



## SCIENTIFIC FINAL REPORT

Regnr Östersjöstiftelsen: 41/16

Project manager: Mikael Lönnborg

Project title: A Contemporary Business History of the Dairy Industry – Processes of Entrepreneurship, Strategy and Internationalization in the Baltic Sea Region, 1989-2018

### 1. Purpose of the project

The main purpose of this project was to contribute with new knowledge on change and transformation of the market economy, on the process of market integration and on changes in conditions for business in the Baltic rim since the fall of the Berlin wall. The project's empirical setting was the dairy industry in the Baltic rim; a Baltic-Nordic perspective with ability to shed light over the impact of economic integration and on business activity in between the "East" and the "West". The inclusion of "mature" economies and "transition" economies provided insights about market integration and changes in business activity in a geographical area that was divided, but after 30 years of economical and political changes, in several ways integrated.

Globalization and liberalization have fundamentally changed the overall conditions for firms in the Baltic rim. Established as well as new firms have discovered new opportunities or have been forced to change their strategies and behaviors. Individual industries faced dissimilar conditions, and the project's purpose was achieved through a long-term examination of one specific industry, the dairy industry. The project used a long-term and longitudinal research strategy and focused on several levels of analysis, in which the business firm was the core unit of observation – from large transnationals to smaller, domestic firms; both younger and established firms; corporations as well as cooperatives.

The intention was to address relationships and networks that went in all geographical directions – both domestic firms in the Baltic rim export their products, and the large transnational (sometimes not even European) firms that merge and acquire domestic firms in the region. Over time, the inflow of capital from external investors has gradually increased and thus changed ownership structures will also be in focus. Within the context of globalization and market integration, our overall research question was formulated:

- How has the dairy industry in the Baltic rim changed since 1990 – what are the patterns, causes and outcomes behind the development and conduct of dairy corporations and dairy cooperatives?

To clarify, by changes in the industry and firm conduct we focused on entry, growth and expansion patterns, as well as business exit, across geographical areas. By strategies, we specifically mean observed patterns and behaviors of dairy firms, and groups of firms, in terms of competition, cooperation and co-competition across time and place – within and across borders – in the Baltic rim. A number of sub questions were also developed:

- Are there similarities and differences in conduct and performance between dairy cooperatives and dairy corporations; does ownership and governance matter?
- How and to what extent has the strategies of both smaller and large dairy firms changed over time in the Baltic rim with respect of internationalization (including



networks and exports), financing, investments, mergers and acquisitions, and alliances?

- How is cooptation orchestrated – how has it evolved, how is it expressed, and what are the main driving forces behind cooptation?
- What are the implications on firm and industry performance from competition, cooperation and cooptation?
- Can economic and institutional transformation in the Baltic Sea region explain how firms and the dairy industry has transformed and changed?

## **2. The three most important results of the project and what conclusions can be drawn from them**

One important result concern general and aggregate patterns on the European dairy market. Previous research maintains that the past three recent decades of increasing competition in agribusiness, the opening-up of markets, and globalization, have caused agricultural cooperatives to grow and consolidate at an increasing pace. Aforementioned changes in terms of trade and intensified competition and globalization of agribusiness have increasingly pushed both investor-oriented firms (IOFs; privately owned dairies) and cooperatives into intensified cross-border activities and internationalization. However, in the literature on cooperative agri-businesses' strategies, an established hypothesis is that equity constrains is a main explanatory factor for different modes of strategic actions: cooperatives will pursue different strategies than IOFs. Due to capital constraints, cooperatives will choose to engage in and consolidate through alliances, either mergers or agreements such as joint ventures or licensing, to a higher degree compared to IOFs.

IOFs in the same industry will choose to consolidate and grow externally through acquisitions of other firms or through strategic shareholdings in other firms. This part of the project has mapped all strategic events and deals in the European dairy sector, 1997-2020 – nearly 4,200 over the entire period – focusing on strategic behaviors of both established and large dairies and small dairies. Our results both confirm and challenge previous assumptions and theoretical models. The number of consolidations peaked during the 2010s and have thereafter fallen, both in Western Europe and in post-socialist (East) European economies; dairies seeking growth opportunities have gradually to lesser extent targeted firms in Eastern Europe. It is however clear that IOFs and cooperatives have chosen different target regions during the past two decades. Dairy cooperatives have to a greater extent targeted markets in Eastern Europe than IOFs, consolidating mainly through mergers and joint ventures. However, it was expected from previously generated hypotheses that acquisitions would be a more typical mode for consolidation for IOFs to a greater extent than for cooperatives. This hypothesis could not be confirmed. One explanation could be that large and dominating West-European cooperatives such as Arla Foods and Friesland/Campina at several occasions from the early 2000s and onwards have used acquisitions as modes of expansion and growth.

There are substantial similarities and differences in performance between dairy cooperatives and dairy corporations. While the main sources of transformation are found in market changes and globalization, substantial differences appear as the result of history. Through the two main cases highlighted in this study we could conclude that historical events, and not the least the fact that Finland was involved in WWII, led to a forced export strategy already in the late 1940s to cope with war reparations. This led to the emergence of an export oriented dairy industry with a focus on concentration at national level leading to the establishment of Valio OY, which is a so-called second-degree cooperative with the main purpose of exporting Finnish dairy products. Thus, Finland has a pronounced export led development, with a national sourcing strategy which is sometimes supported by the establishment of subsidiaries, in particular in Eastern European countries.



In contrast, the dairy industry in Sweden, represented by Arla (our second main case) has adopted a global sourcing strategy, in which the main tool for expansion are mergers and acquisitions. In fact, the first merger was that of Arla with MD Foods, which eventually made Arla Foods one of the largest dairies in the world. Thus, contemporary history was as important for cooperatives strategies as globalization and regional market integration.

### **3. The project's contribution to the international research frontline**

The issue of internationalization of multinational corporations has since the 1960s become a growing research field, trying to understand why and how companies operate business outside their domestic market. In the group of large multinational corporations, as Bartlett and Ghoshal observed at the end of the 1980s, that many changes had happened. Firstly, that the domination of US multinational firms had declined, however, three decades later, of the 100 largest MNC corporations, still around two thirds of them have main offices in United States. Secondly, in the 1980s, another feature was that MNC from Europe had lost ground, while corporations from Japan and East Asian were gaining market shares. This development has deepened further when corporations from China, India and South Korea, have becoming increasingly important. Another change that was already then visible was more flexible industrial organizations, and the beginning (which has continued and deepened) of moving production to China and East Asia. The digitalization of the economy also changed the governance of large multinational corporations, and some corporations have disappeared from the 100 list, while others (often connected to the new technology) has become incrementally larger and climbed on the list of the largest corporations.

The main target of the international business research has concerned large firms within the industrial sector but also service corporations conducting business on a wide array of markets has been included. These firms are normally founded with limited liability and often listed on stock exchanges with many owners and other stakeholders. However, here we are interested in another kind of ownership form, namely the cooperatives. This ownership form developed already in the 18th century but appeared in the middle of the 1980s to be an obsolete ownership form, outcompeted by joint-stock corporations. However, they managed to prevail and today the question is why and how they conduct their business. Not only are we studying cooperatives, but companies within a field – the dairy industry with a ‘fresh’ commodity, milk, in the centre of production – maybe not that suited for international export. More specifically, we have in particular investigated two dairy Nordic cooperatives – maybe more correct to defined them as hybrid organizations – namely Swedish-Danish Arla Foods a.m.b.a. and Finnish Valio Oy. These organizations have been crucial in reshaping of the dairy industry in the Baltic sea region – both within the “east” and “west” side of the Baltic rim.

Another area of interest has been theories about internationalization and how these has changed with reference to the changing conditions since the fall of Berlin Wall in 1989 – the European market have grown considerable. The research about international business commenced as noted in the 1960s when Stephen Hymer (1974:1960) asked the intriguing question why international trade and foreign direct investment did not follow the Heckscher-Ohlin theorem? The latter stated that countries with access to capital would export capital-intensive items and import labour-intensive products, while countries with a labour-intensive economy would do the opposite (and foreign direct investment should follow the same pattern) and leading to a diverging of prices in both sectors. However, Hymer concluded that most of trade and foreign direct investment was taken place among corporations with origins from Europe, United States and Japan, and this observation made the Heckscher-Ohlin theorem more or less obsolete. Hymer instead focused on explaining this pattern through



firm-specific advantages. Foreign companies had a disadvantage towards domestic firms, but something, for instance higher quality, more access to capital or cheaper prices, possessed by the foreign firm could explain why they could compete with domestic firms. If that was the main reason for why foreign direct occurred, Yair Aharoni explained that the pattern of foreign direct investment. Companies' seemed to go through stages of development, beginning with export and then starting to invest in countries with close proximity, and after gaining experience, expanding further away from the home market.

The traditional theories of Foreign Direct Investment (FDI) derived from Stephen Hymer and Yair Aharoni explains international expansion through concepts as unique competences, ownership advantages, comparative advantages, locational advantages, internalization advantages, or with other words, different kinds of firm-specific resources that makes it possible for individual firms to compete abroad. However, all their examples concerned larger (and often industrial) firms that started with exports and establishing sales divisions, and later on started production on foreign markets. The normal procedure was starting in neighbouring countries with low geographic and psychic distances and after gaining experience expanded further away from the domestic market. This has shaped an establishment pattern that begins close to the home market and eventually spreading away further from the domestic market. However, these internationalization patterns have been associated with larger industrial and service firms, more or less defined as multinational or transnational conglomerates. When discussing smaller businesses and individual entrepreneurs, but also cooperatives, other concepts have been presented to explain the internationalization process, and many constrains for instance through limited capital and legal expertise for acquiring different permits disappears.

Cooperatives normally experience constrains of capital but rely on specific competences and specific resources that makes it possible for them to exploit foreign markets. In particular, through connecting to important networks (local, regional, national or even international) it has been possible for individual entrepreneurs to avoid different obstacles, for instance institutional constrains, in expanding business abroad. In our case, the issue of cooperatives that starts business abroad is to some extent surprising. Firstly, dairy products have normally being produced and consumed on local markets (of course with the major exception of Nestlé). Secondly, cooperatives as an ownership form have historically avoided risky investments on foreign markets and were also constrained by scarcity of capital. The most important cooperatives for the region, e.g. Arla and Valio, have chosen a combined ownership form doing business abroad, as both cooperatives and limited liability corporations. This hybrid form of ownership will be another factor that can show us the different firm strategies on different markets and how cooperatives in practice conduct international business.

Agricultural cooperatives in Europe have recently started a new phase in their internationalization strategies. For many decades, cooperatives have expanded internationally through exporting and investing in foreign distribution networks, either individually or in joint ventures with foreign partners. However, over the last 15 years an increasing number of cooperatives has expanded internationally by inviting foreign farmers to become members. The interesting outcome of cooperatives conducting international business, both empirical and theoretical, is the combined use of several different ownership forms, the most obvious example is Arla. When cooperatives have expanded in the "western" part of Europe, for instance Denmark, Germany, United Kingdom, Belgium and Netherlands, the farmers in the individual country, have been invited as regular members of and enlarged the cooperatives. While the expansion in "Eastern" Europe, as for instance Estonia, Latvia, Lithuania, Poland and Russia, but also in Asia (in particular China and Japan), Middle East, Africa, South and North America, have been conducted through



mergers and acquisitions as “regular” multinational corporations, and the joint-stock part of the organizations have enlarged instead. This strategy has in particular been used expanding in the Baltic countries, but also in other Eastern European countries.

In addition, there are several other features of these cooperatives/multinational corporations that make them differ from normal multinationals, that have implications for the theoretical view on this topic. One is different kinds of collaboration with domestic actors, and one significant is the collaboration between Arla and Mengniu Dairy in China. In 2005, Arla signed a joint-venture deal with China's leading dairy firm, Mengniu Dairy Company – founded in 1999 and listed on the Hong Kong stock exchange – to get its added value milk powder products in consumers packs for the Chinese market, with production in both Europe and China. At the same time, Arla reduced staff and stopped production of several products in Denmark. Due to increased cost pressures and the European Union’s cuts in agricultural export subsidies, the deal in China relieved profit margins. Arla had the necessary know-how for added value to the milk powder while Mengniu had a developed distribution and sales network. The growing demand for milk powder as well as increasing imports constitutes a main explanation for Arla’s entry in China. The growth of the Chinese market implied both domestic producers and strong global players that had revisited their China strategy, undertaking approaches to secure a competitive position in China: both Fonterra (New Zealand) and Danone (France) set up production facilities as well as research and development centres through collaborations agreements.

#### **4. New research questions that the project has led to**

The project enabled us to understand systemic features of the agro-food sector (see discussion under point five). Old structures concerning the geopolitical and strategic food and agricultural relations (e.g. a food regime) developed during the Soviet Union were developed during the 20<sup>th</sup> century with Russia in center. The Soviet food regime set the frames under which productive decisions, specialization and exchange took place until the fall of the USSR. However, many of the mechanisms and structures developed under the Soviet food regime are still in motion due to path-dependent structures and institutions.

Through the “milk crisis” caused by Russian import ban of agri-food products from Europe (following EU sanctions on the annexation of the Crimean Peninsula in 2015), we learned that disturbances in either the “western” or the “eastern” agri-food structures has an in-depth impact globally. An important reason is that food and agricultural relations, practices, rules and regulations have remained unchanged along with path dependent formal and informal institutions. The previous and current impact of the Soviet Food Regime and its remnants has with a few exceptions have been neglected. Knowledge from this project can be used as a starting point to study the potential impact of the current war on Ukraine on the agri-food system. Some well-motivated research questions are therefore: How does the war on Ukraine and following disturbance in food production and food exports from Ukraine influence the agro-food sectors, supply of food and food security in Western and Eastern Europe and former USSR countries in the Caucasus? What are the business, socio-economic and environmental consequences of the production stop caused by the war on the food sectors in former USSR countries and Western European countries?





## **5. The contribution of the research to the knowledge of the Baltic Sea Region and Eastern Europe**

Our research shows that east-west interactions are much more important than previously identified and that interaction between former USSR countries goes beyond import exports dynamics. Agricultural and food relations have been organized in food regimes – until the fall of the Soviet Union, parallel food regimes have evolved. One developed through the internal dynamics of the USSR with Russia at its hub, and the other evolved around the US and Western Europe. The trade blockade issued by Western Europe against Russia following the annexation of Crimean Peninsula made visible that both the Eastern and Western food regimes still exist and that disturbances related to geopolitical events have a deep impact on food firms around the Baltic Sea region, but also on other former USSR countries. In fact, one of the most affected industries, is the dairy industry. Mentioned results are important to understand the potential impact of current events as the most important exporter of food in Europe, Ukraine, is unable to continue its exports. Moreover, current export ban of various items on Russia, not the least of food and agricultural products is bound to have a deep impact on Western European markets, but also on former USSR countries.

### **Structural changes in the dairy sectors at national and local level**

The impact of global transformation pressure on the dairy market along with the import ban from Russia in 2015, has influenced the dairy industry by accelerating the number of mergers and acquisitions at industry-level, which accelerated the process of corporatization of dairy cooperatives. Globalization, new sourcing strategies of international/global dairy cooperatives, such as Arla Foods and Valio and the Russian import ban against dairy products from Europe in 2015, also pushed the dairy farmer sector to a far-reaching process of structural rationalization. As farmers see their income decrease, they are forced to either increase their scale, leave the trade, or elaborate their own produce by establishing small scale dairies. dairy firms and especially. This has been a key strategy of dairy farms in Sweden and Finland. At the same time, production in all countries around the Baltic Sea Region decreased as an effect of the 2015 trade blockade. Therefore, in countries where the dairy sector is still industrializing, such as Poland, the number of small-scale dairies has decreased. Thus, there is a process of re-industrialization in rural spaces in “old” EU countries, while in former USSR countries the dynamics is the opposite, e.g. de-industrialization.

The dairy industry in the Baltic states has on one hand partly been incorporated with the larger cooperatives/multinational companies particularly from Finland and Sweden. This has modernized the industry but also making them dependent on foreign companies. On the other hand, the concentration has been counteracted by another new feature of the market, namely the upswing of small-scale rural creameries. This re-industrialization in rural spaces have occurred not only in the Baltic States, but also in Poland, and even in Finland and Sweden. This interesting development has been a reaction against the globalization of the dairy industry with stream-lined products. The demand for more unique dairy products has created a boom of new businesses of small-scale dairy entrepreneur corporations in rural areas. Considering that the project in particular focused on the internationalization of the dairy industry, we also want to demonstrate that the current globalized development has created a new branch of small-scale business on both side of the Baltic rim (but of course also on other markets).



6. Dissemination of the results of the project within and outside the research community

Also include a list of publications (divided into different categories such as monographs, articles, textbooks, debates, popular science publications, etc.) and the five most important conferences (organized and papers presented).

Mark open access publications and include links to these publications. See the Foundation's open access policy. (Monographs published with support from the Foundation must be sent to the Foundation in one copy.)

**Books edited**

Lönnborg, M., Ndiege, B. O. and Tesfaye, B. (eds.) (2021). *Beyond Borders. Essays on Entrepreneurship, Cooperatives and Education in Sweden and Tanzania*. Södertörn Academic Studies: Huddinge: 398pp. (OPEN ACCESS)

<chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/http://sh.diva-portal.org/smash/get/diva2:1541493/FULLTEXT01.pdf>

**Book chapters**

Box, M., Lönnborg, M. and Rytönen, P. (2021). Both a Cooperative and Multinational – International Market Strategies of Danish-Swedish Arla MD. In: “Beyond Borders: Essays on Entrepreneurship, Co-operatives and Education in Sweden and Tanzania”. [eds.] Mikael Lönnborg; Benson Otieno Ndiege; Besrat Tesfaye, *Södertörn academic studies* 85, pp. 323-344. (OPEN ACCESS).

<http://sh.diva-portal.org/smash/get/diva2:1542752/FULLTEXT01.pdf>

Lönnborg, M. (2021). ”The Rise and Fall of Swedish International Reinsurers in the Non-Life Sector”. In: Caruana de las Cagigas, L. & Straus, A. (eds.). *Role of Reinsurance in the World. Case Studies of Eight Countries*. Palgrave Macmillan, Cham: pp. 89-114. (NOT OPEN ACCESS)

[https://link.springer.com/chapter/10.1007/978-3-030-74002-3\\_5](https://link.springer.com/chapter/10.1007/978-3-030-74002-3_5)

Lönnborg, M. Ndiege, B. O. & Tesfaye, B. (2021). Beyond Borders. Entrepreneurship, Cooperatives and Education in Sweden and Tanzania. In: “Beyond Borders: Essays on Entrepreneurship, Co-operatives and Education in Sweden and Tanzania”, [ed] Mikael Lönnborg; Benson Otieno Ndiege; Besrat Tesfaye, *Södertörn academic studies* 85: pp. 9-50. (OPEN ACCESS)

<http://sh.diva-portal.org/smash/get/diva2:1541493/FULLTEXT01.pdf>

Rytönen, P., Ragnar, M. & Lönnborg, M. (2021). Patterns of Collectivization and De-Collectivization in the Swedish Dairy Sector from 1900 to 2015. In: “Beyond Borders: Essays on Entrepreneurship, Co-operatives and Education in Sweden and Tanzania”, [ed]



Mikael Lönnborg; Benson Otieno Ndiege; Besrat Tesfaye, *Södertörn academic studies* 85: pp. 297-321. (OPEN ACCESS)

<http://sh.diva-portal.org/smash/get/diva2:1541679/FULLTEXT02.pdf>

### Articles

Box, M., Rytönen, P. & Lönnborg, M. (2023, forthcoming). Patterns and modes of consolidation and internationalization in the European dairy sector, 1997-2020 (*Business History*, United Kingdom).

Rytönen, P. (2021) Wine in the Soviet food regime: Experiences from Armenia and Georgia, *Baltic Worlds*. nr 3, s. 14-26.

Rytönen, P. (2022, forthcoming) Food safety and food security in the modern food system in Sweden. Essay to be published in the Special Issue: Dietary reforms in the BSR 1850-1950, *Baltic Worlds*, Issue 2022:2.

Rytönen, P., Box, M. & Lönnborg, M. (2023, forthcoming). Understanding the Internationalization of Cooperatives – contemporary perspectives on the development of cooperatives in Northern Europe 1950-2020. *Investigaciones de Historia Economica/Economic History Research*.

Rytönen, P., Box, M. & Lönnborg, M. (2023, Forthcoming). Small-scale rural creameries, re-industrialization and de-industrialization of rural spaces in Finland, Poland, Sweden and the Baltic States 1990-2020. *Norwegian Journal of Geography*.

Rytönen, P., Box, M. & Lönnborg, M. (2022, Forthcoming). After the blockade – the impact of Russian import bans on the European dairy sector 2015-2020. *Baltic Worlds*.

Rytönen, P., Oghazi, P., Mostaghel, R. (2022, forthcoming). Business development, gender contracts and islandness – developing food artisan businesses in the Åland islands. Forthcoming. (Accepted at the ACIEK-Conference 2022. Under review for *British Food Journal*).

Rytönen, P.I. and Oghazi, P. (2021), "Bringing innovation back in—strategies and driving forces behind entrepreneurial responses in small-scale rural industries in Sweden", *British Food Journal*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/BFJ-05-2021-0587>





### **Conference presentations**

Box, M., Lönnborg, M. & Rytönen, P. (2021). Understanding Internationalization of Cooperatives - The Case of the Dairy Industry. Paper presented at the 2nd World Congress of Business History (planned to be in Nagoya, Japan but online), on September 9-11, 2021.

Rytönen, P. & Oghazi. (2021) Bringing innovation back in—strategies and driving forces behind entrepreneurial responses in small-scale rural industries in Sweden. Academy of Innovation and Entrepreneurship Conference (ACIEK). Digital conference June 2021.

Rytönen, P., Box, M. & Lönnborg, M. (2018). The dynamics of competition in the dairy industry – transformation and change in the Baltic Rim across two decades. 43rd Annual Economic and Business History Society Conference, Jyväskylä University, May 30 - June 2, 2018.

Box, M., Lönnborg, M. & Rytönen, P. (2017). From the Baltic rim to growth markets: Contextual issues and market strategies of dairy companies in the Baltic rim – the case of Arla. Paper presented at: 21th Annual European Business History Association (EBHA), 24-27 August, Vienna, Austria.

Box, M., Lönnborg, M. & Rytönen, P. The Internationalization of the Swedish Dairy Industry. (2016). 20th Annual European Business History Association (EBHA) and the 1st World Business History Conference, Bergen, Norway, August 25-28, 2016.

### **Conference session organization**

The History of small business as business history. Swedish National Economic History Conference 2021. <https://ekonomiskhistoria.org/programme>

Agrarhistoria från alla fält. 12th Swedish National Economic History Conference 2021, 12-14 October 2017 18:00. Stockholm University, 2017. <https://www.ekohist.su.se/tolft-ekonomisk-historiska-m%C3%B6tet-i-stockholm-1.317493>

### **Popular presentations**

Mjölken, det svenskaste som finns? – Radio show with Paulina Rytönen, 1st October, 2019. <https://sverigesradio.se/avsnitt/1382318>

Så kan mejerimarknaden se ut år 2050, LandLantbruk, 16/12-2019. Interview Paulina Rytönen. <https://www.landlantbruk.se/lantbruk/sa-kan-mejerimarknaden-se-ut-ar-2050/>



**Knowledge transfer to students who wrote academic theses in collaboration with the project**

Supervised by Paulina Rytönen:

- Mejerisektorn. Med ett belysande exempel från en ekologisk producerande gård på Island. (HT2020)
- Mjölkdryckens plats på vårt bord: konsumentens livsstil och mejeriindustrin i förändring (HT2020).
- Diskursanalys om mjölkindustrins tillväxthormon bST (HT2020)
- Genuskontraktets gränser inom mejeri. Hur genussystemet skapade gränser för att kvinnor skulle komma in på mejeriet efter 1800-talet (HT2020)
- Urskildring av marknadsanpassning genom utlandsfusioner för mejerijätten Arla foods amba (HT2019).
- Ekologisk och konventionell mjölkproduktion - är ekologiskt verkligen bättre? (HT2019)
- Män innehar fler ledande positioner inom mejerisektorn än kvinnor, varför? (HT2019)
- Statliga interventioner av mejerisektorn (HT2018).
- Pastörisering i Sverige. Hur pastörisering förändrade mjölkindustrin. (HT2018)
- Arla och marknadsföring av mjölkprodukter (HT2018)

Supervised by Mikael Lönnborg:

- Maintaining legitimacy through CSR reporting in an environmentally sensitive industry: A longitudinal analysis of Swedish dairy companies' usage of legitimacy strategies (2020 – Master thesis). Awarded 3<sup>rd</sup> price in the best master thesis about Sustainability in Sweden, Umeå university. 2021.