatives except Coop were inclined towards exploiting debt as a primary source of investment. Due to size advantages, Lantmännen continuously views financial leverage as a viable source of investment, which is also corroborated by Yen et al. (2020) stating that larger cooperatives can be more dependent on debt financing. However, Coop prioritized amortization during the economic uncertainty of 2022/2023, showcasing behavior in line with Iqbal & Kume (2014) suggesting that cooperatives generally try to reduce their financial leverage during economic downturns. Furthermore, a calculated equity ratio could be beneficial for the studied firms, since it could strengthen their financial position. Conclusively, weighing the pros and cons of financial leverage could optimize the cooperative's equity ratio, allowing them to further exploit the advantages of debt financing. Consequently, this could be useful in an uncertain economic environment.

5.3. Access to Equity

As a consequence of the cooperative ownership structure, cooperatives are restricted from issuing new equity on capital markets, thus needing alternative means to raise equity. According to Boland and Barton (2013), cooperatives' main sources of new external equity are entrance fees, voluntarily invested capital from owners and other types of private interest-incused placements. Entrance fees refers to investment capital from new members upon entry. Boland's and Barton's claim is to a large extent supported by the gathered empirics. Volunteered new investment capital from members pose as an alternative for all firms except for Coop, which likely is due to Coop's member base consisting of consumers. In addition, Lantmännen and Coop both offer publishing shares as means for non-members to invest and take part in dividends. However, publishing shares is portrayed as a supplementary option with limited impact. Furthermore, all firms allocate entrance fees to equity. However, since the stream of new members is hard to regulate based on the current need of new equity, entrance fees can hardly be classified as a realistic source of equity that can replace e.g. IOF:s option to issue shares on capital markets.

The final alternative for all cooperatives to raise new equity is allocating a fraction of retained earnings to unallocated equity instead of distributing the funds to members as dividends. This is highlighted by Royer (2017) as an important source of equity. This however creates a conflict of interest between members and managers, where the ability to accumulate retained earnings is dependent on cooperatives' willingness to decrease the annual patronage dividends. This is further discussed in the first section of this chapter. Moreover, firms' ability to accumulate retained earnings

to equity is also dependent on availability of profits. During normal economic conditions this may be a viable option, however the need of equity financing is typically more present when firms face economic hardship. During an economic downturn profits tend to shrink which limits firms' access to new equity from retained earnings, even though that potentially is when it's most needed. In conclusion, the main alternatives for new equity for the analyzed firms is voluntarily contributed investment capital from owners and accumulation of retained earnings, with publishing shares as a supplementary option in Lantmännen and Coop, who are the two largest firms.

Although the analyzed cooperatives all have alternative ways to raise new equity, the empirical material shows that equity financing is rarely used in practice. The most common way the firms are increasing equity is through accumulation of retained earnings. Although seen as a viable option (Royer, 2017), this is done continuously on a smaller scale as a measure to strengthen the firm's financial position rather than to meet short term needs of external funds. However, due to the cooperatives' objective to maximize member value, distributing retained earnings as dividends is prioritized. Therefore, the cooperatives are unwilling to reduce dividends in favor of the opportunity to allocate more to equity. This is partly in line with Barton (2011a) claim that new equity financing rarely is conducted through retained earnings. The firms' reluctance toward raising new equity to prevent financial distress is even more evident during economic downturns where they prioritize additional support to members, hence instead turning to debt to cover capital needs.

The second main alternative for raising new equity is through voluntary investment capital from members. During normal economic conditions the firms have previously not been in need of additional equity from members. However, Lantmännen and Coop point out that this theoretically is an option in times of economic uncertainty if the firm faces financial distress. Dahl & Dobson (1976) argues that members are interested in reaping membership benefits, but are reluctant to contribute with additional equity during downturns. Lantmännen, Norrmejerier, and Coop share this view and state that turning to members during economic downturns is unrealistic in practice. But instead of pointing to members' unwillingness to contribute, they argue that since members are less diversified compared to the cooperative they will suffer more from downturns. Therefore members will likely not be in a financial position to support their cooperative with additional capital. This is supported by Norrmejerier, who are currently faced with financial distress and have yet to turn to members for new equity, which further strengthens the argument that turning to members during economic uncertainty is not a realistic option in practice. Although the cooperatives have alternatives to capital markets for raising equity, most of the firms express that they cannot rely on members if faced with financial hardship, instead they turn to debt. This supports the view of cooperatives as capital constrained (Li et al. 2015).

According to Boland & Barton (2013), incentivizing investments from owners is more effective than mandatory equity assembling programmes, since they contradict the overall purpose of the organization. Lantmännen has actively varied the interest rate on investment capital accounts to regulate the incentive for members to commit additional investment capital. This is in line with Dahl & Dobson (1976) proposed measures to raise more equity from members. Other than that, the analyzed firms have not shown indications of active management of members' incentives for further capital contribution. This is likely a result of their overall reluctance to raise new equity from members. Being capital constrained, forces cooperatives to rely more on debt when internal funds are insufficient. The empirics show that their reliance on debt intensifies during downturns when liquidity tends to weaken. Norrmejerier is an example of this as they are currently experiencing financial distress. To stabilize their financial position, they have used additional debt and canceled dividends. However, the firm is optimistic about a positive bottomline in 2023. In this case an IOF would likely be able to issue new shares to investors to raise capital to cope with temporary challenges and maintain a strong equity ratio. Cooperatives are in contrast forced to rely on debt which lowers their equity ratio and weakens their financial position.

5.4. Member Value Maximization

As discussed previously, the fundamental idea behind the cooperative ownership structure is to maximize member value rather than maximize profits. Therefore it is interesting to analyze how cooperatives prioritize value creation for members in practice, and how that changes when faced with economic hardship. Annual patronage dividends is one way to create value for members and is actively used by all firms except Coop. As pointed out by the respondent from Norrmejerier, farmers tend to be short-term focused with respect to member utility due to the nature of the cooperative structure, where current members do not profit from future earnings. This is in contrast to shareholders of IOF:s where the share price mirrors expectations of future cash flows. As a result, owners of cooperatives favor dividends over using retained earnings for internal financing of future investments even if it tends to reduce the firm's cost of capital, which is in line with Barton (2011a) view on owners' priorities.

This is illustrated in the case with Lantmännen and Arla. Both firms distribute a large fraction of retained earnings to members. In the light of the current economic downturn, both firms have seen decreased cash flows from operating activities, but have still increased the size of the dividends to further support members who have been pressured severely by inflation and increasing interest rates. This led to a cash deficit which was covered with debt. Arla and Lantmännen have leveraged their strong financial position to further support struggling members, at the expense of the firm, which is in line with the cooperative fundamental values and supports the argument by Yen et al. (2020) that

larger firms tend to be more resilient to economic downturns. Compared to Lantmännen and Arla, Norrmejerier has been affected more by the current economic climate and has canceled dividends to members during 2022 due to a lack of retained earnings. The respondent from Norrmejerier explained that they previously had sacrificed profits by prioritizing member utility which has put the firm under financial pressure. This is not sustainable, hence forces the firm to focus on profit generation to survive. This showcases how cooperatives, when faced with financial hardship, partly turn away from core cooperative values and act more in line with IOF:s, which is in line with Soboh et al. (2011) suggesting that IOFs tend to be more profitable.

Another way that Arla and Norrmejerier, both in the dairy segment, provides member value is by paying a premium on the commodity price to members. Arla increased their premium during 2022 and distributed 25 percent of dividend funds six months in advance to further support members who were struggling due to rapidly increasing costs. This is not in line with the free cash flow theory (Jensen, 1986), which suggests that managers in this case wouldn't abstain from investment opportunities to distribute premature patronage dividends. Arla has leaned on their strong financial position to partly absorb the negative consequences that this brings on liquidity and margins. However, the firm still generated a record profit of which a majority was distributed as dividends, signaling focus on members. In contrast, Norrmejerier explained that they are not focused on generating profits. If margins allow, they instead increase the price premium to deliver instant member value, thus acting as a facilitator of member value rather than a profit generating organization. This further limits their ability to gather equity from members since providing instant member value limits retained earnings available for dividend distribution, which disincentivizes further investments in the cooperative (Dahl & Dobson, 1976). Norrmejerier offers members a smaller premium than Arla, mainly due to being financially constrained and not able to absorb as much of the increasing cost throughout the value chain. If prices on end-products would fall back during the second half of 2023, then Norrmejerier will be forced to pass that on to their members by lowering premiums to maintain margins. Sacrificing profitability in favor of members is no longer an option for the firm which suggests that the firm ceases to place members' interests first due to its weak financial position. This further supports the argument that cooperatives, when faced with financial hardship, partly turn away from core cooperative values and instead focus on generating profits.

The empirical material provided an additional example of how cooperatives, when under pressure, may deviate from their member-first mindset through use of active capital management. For IOF:s, minimizing working capital is central in strengthening liquidity. By altering payment terms, account payables can be used as a source of financing. In contrast to IOF:s, all four analyzed cooperatives except Coop have their members as suppliers, hence leveraging account payables will directly affect member value. Managing working capital can be used either to support members further, or to benefit

the firm at the expense of members. This raises questions regarding both conflicts of interests and the true priorities of cooperatives. Lantmännen and Arla claim to be willing to potentially absorb more working capital to further support members through future downturns, whereas Norrmejerier contemplates reducing working capital at the expense of members if needed. The empirics show that Norrmejerier increased their accounts payables to members by 42 percent, while commodity prices increased less and volumes declined. This suggests that the firm actively increased accounts payables at the expense of members to balance their liquidity deficit. Consequently, when cooperatives are pressured financially, they act more in line with IOF:s and deprioritizes members' utility. Coop also claims to be willing to make strategic changes in accounts payables if necessary. The firm has no obligations towards suppliers, more than maintaining sound relations, since their member base consists of individual consumers. As a result of their type of member base, Coop operates more like an IOF compared to the other three firms. In conclusion, the financial position of cooperatives impacts their tendency to prioritize in accordance with the fundamental cooperative values. Thus the economic environment, which impacts firms' financial positions, will play an important role in cooperatives financing preferences as will be seen in the next section.

5.5. Financing Preferences

The observed cooperatives display varying preferences in determining the financial source of investments. During regular economic presumptions, Coop seems to prefer internal financing, showcasing behavior in line with Fischer (1984) and prioritizes growth above patronage dividends. This, together with distinct tendencies of pecking order behavior (Myers and Majluf, 1984), leads to the conclusion that Coop prioritizes maximizing profits in financial decisions during regular economic conditions. In addition, since a cooperative ownership structure establishes constraints regarding equity financing, Coop frequently exploits financial leverage if internal funds aren't sufficient. The firm summarizes their financing preferences evidently in stating that: "we don't see a reason to use any other sources of financing if internal funds are available". Furthermore, the firm regularly gathers a large amount of unallocated equity, providing them with a strong foundation in managing eventual economic downturns.

Lantmännen distributes a large amount of their retained earnings as patronage dividends, forcing them to use other sources of financing to cover all expenses. However, conflicts of interests occur regarding the size of patronage dividends, where owners argue for greater compensation whilst Lantmännen argues for reinvestments and subsequently greater compensation. Consequently, this suggests that the firm would prefer internal funds as a source of financing, if available. However, even though internal funds may arguably be the preferred source of financing, the firm is inclined to prioritize member value and primarily exploit debt financing to cover investments. This is in line with Fischer (1984) stating that a recurring deviation exists between a cooperative's optimal source of financing and their

actual source of financing. This also supports Yen et al. (2020) suggesting that larger cooperatives with less capital constraints can rely more extensively on debt financing. Reasons as to why Lantmännen primarily exploits bank loans as a source of investment seems to be towards enhancing patronage dividends (Pokharel et al. 2019), maintaining minimum liquidity levels and keeping an optimal equity ratio (Barton, 2011a). In addition, Lantmännen annually gathers a large amount of unallocated equity and operates several successful equity programmes, primarily incentivizing investments from owners, which is according to Boland & Barton (2013) the most effective way for a cooperative to assemble equity. However, since supplying equity is voluntary, issuing equity when needed is not an option. In conclusion, Lantmännen operates with a well-diversified stream of income, gathering funds from several financial sources. Their preferred source of financing seems to be debt, since the usage of internal funds decreases their provided member utility.

Arla also devotes a significant amount of their generated result towards patronage dividends. They compensate their extensive patronage dividends with debt financing, exhibiting behavior in line with Pokharel et al. (2019) stating that cooperatives can exploit bank loans to distribute greater patronage dividends. Arla however tends to finance their investments with retained earnings during regular economic conditions, leading to the contradictory conclusion that they adhere to the pecking order theory (Myers and Majluf, 1984). The firm doesn't appear to regularly exploit debt to finance increased patronage dividends, but instead uses debt to compensate for lost cash flows during downturns. Conclusively, Arla seems to prioritize internal funds towards investments during regular economic conditions.

Yen et al (2020) argues that small/medium sized growth cooperatives favor internal financing, since external capital tends to be more costly. Even though this may be the case, a small cooperative like Norrmejerier doesn't have the luxury to choose freely between different sources of financing. The firm distributes almost all their retained earnings as patronage dividends, leading to limited opportunities towards financing with internal funds. This also means that the firm gathers a limited amount of unallocated equity. Because of low cash flows, the firm is disincentivized to exploit internal financing, as it significantly affects their patronage dividends (Blackwell, 2019). However, since the cost of debt has a greater impact on smaller cooperatives (Yen et al. 2020) and retained earnings is classified as a low-cost source of capital since it isn't assigned towards a specific member of the cooperative (Yen et al. 2020), a dilemma emerges. Consequently, Norrmejerier exploits an equal combination of retained earnings and debt in financing their operation during regular economic conditions. This suggests that the firm prioritizes internal financing, but insufficient funds force them to use debt as a complement.

A collective denominator between the cooperatives is the effect of large patronage dividends. Patronage dividends limit the use of internal financing, leaving the cooperatives more dependent on

external sources of financing. Even though some of the cooperatives operate successful equity programmes, issuing equity isn't a possibility, showcasing behavior in line with Barton (2011b) which stated that members of cooperatives are quick to exploit the entailed benefits of a cooperative but are reluctant towards providing equity when needed. Consequently, the cooperatives are dependent on debt as a source of external financing. Lantmännen, Arla and Norrmejerier operate accordingly, distributing large patronage dividends and expressing debt as a vital source of financing. This supports Pokharel et al. (2019) suggesting that cooperatives can exploit debt financing to enhance patronage dividends. However, Coop instead exploits internal financing and deprioritizes patronage dividends, showcasing intentions towards maximizing growth and profits. The leverage provided through operating with consumers as owners allows Coop to act more swiftly with their internal funds, whilst the other firms display clear tendencies of cooperative-related constraints on their internal financing. Conclusively, despite constraints on equity and internal funds, none of the firms displays behavior in line with the trade off theory during regular economic conditions. However, most of the firms seem to prefer internal financing during regular economic conditions, suggesting that they adhere to the pecking order theory, which is in line with Mateos-Ronco & Guzmán-Asunción (2018). Consequently, the deficiency of internal funds seems to force cooperatives to exploit external sources of financing.

The economic uncertainty of 2022/2023 has caused the majority of observed firms to attain more debt than usual. This supports Iqbal & Kume (2014) suggesting that economic uncertainty has a substantial effect on firms' leverage ratios. Despite this, Lantmännen, Arla and Coop increased their patronage dividends during the economic uncertainty, acting in line with Cook (1976) stating that inflation diminishes the value of internal equity. This ultimately incentivizes distributing inflation-incurred liquid funds as depreciation causes the real value of assets to decrease. Furthermore, investing in increased patronage dividends could enhance future invested capital from owners (Dahl & Dobson, 1976). Increased patronage dividends also suggests that the short-term benefits of members are prioritized above the optimal source of investment, meaning that internal funds are used towards patronage dividends during economic uncertainty. However, Norrmejerier has been experiencing financial distress and have consequently prioritized other expenditures, meaning that deprioritizing patronage dividends can be seen as a last resort for cooperatives. However, deprioritizing patronage dividends during economic uncertainty can be regarded as a favorable course of action, as Briggeman (2010) states that the effects of financial distress have a tendency to escalate quickly during high inflation. Coop have also been forced to complement their internal financing with debt to maintain regular investments, which leads to the conclusion that a cooperative operates with less internal funds during economic uncertainty.

Even though members can be seen as responsible towards providing equity during downturns (Barton et al. 2011), the suppliers of agricultural firms often operate with insufficient capital to invest. The owners of an agricultural cooperative are often more exposed to the consequences of an economic downturn than the cooperative is, meaning that gathering capital from owners is almost never an option. As cooperatives rarely have the opportunity towards issuing equity, a cash deficit causes them to exploit debt as a complement. Consequently, it's noticeable that the majority of the observed cooperatives have expanded their usage of debt during the economic uncertainty of 2022/2023. Lantmännen increased their use of debt financing during 2022 in order to finance investments and maximize member utility, showcasing behavior in line with Yen et al. (2020) suggesting that large cooperatives can rely on debt financing during economic downturns. Their diversified stream of income makes them resilient towards economic downturns, leaving their financing preferences unaffected.

A significant cash flow deficit caused Coop to exploit debt financing during 2022, steering away from their financing preferences during regular economic conditions. Consequently, if internal funds aren't sufficient, the firm is inclined towards exploiting financial leverage to maintain investments. However, Coop has shown themselves prone to deprioritize patronage dividends before obtaining debt, suggesting that they prioritize growth over patronage dividends despite the economic uncertainty of 2022/2023, leaving their financing preferences unaffected. Furthermore, Arla also displayed a decreased cash flow during 2022. Despite this, the firm increased their leverage to finance increased patronage dividends, suggesting that the firm prioritizes obtaining new debt above deprioritizing patronage dividends. Consequently, the economic uncertainty of 2022/2023 have caused Arla to exploit debt as their primary source of financing. This is in line with Pokharel et al. (2019) stating that increased use of financial leverage may increase patronage dividends.

Because of a negative bottomline, Norrmejerier issued a significant amount of debt on their checking account, almost reaching their set credit limit. Because of this, the firm initiated an increased usage of leasing. Since these measures weren't enough to maintain a positive bottomline, the firm also deprioritized the distribution of patronage dividends. These actions may have been taken because of insufficient unallocated equity within the firm. The larger observed cooperatives annually collect a significant amount of unallocated equity compared to Norrmejerier, whom distributes almost all of their retained earnings. This is in line with Royer (2017) suggesting that retained earnings is an important source towards gathering equity within a cooperative, which isn't a possibility if the firm distributes all of their retained earnings as patronage dividends. This left Norrmejerier unprepared and vulnerable towards a downturn, which led to the prioritization of debt financing during the economic uncertainty of 2022/2023. The arguments above suggest that Norrmejerier will continue to prioritize debt until their internal funds are sufficient. Going forward, the firm also stated that they will increase

the priority of profit, suggesting that patronage dividends may decrease and the accumulation of unallocated equity may increase. Despite the economic uncertainty of 2022/2023, the observed cooperatives generally prioritized member utility, which left them dependent on financial leverage to maintain their patronage dividend distributions. The firms continuously seem to prefer internal sources of financing, whilst being forced to primarily exploit debt as a source of financing, suggesting there exists an even greater deviation between a cooperative's optimal source of financing and actual source of financing during economic downturns.

6. Conclusion

The purpose of this thesis is to receive a better understanding of how financing preferences of Nordic cooperatives are affected by the uncertain macroeconomic circumstances during 2022/2023. The results suggest a general preference for internal financing in line with the pecking order theory, and little agreement with the trade off theory. However, weighing pros and cons of debt financing could optimize cooperatives' equity ratio, allowing them to further exploit the advantages of debt financing. Furthermore, cooperatives are more reliant on debt compared to IOF:s due a relative deficit of internal funds and equity. Members' short-term focus impose a conflict of interest between members and managers, where higher prioritization of dividends partly drains internal funds. In addition, external equity financing to cover short-term capital needs is rarely used since members in general are capital-weak, which supports the view of cooperatives as capital constrained. However, accumulation of unallocated equity through retained earnings is used to strengthen the firm's financial position over time to ensure future debt capacity and resilience in an eventual economic downturn. In times of economic uncertainty, the results show that cooperatives tend to prioritize short-term needs of members at the expense of the firm's financial position, if possible. Deficits in internal funds are balanced by additional debt to maintain or increase dividends to members. This illustrates cooperatives' objective to maximize member value and how cooperatives' reliance on debt further increases during economic uncertainty. However, cooperatives' ability to prioritize member-utility is reliant on a strong economic position. The results show that when cooperatives are faced with financial distress, firms partly turn away from cooperative values and act more in line with IOF:s, i.e. prioritizes profit generation. Examples of measures are reducing or canceling dividends, and increasing accounts payables at the expense of members. Finally, the results also suggest that larger cooperatives have greater ability to maintain cooperative values during downturns due to a strong financial position and rigorous diversification. In addition, cooperatives with a member base consisting of individual consumers, rather than suppliers, are less dependent on members in financing decisions and behave less in line with cooperative values and more in line with classic IOFs. In conclusion, during uncertain economic market conditions cooperatives still prefer internal financing, but due to members' short-term focus, firms become even more reliant on debt to continue their quest of member value maximization.

7. Suggestions for Further Studies

This thesis set out to examine how economic uncertainty affects financing preferences in cooperative agri-food firms, through a qualitative method based primarily on interviews. Our findings suggest that their preferences do change within our selected timeframe. In order to further extend the understanding of the topic, future research could consider longer periods to examine if the changed preferences were found persistent over time or if they were solely short term reactions. In addition, exploring the long-term effects of increased debt could constitute an interesting topic. Studying longer periods would also allow testing of Iqbal & Kume (2014) claim that crisis adjusted equity ratios of firms tend to revert back to pre-crisis levels after an adjustment period. Future research could also explore the usage of other methodologies. The qualitative method used in this thesis could be complemented with a quantitative study. A thesis revolving around equity ratios would be especially interesting. This, since a common denominator amongst the studied cooperatives were equity ratio targets based on intuition and instinct rather than mathematical models. Therefore, a thesis examining the mathematically/theoretically optimal equity ratio has potential to be an interesting future topic. Furthermore, since this thesis solely compares theoretical financing differences between IOF:s and cooperatives, it may be of interest to conduct an empirical study comparing financing preferences of firms with different types of owner structures. This would further enhance the understanding of the insights provided in this thesis.

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Appendices

Appendix A - Key Financial Metrics From Annual Reports

Table A.1: Key financial metrics for the four studied cooperatives.

KPIs	LM-22	LM-21	C-22	C-21	A-22	A-21	NM-22	NM-21
Equity ratio [%]	44.9	46.4	35.3	26.5	35	37	32.2	36.9
Cash flow [MSEK]	-2,732	1,280	-888	-539	-259	298	-1.96	1.52
Turnover [MSEK]	60,612	48,183	36,677	38,309	13,800	11,200	2076	1959
Resultat [MSEK]	1,791	1,887	2,337	366	400	346	-15.9	16.8
Dividends [MSEK]	1,080	1,000	15	0	269	207	0	14.6
Cash [MSEK]	355	2,704	1,337	1,877	106	97	1.15	3
Equity [MSEK]	22,932	20,098	7,593	5,269	3,168	2,910	349.8	374.1
Debt [MSEK]	28,167	23,249	13,719	14,791	5,578	4,903	961.9	851.8
Members [#]	18,256	18,726	3.8 M	3.8 M	8,492	8,956	365	392

Summary of financial metrics for the analyzed firms. All values are closing balance values gathered from the respective firm's annual report. A=Arla , C=Coop , LM=Lantmännen , NM=Norrmejerier

Appendix B - Interview Questions

Interview Questionnaire

General questions:

1. How does your cooperative create significant value to your members?

Financing:

2. How do you as a cooperative define external and internal financing?
 - a. What types of internal financing are used?
 - b. What types of external financing are used?
 - c. Do you operate an internal cash pool? In that case, tell us more about it.
3. What do you do with residual retained earnings?
 - a. How do you decide the size of your patronage dividends? Any max/min level?
4. Do you have an optimal equity ratio?
 - a. What types of methods and frameworks are you using to decide this level of optimal equity ratio?
 - b. What means of financing are prioritized in new investments?
5. How important are bank loans in your operation?
 - a. Are you taking any further measurements to ensure your availability towards attaining bank loans? (Ex, credit rating, collateral)
6. Do you have an order of prioritization in different means of financing?
 - a. Internal financing, bank loans, equity
7. Did your cash decrease during 2022? In that case, what was this used for?
 - a. How is this motivated during the current uncertain economic environment?
8. Can you in any way issue new equity if needed?
 - a. How? Where?
9. Do you tie working capital because of favorable payment terms to members?
 - a. Could lowering working capital be a way of liberating internal funds used for financing?

Economic uncertainty:

10. How has the past year's economic uncertainty affected your financing preferences?
 - a. Do you adjust your financing during times of high inflation and rising interest rates?
 - b. Does your order of prioritization in financing change because of this?
11. If your organization had low liquidity and an increase was necessary, what are your alternatives towards gathering cash?
 - a. Bank loan, decreased working capital, decreased patronage dividends, equity?
12. How did your organization manage the 2008 financial crisis?
 - a. Could this experience be of any use today?
13. What is your expected forecast for the upcoming years?
 - a. Do you take any measurements to prepare for an upcoming tough period?
14. Do you have anything to add in relation to financing during uncertainty?

15. How has the past year's economic uncertainty affected your organization?
 - a. What aspects have been affected?
16. Would you say that your industry has been affected significantly from the past year's economic volatility?
 - a. How?

Investment capital:

17. Does your organization have any opportunities to invest in investment capital?
 - a. How does this work?
 - b. How much is invested in your organization?
18. Is it possible to invest additional capital in your organization?
 - a. Emission rights? Publishing shares?

Conflicts of interest:

19. Does conflicts of interest ever occur in your organization?
 - a. Owners, management, board, others?
20. Is there any other important aspect regarding cooperatives financing preferences during economic uncertainty that you would like to add?