This is an Accepted Manuscript of the following article:

Klimek, B. Macro-qualitative Comparisons: Grounded Theory and the Comparative Case of Norwegian and Danish Food Industries since the 1990s Transformations. Comparative Sociology. Vol. 18, Issue 3, 2019, 386-411. ISSN 1569-1322

The article has been published in final form by Brill at https://doi.org/10.1163/15691330-12341502

© Koninklijke Brill NV, Leiden, 2019. This manuscript version is made available under the CC-BY-NC-ND 4.0 license http://creativecommons.org/licenses/by-nc-nd/4.0/

It is recommended to use the published version for citation.

Macro-qualitative Comparisons: Grounded Theory and the Comparative Case of Norwegian and Danish Food Industries since the 1990s Transformations

Bjørn Klimek
Institute of Transport Economics, Oslo, Norway
bkl@toi.no

Abstract

This article examines macro-qualitative methodology specified for studies in comparative economic sociology. It elaborates a qualitative approach to comparative theory development. An examination of the socio-philosophical roots of social science theory is given, grounded theory methodology is reconstructed and research designs for macro-qualitative studies are discussed. It is argued that grounded theory methodology is able to contribute to macro-comparative studies as knowledge accumulation in case-specific research projects enables researchers to develop empirically grounded and plural notions of comparative theory. The research design presented for macro-qualitative inquiry builds on a middle-range attempt to accumulate knowledge in a micro-meso-macro procedure, including the productive examination of empirically grounded theoretical concepts at each analytical level. A previous macro-qualitative case study on Norwegian and Danish food industries since the 1990s turn is reconstructed to demonstrate how qualitative sociology is able to contribute to research frontiers that usually are dominated by quantitative economics.

Keywords

macro-qualitative comparisons – economic sociological methodology – grounded theory – path dependency – case study – food industry – Norway – Denmark

1 Introduction

In comparative political economy, we are used to operating with large entities such as national economies, transnational institutions and industrial sectors. To gain novel insights, political economists analyse institutions and trace causal explanatory chains of economic development. Approaches in institutional political economy are in contrast to models used in economics. However, macro-economic analysis frequently requires researchers to choose either quantitative approaches, founded on large datasets, or sociophilosophical approaches that aim to recombine and renew existing theories rather than accumulate novel knowledge. Qualitative research methodologies have been used to contribute to comparative political economy, but they are commonly assigned to micro-level investigations that might compensate for the limits of quantitative approaches. This research article discusses macroqualitative research procedures, based on grounded theory approaches and specified for studies in macro-comparative political economy. Grounded theory research procedures, familiar from micro-oriented sociological inquiry, have been elaborated to contribute to heterodox economic theory. Heterodox economists argue that the key to going beyond invariant models derived from economics is to develop economic theories from below. Consider the plural notion of theories denoting a contrast to the 'law-like' notion of universal range economic theory. This article will examine how grounded theory-inspired research methodologies contribute to developing macro-economic theoretical concepts.

For that purpose, the article will examine a methodological reconstruction of a recent case study of Norwegian and Danish food industries and their structural development since the 1990s neo-liberal turn (Klimek, 2017). In that case study, two distinct types of path dependency are identified, a transformative type (Norway) and a self-reinforcing type (Denmark), that basically influence industry structure. Note that studies of path dependency build on process tracing, as is done in qualitative case study methodology, and that both national economies are macro-level entities. Research findings at the macro level are discovered after a productive examination of various data sources in a micro-meso-macro research approach that allows for accumulation of knowledge from below, as done in grounded theory. The article is divided into two main parts. The first part (section 2) contains a methodological and socio-philosophical discussion of grounded theory research approaches, various notions of theory in the social sciences and theoretical concept development in macro-qualitative research design. The second part (section 3) presents a methodological reconstruction of the abovementioned case study. The conclusion (section 4) argues that qualitative

economic theories enrich research frontiers that usually are dominated by standard methodological approaches.

2 Macro-qualitative Research Design in Comparative Political Economy

As studies in comparative political economy focus on national economies, some standard notions of grounded theory must be specified. National political economies are macro cases that seldom fit to middle-range investigations when it comes to accumulating knowledge through participatory approaches. The combination of grounded theory methodology and research on macro-economic topics is thus a research field that requires attention to the ways in which we accumulate knowledge and the types of social theory we develop. Social researchers working on topics with a macro-economic reach usually choose quantitative standard methodologies (as known from natural science) or socio-philosophical reconstruction of theories (as known from the humanities), given that qualitative inquiry is seen as being limited to local contextualisation (see also Mjøset, 2007; 2009). Arguing for a third and distinct position, Mjøset writes:

Overcoming the human versus natural science dichotomy is necessary in order to focus on what knowledge we actually possess in social science. The methodology of grounded theory points our attention to ways of accumulating knowledge that have been neglected both in standard and humanities-oriented methodologies.

MJØSET. 2007:124

The varieties of capitalism (VoC) approach is one example of attempts to accumulate comparative knowledge about national political economies (Hall and Soskice, 2001; Kang, 2014). Heterodox economists have introduced the grounded theory research program as a fruitful counterpart to standard models in economics (Finch, 2002; Lee, 2012; Lee and Cronin, 2016). However, researchers working on the topic still defend the use of alternative economic methodologies. As for the heterodox perspective, Lee argues that grounded theory methodology is a counterpart to economic theory.

To develop a theory that analytically explains causally related, historically contingent economic events, the critical realist heterodox economist needs to identify and delineate the structures, causal mechanism, and causal processes producing them. The best methodological guideline for creating causally explanatory theories

is the method of grounded theory. (...) the theory is not a generalization from the data, but of the data; that is, a grounded theory does not go beyond the data on which it is based – it does not claim universality or the status of an empirical-theoretical law.

LEE, 2012

Theory development in grounded theory reflects a productive examination where theories emerge within the research process. The theories do not play any guiding role prior to the research endeavor. However, consider that grounded theory procedures might also be theory-laden. In such cases, theoretical input must be grounded in previous empirical research activities and the primacy of empirical data requires a differentiated understanding of social theory and the types of knowledge we use to operate.

A systematic attempt to advance grounded theory not only for economic issues, but also for macro-comparative political economy, has been elaborated by Mjøset over several years. Emphasising a third and distinct position of research methodologies, namely, a contextualist approach to social science (Mjøset, 2006, 2009, 2015), he presents a set of grounded theory methodologies for macro-qualitative research that requires attention to different notions of social science theory. Based on different philosophical references, he identifies three clusters of social science research methodology, arguing that the contextualist position, which can be traced both to Weber's methodological reflections and to the interwar Chicago school of sociology, has not been treated as a distinct methodological and philosophical cluster. Table 1 shows the three clusters of social science methodology identified by Mjøset.

The two other clusters are the standard one and the social-philosophical (Mjøset, 2009:41). The three clusters of social science methodology are divided based on three different practical philosophies, distinct styles of reasoning (Hacking, 1999) and six notions of theory (Mjøset, 2006:381). The cluster of standard methodologies relates to the natural sciences (an experimental ideal), the social-philosophical cluster to the humanities (transcendental and existential philosophical reflection) and the third to participation-based explanations of singular cases. While the first and second positions rely on practical philosophies developed in disciplines belonging to academic faculties other than social science, the third position has autonomously emerged within social science. A crucial point of this article is thus that grounded theory-based macro-qualitative political economy is not a compensation for the limits of quantitative approaches, but rather a standalone research design with its own styles of reasoning and theory development.

TABLE 1 Three clusters of social science research methodology

	Standard position	Social-philosophical position	Contextualist position
Philosophical	Natural science,	Humanities,	US pragmatism,
reference	logical	phenomenology,	European
	positivism	structuralism	critical theory
Notion of theory	Law-oriented,	Transcendental,	Explanation-based,
	idealizing	deconstructionist	critical theory
Methods	Mathematical	Interpretive	Qualitative case
	modelling,	analysis, discourse	studies, participatory
	thought	analysis, grand	fieldwork
	experiments,	narratives	
	statistical analysis		

SOURCE: MJØSET, 2009

Qualitative case studies are the methodological basis of this third position. The accumulation of knowledge proceeds by comparative specification and generalisation, as in grounded theory. The contextualist approach thus relates to US pragmatist 'participatory' philosophy and the grounded theory understanding of knowledge accumulation. Participatory case-oriented methodologies aim at understanding social interaction as situated in time and space. US pragmatists have rejected high-level notions of theory (i.e. social theory with a claim to universal range). Grounded theory's notion of theory instead is an attempt to accumulate knowledge of how context (time and space) affect social interactions. The grounded theory tool box of open and selective coding represents an active strategy to develop theoretical concepts from below and is tied to empirical data (Bryant and Charmaz, 2007). A study of social interaction is grounded when developed through accumulation of substantive empirical knowledge, preferably through comparative case studies. In comparative case studies, we have previously outlined the context that is relevant to an explanation of our findings. This contains a research strategy of process tracing, which is studying social interaction as situated in time/space relations. Such an approach is skeptical of universal range theories, since substantive knowledge can only be developed at the case study, or middle-range, level (Merton, 1968; Boudon, 1991; Pawson, 2000). In macro-level studies, the focus of this article, this participatory feature must be modified. Case specification and generalisation go hand in hand in the development of comparative substantive theory and the two concepts of formal and substantive grounded theory are important here.

The concept of substantive grounded theory refers to contextual generalisations within substantive research frontiers. The concept of formal grounded theory refers to formal patterns across research frontiers (Glaser and Strauss, 1967: 33; Mjøset, 2009: 54f).

Mjøset presents a macro-qualitative equivalent to the standard version of grounded theory, arguing that the original notion presented by Glaser and Strauss in 1967 was open to any analytical level and not restricted to micro-level sociology (Mjøset, 2007; 2009). For macro-qualitative studies, several types of empirical input, quantitative and qualitative, can be considered a macro-level equivalent to fieldwork in micro-qualitative research projects.

The equivalent to fieldwork is to tap into relevant earlier research: this field consists of various printed sources, information-seeking interviews (...) as well as earlier analysis relating to the field, from the relevant local research frontiers down to detailed historical monographs.

MJØSET, 2009a: 244

Considering theory as based on empirical input, macro-qualitative researchers are required to carefully evaluate several types of data for meso-and macro-level investigations. As macro-oriented qualitative researchers, we can outline micro-meso-macro procedures to scale up our theoretical concepts, as is done in standard grounded theory approaches at the micro level. Data used to build concepts at higher analytical levels must be grounded at any rate, and the point of substantive primacy requires macro-qualitative researchers to carefully select grounded empirical sources, quantitative or qualitative, to build concepts at the macro level. Macro-qualitative researchers can scale up analysis based on a combination of previous grounded concepts (this is the point of theory-leadenness in grounded theory) and build meso- or macro-oriented concepts. Lee illustrates the problem of carefully choosing suitable data in grounded theory research by using the example of mathematical models.

Their uses are (...) restricted since the method of grounded theory prescribes that the type of mathematics used and economic models constructed are derived from (as opposed to being imposed via analogy or metaphor) the empirically grounded theories being developed. (...) While mathematics helps illuminate aspects of the grounded theory and making clear what might be obscure, it does not add anything new to the theory, that is, it does not by itself produce new scientific knowledge.

LEE, 2012

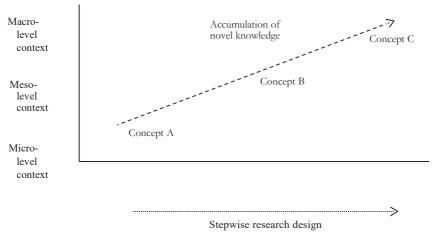


FIGURE 1 Groundedtheoryandmacro-qualitative research design OWN ILLUSTRATION

Note again that such a research approach in macro-qualitative political economy offers no additional compensation to quantitative analysis, but instead serves as a counterpart. When we examine empirical data, using coding and concept development, we must adjust the research design in macro-qualitative approaches using a stepwise strategy of building theoretical concepts from below. Figure 1 shows a grounded theory-based macro-qualitative research approach.

Substantive primacy means that theoretical concepts are always grounded in empirical data, which involves operationalising theories as a productive process from the micro to the macro level. Thus, with macro-qualitative political economy, we can contribute to macro-economic theories. However, theories developed in such a research enterprise are contextualised to the cases under investigation, build on contextualised generalisation (as in case-study methodology) and have no claim to universal range or law-like validity. Researchers working on such topics develop heterodox explanations of economic issues instead. The next part of this article will examine a macro-qualitative research project exemplified by the comparative case of Norwegian and Danish food industries since the 1990s neo-liberal turn.

3 Danish and Norwegian Food Industries at the Neo-liberal Turn of the 1990s—Two Macro-comparative Cases under Qualitative Investigation

In recent research (Klimek, 2015; Klimek and Bjørkhaug, 2015; Klimek, 2017; Klimek and Hansen, 2017), I have investigated how institutional settings

(context) since the 1990s (process) have affected the structure of the food industries in Norway and Denmark (outcome to be explained). This research question contains the threefold dimension of case-study research design. In the following, this research inquiry is reconstructed to illustrate a macroqualitative research design in comparative political economy.

Norway and Denmark are neighbors in the Nordic area, even unified as a single state before 1814, and both count as representatives of a Scandinavian model of coordinated capitalism. Norway, with its mountainous and harsh climatic conditions, historically developed a system of small-scale farming which, due to the high price level, requires subsidies to maintain farming across the entire country. Farmers have always mobilized against European Union (EU) membership and Norway is today associated with the EU via the European Economic Area (EEA) agreement. Denmark has climatic and topographic conditions that earlier allowed the country to build export strategies and today Denmark is the home market to some of the world's largest food processing companies. Danish farmers have, based on huge cooperative organisation, always mobilised for free trade, given the country's export dependence. Denmark has been a full EU member since 1973. The motivation for conducting comparative research about the impacts of market institutions on food industry development is grounded in the specific institutional tensions between two Nordic countries with unequal connections to the EU. Norway has highly protectionist institutions and a complex system of subsidies. Its economy depends largely on access to international markets. Agriculture and land-based food production are to varying degrees excluded from the EEA agreement. Denmark, on the other hand, is a full EU member and agri-food production competes within the huge internal EU market. Such institutional settings contain fertile ground for research within comparative institutional political economy.

Industry structure is usually familiar from studies in industrial organisation covering topics such as concentration, internationalisation, vertical integration and many other aspects that contribute to characterise industries (see Hansen, 2013). Changes in industry structure are hugely affected by mergers and acquisitions (M&As) because M&As directly affect all the above-mentioned parameters of industrial organisation. This is why the study starts with a qualitative approach to understand why finance and industry managers acquire other companies (micro level) and how these decisions relate to institutional settings in both markets (meso level). Beginning at the micro level, the relevant context for M&As is food processing companies and the research frontiers on finance and investment activities. As for the meso level, asking how institutional settings in both countries influence M&A behavior, the relevant context

TABLE 2 Outline of context and research topic at different analytical levels

	Researchtopic	Position within research design	Empirical sources/ research frontiers
Macro-level Context (part 3.3)	 Evolutionary capitalist history; Path dependency in economic development 	Theoretical understanding of capitalisthistory and changes at 1990s neoliberalturn	 Secondary grounded data, macro-historical process tracing
Meso-level Context (part 3.2)	 National institutional settings and changes at the 1990s turn Characteristics of Norwegian and Danish food industries 	 Specificationat national level, specification for food industries 	Secondary grounded dataOfficial statistics, institutional analysis
Micro-level Context (part 3.1)	 Understanding M&As: why and how do finance and industry managers invest in both industries? 	 Qualitative sociological inquiry M&As are crystallisations of structural change 	Primaryqualitative/grounded dataPrevious research

is political institutions that regulate the national industries. The macro-level context is the 1990s neo-liberal turn and different developmental trajectories of the industries in both countries. Working with three analytical levels requires carefully outlining the relevant context at each analytical level. Table 2 shows the research topics and empirical sources at each analytical level.

As for grounded theory concerns, theoretical concepts are developed in a stepwise and threefold micro-meso-macro procedure (figure 1) and concepts at higher analytical levels are developed at later stages of inquiry. Defining the macro-historical context allows me to specify the research question concerning the 1990s turn. This macro-level context has not been further investigated since the research interest is located at lower analytical levels. The lower the analytical level, the more specified the relevant context. Consider that this research procedure is theory-laden, as it builds on previous research concerning, for example, finance investments, institutional analysis or historical studies of path-dependent industrial sequences. As for grounded theory methodology, no universal range notions of theory have been applied to arrive at theoretical concepts at higher analytical levels. In the next three parts (3.1 through 3.3), the

article will examine the stepwise research process by discussing different empirical sources at any level showing how theoretical concepts emerged within the case study.

3.1 Micro Level: Food Industry M&As in Norway and Denmark; the Impact of Market Institutions

Regarding the M&A activity of finance and industry managers in Norwegian and Danish food industries, the study starts with qualitative interview methodology. The interviews in both industries are analysed with grounded theory methodology, aimed at reconstructing recent investment activity and tracing changes in industry structure since the 1990s. This first round of qualitative inquiry results in two concepts, considered as categories in grounded theory methodology, that express the micro-level input to the stepwise research enterprise (figure 1). Interview material from Norwegian investment managers contains a set of information that leads to outlining a first concept of "national structural growth barriers". This is a concept that summarises information given by the interviewees. Interviews with investment managers in Denmark contain information about the dynamics of a fully internationally integrated industry with global investment activity. This analysis leads to the concept of "full international integration", which is a comparative counterpart to the Norwegian concept. Both serve to summarise and conceptualise information gained from expert interviews in the industries.

The interview material is combined with secondary empirical sources concerning the drivers and motives for M&As in food industries (Hansen, 2013), brand portfolio management (Barwise and Robertson, 1992) or the determinants of private equity investments (Kaplan and Strömberg, 2009). Concerning grounded theory methodology, the combination with previous grounded research contains the element of theory-ladenness.

Below is a brief examination of explicit citations gained from interviews. The study contains interviews with the most relevant company leaders in both industries and in total 13 interviews are conducted in Norway and 6 in Denmark (Klimek and Hansen, 2017). One leader of a Norwegian food processing company expresses the need for foreign investments.

Processing of Norwegian raw produce will, above all, be concentrated on the five million people living here. If you want to grow within such a context, you need to stand on the other foot, which is foreign acquisitions. (...) But it seems to be difficult, as the situation is by now, to move the product, the physical product, out of the Norwegian landscape.

REPRESENTATIVE OF A FARMER COOPERATIVE, strategic judgment

Norway's food industry cannot develop export strategies because international agreements, such as EEA and World Trade Organization (WTO) trade regulations, prohibit subsidised exports. The informant mentions limitations for

growth possibilities (five million people) and that foreign acquisitions are an external growth strategy. Another Norwegian company leader expresses the meaning of institutional settings.

I actually will claim that the EEA agreement or our 'no' to the EU forced the big Norwegian food corporations to substitute exports or export ambitions with acquisitions within the EU. We had exports to Sweden. But this was hampered when Sweden became an EU member and we did not. (...)

A NORWEGIAN COMPANY LEADER

The first concept of 'national structural growth barriers' that was developed for structural changes in Norwegian food industries is based on an explanation of M&A strategies. The qualitative data describe a situation wherein Norwegian companies are forced to seek growth through foreign M&As. The informants report that demand in the domestic market is limited to about five million consumers and that export strategies are difficult to obtain, due to subsidies. Both the above interview excerpts relate industry structure to institutional settings and both illustrate the development of the concept of "national structural growth barriers".

The impact of institutions becomes even clearer when the study enters the Danish field. Interviews with company leaders show that M&A strategies play a role in accessing distant markets. Danish acquisitions in neighbouring countries with lower labour costs (e.g. Germany and Poland) serve to develop competitiveness in international markets. Informants explain that the Danish food industry follows a global export and sourcing strategy, and this is due to the historically grown export structure and institutional settings (internal EU market) that allow for scaling up production facilities. A Danish industry manager expresses the meaning of lower labour costs for global export strategies.

Yes, the access to cheap labour costs is a central driver for international investments. A large part of processing and value adding is located in the UK, Germany and Poland, due to lower labour costs.

REPRESENTATIVE OF DANISH CROWN

Size and international presence are mentioned as important for Danish companies as critical mass enables investment in research and development (R&D) and technology and entry into distant markets. Given Denmark's size and international presence, Danish companies have also been able to develop distant markets.

Trade liberalisation and new transportation technologies made it possible to develop distant markets. Today Australia imports 25% of their cheese, and Denmark has 57% of Australia's import of

blueveined cheese – a process which was not possible just a few decades ago.

REPRESENTATIVE OF ARLA FOODS

Based on interviews with Danish industry representatives, the study develops the concept of 'full international integration' as a comparative counterpart to Norway. This concept summarises information gained from interviews with Danish informants. The difference involves a particular behaviour in relation to institutional settings in both countries. Norwegian companies try to replace export strategies with acquisitions in neighbouring markets, apparently due to international trade restrictions. In contrast, Danish peers take advantage of open markets. However, this qualitative inquiry develops two comparative concepts that summarise information and build the basis for further investigations in the study.

3.2 Meso Level: Sector-specific Institutions, Statistics and Long-term Developments

These concepts are taken further in a next step of inquiry, now focusing on other data sets and on higher analytical levels. The concepts developed become the basis for a productive combination with other types of data, such as analysis of institutions that regulate the industries in both countries, sector-specific statistics and previous findings from the discipline of food economics. Consider that this step contains a first specification of grounded theory methodology, as known from micro-oriented sociology.

The meso-level investigations start with institutional analysis concerning both food industries. Norway maintains a highly protectionist system, based on subsidies, and Denmark is an EU member underlying world market competition. Note that Denmark went through periods with huge agricultural subsidies in the 1960s, but those were temporary and mainly focused on sectoral transformations. The national protection coefficient of the Organization for Economic Co-operation and Development (OECD) contains a ratio between world market prices and those prices that agricultural producers obtain in national markets. Figure 2 shows that Norwegian farmers obtain prices on raw

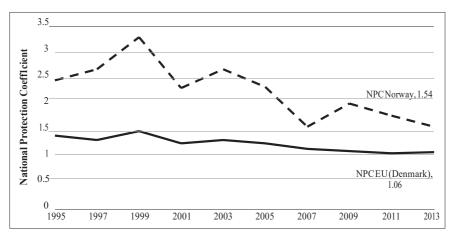


FIGURE 2 National protection coefficient since the 1990s OECD

produce that are 54% above world market prices in 2013. The Danish counterpart in 2013 is 6%.

At the very centre of the Norwegian agricultural subsidies is a system of target prices and two national farmer cooperatives that regulate volume in the market. Annual negotiations between the two national farmer unions and state authorities determine the target prices for raw produce. Target prices build the basis for income equalisation for farmers and aim at maintaining rural settlement based on small-scale farming. This system equals those known from corporatist bargaining systems between labour unions and employer associations. However, it is this very system of target prices that has come under pressure since the 1990s. Target prices are subsidised prices and the WTO agreements, namely, the Aggregate Measurement of Support (AMS) of WTO's yellow box, requires Norway to reduce subsidies. Target prices have until now guaranteed income equalisation and spread rural settlement. Depending on subsidies, Norway is thus not able to develop export strategies and it is this particular point that the Norwegian informants (part 3.1) mention in relation to export possibilities. I will come back to this point below.

Denmark became a full member of the EU in 1973 and development was largely affected by the Common Agricultural Policy (CAP). After Denmark's EU entry, the country's agricultural policy making has become part of European alignment. The CAP consists of different programmes to align agricultural policies between the member countries and organises a system of agricultural subsidies. However, the liberal trend continued as European agriculture was increasingly liberalised. This started with the General Agreement on Tariffs and Trade (GATT) negotiations of 1986, later leading to the WTO agreements in 1995. Since the 1990s, European agricultural support has been reduced, as shown in figure 2. The later consolidation of EU's internal market in the 1993

Maastricht Treaty, with its four freedoms of goods, labour, capital and services, became yet another factor. Danish food production competes within the single EU market and is thus exposed to world market competition. Denmark's institutional integration forces companies to cope with full international competition, a characteristic that differs from that found in Norway.

Institutional analysis was later connected to official statistics and insights from the discipline of food economics to characterise developments within both food industries. Consider that the aim of the case study was not to compare economic performance in the two industries, but to determine how different institutional settings influence structural development. Sector-specific statistics show the unequal meaning of the industries and table 3 summarises macro-economic indicators for the industries in 1995 and 2012.

TABLE 3 Agri-food, GDP and total exports since the 1990s

	Total GI growthin (1995-20	1 %	Agri-food share of GDP (1995 / 2012)	8	n %	expo	-food ort share 5 / 2012)
Norway	218%	3.5	50 % 1.81 %	251 %	8.1	11%	5.78%
Denmark	98 %	10	.35 % 6.94 %	113 %	22	.07 %	16.45 %

SOURCE: STATISTICS NORWAY AND STATISTICS DENMARK, OWN TABULATION

The economic weight of the food industries is declining in both countries, but the decline starts from a higher level in Denmark. Table 3 shows the contribution of agri-food to gross domestic product (GDP) development since the 1990s and its share of total exports in the same period. Driven by oil resources, Norwegian GDP and total exports rises sharply in the period. In Norway, the contribution to GDP is less than 2%, but the agri-food value chain is one of the biggest and most coherent chains in the domestic economy. In Denmark, the contribution of food industries to GDP is still about 7% and specifically its export share is large, above 16%.

Insights from food economics have shown that food demand does not change much over time due to low income elasticities of food demand (changes in income related to changes in consumption). Productivity gains cannot compensate for low growth in demand and typically, in developed countries, the contribution of agri-food to GDP is lower than in developing countries (Hansen, 2013:76). Stepped-up demand is one way to meet these challenges. Low income elasticities of food demand are the most common explanation for the declining contribution of agri-food to GDP developed by economic theory. Food is a necessity good with low elasticities in Norway and Denmark (Edgerton et al.,

1996). Low elasticities therefore explain the decoupling of food demand from GDP growth in the long run and are in line with the macro economic data presented in table 3. Productivity gains, increasing value added and broadening demand (new consumers), is therefore imperative to agri-food companies in developed countries.

At this point of inquiry, it is possible to connect several types of data considering the specific situation of Norwegian food production, which limits the possibilities to respond to these decreasing tendencies. Two strategic approaches would allow food industry companies to counteract the falling share of GDP. The first is productivity gains to grow profitability and the second is demand extension through exports. The Danish food industry had an exportoriented structure before the 1990s neo-liberal turn and companies were able to extend demand by export strategies. EU membership, the access to 500 million consumers in the internal market, and further development of distant markets with growing middle-class demand are crucial factors that explain Denmark's possibilities to counteract the declines in the domestic home market. Focusing on so many consumers, the Danish industry has developed economies of scale and productivity gains, so that companies profit from both above-mentioned approaches. Norway's agri-food sector, with institutional settings mainly focusing on protecting small-scale farming across the country, has since the 1990s turn been struggling with trade liberalisations. Consider the point of constant demand, which is 5 million Norwegian consumers, and difficulty of extending demand by export strategies. Given that demand is constant, productivity gains would tend to minimize employment in the sector. Norwegian food companies are additionally not able to develop similar economies of scale as their Danish peers due to the limited size of the market. Competitive Norwegian food production depends on subsidies and that is why Norwegian food industries have limited possibilities (due to the WTO trade regime) to develop export strategies. This again hampers opportunities to counteract the falling share of the sector's contribution to GDP and finally to tie rural income to general developments. It is this institutional dilemma of protecting national farming and international trade restrictions that affects the structural development of the domestic food industry. Consider the micro-level analysis (part 3.1) with Norwegian company leaders explaining how export strategies have been replaced by foreign acquisitions and a reduction of domestic capacity. With respect to the grounded theory research strategy, these explanations reflect a meso-level saturation of the loose concepts previously developed on the lower analytical level. Based on institutional analysis and sector-specific statistics since the 1990s, I report evidence in favor of my concept of 'national structural growth barriers' in Norway. For Denmark, I find evidence for my concept that industry structure here is affected by 'full international integration' and Danish industries have been able to take advantage of new growth possibilities in a liberal trade environment since the 1990s.

The case study starts with qualitative input and proceeds with a saturation of concepts on higher analytical levels. The above examination is an institutional explanation of economic developments. The possibilities to grow also depend on the institutional environment. This explanation has been developed based on grounded theory research procedure. It is mainly the possibility of broadening demand through exports that separates Norway and Denmark. Also, it is mainly Denmark's chance to take advantage of global trade liberalisations and new technological developments to reach an international scale that is open for growth opportunities. So, what actually explains different developmental trajectories since the 1990s, and particularly the dynamic of national structural growth barriers in Norway, is a "different degree of international integration" of the two industries. This is a conclusion at the meso level that goes back to the early 20th century industrialisation in both countries and is thus a highly pathdependent differentiation. Norway entered the 1990s neo-liberal turn with a protectionist system and without export-oriented experiences. Denmark entered the turn as an export-dependent industry. This is a historical and institutionalist explanation of structural changes since the 1990s turn based on empirical saturation of concepts in a grounded theory research design. Starting with the categories of (a) structural national growth barriers (Norway) and (b) full international integration (Denmark), the analysis at the meso level identifies a different degree of international integration at the 1990s turn as the main theoretical concept with explanatory power concerning structural changes in both industries.

In a last step of inquiry, it is now possible to analyse the research question again on an even higher level. Food industry structure, and changes within it, since the 1990s are affected by a historically grown industry structure and particular institutions in Norway and Denmark. At this point, I develop a causal explanatory chain from micro to macro-oriented reach. Table 2 shows the development of theoretical concepts at different analytical levels in the case study. The next step is focusing on macro-historical developments in both countries and path-dependent economic trajectories before and after the 1990s.

TABLE 4 Micro-, meso- and macro-oriented concept in the research project

Micro-oriented concepts	Meso-oriented concepts	Macro-oriented concepts
Structural national growth		Path dependency (macro-
barriers (Norway)		historical developments
Full international	A different degree of	explain food industry
integration (Denmark) →	internationalintegration	structure since the 1990s
	at the 1990s turn →	turn)

3.3 Macro Level: Path Dependency and Historical Transformations

The final analytical step consists of a combination of the above developed concepts with macro-historical explanations of economic development. Path dependence theory is known from political science and comparative political economy (Pierson, 2000; Mahoney, 2000) and is here able to show that the above identified concepts have grown historically. Explanations of path-dependent development consider social events as dependent on context, which is a time/space specification, and they correspond to case-study research methodology's focus on process tracing.

The notion of path dependence is generally used to support a few key claims: Specific patterns of timing and sequence matter; starting from similar conditions, a wide range of social outcomes may be possible; large consequences may result from relatively small or contingent events; particular courses of action, once introduced, can be virtually impossible to reverse; and consequently, political development is often punctuated by critical moments or junctures that shape the basic contours of social life.

PIERSON, 2000:251

Mahoney (2000:508) distinguishes two types of path dependency in historical sociology, a self-reinforcing type and a reactive type. He distinguishes path dependency from other approaches to historical explanation as he defines three common features: (a) sensitivity to causal processes at an early stage of a path, (b) outcomes not being determined by any singular event in the historical path, but (c) path dependent sequences following relatively deterministic causal patterns, which is 'inertia' that makes it difficult to leave a given path.

Self-reinforcing path dependence relates to Pierson's concept of increasing returns, which reinforce steps along the path.

In an increasing returns process, the probability of further steps along the same path increases with each move down the path. This is because the relative benefits of the current activity compared with other possible options increase over time. To put it a different way, the costs of exit – of switching to some previously plausible alternative – rise. Increasing returns processes can also be described as self-reinforcing (...).

PIERSON, 2000:252

While reinforcing path dependence gives incentives to move the path down, frameworks of reactive dependencies analyse causal processes wherein an event is a reaction to an event that happened in an earlier sequence. Self-reinforcing

path dependence implies reproduction, while reactive path dependence implies transformation and breaking points. Still, analysed as a causal chain, a reactive sequence forms a path-dependent trajectory. The aim of combining the mesolevel concept of a "differing degree of international integration" with path dependence theory is to gain a causal explanatory understanding of developmental trajectories since the 1990s neo-liberal turn.

Consider that path-dependent economic explanations contrast sharply to neoclassical models, since they allow multiple (non-optimal) market equilibria. Markets and market behaviour are not driven by calculating rationality and full market information (as criticised by heterodox economists), but by real social interaction, emerging from decisions made by humans situated in historical time and space. Path-dependent explanations of national economies imply multiple market equilibria because they are rooted in the historical trajectory of an economy.

Thus, path dependence serves explicitly as a counter to those forms of economic theory which posit that interactions between economically rational actors will lead to efficient outcomes, and argues instead that inefficient equilibria may be stable. This broad claim stems from the basic theoretical foundations of path-dependence theory, which seeks to model situations in which there are increasing rather than decreasing returns. In such situations, inefficiencies and suboptimal allocations of resources can persist over time, even when actors are aware of them and are economically rational.

CROUCH AND FARRELL, 2004:5

Note also that path-dependent economic analysis converges to the third methodological 'contextualist' position in the social sciences, as identified by Mjøset (see table 1). Economic analysis which pays attention to path-dependent historical sequences builds causal explanations via empirically substantiated research, pays attention to social interaction as situated in time/space relations (contextualisation) and does not rely on law-like assumptions of economic theory. At this macro-analytical level, the study now pays attention to the concept of a 'differing degree of internationalisation' as a consequence of previous historical sequences. Given the above definitions of path dependence. the analysis is now able to identify strategies for food industry M&As and sectoral structural changes since the 1990s neo-liberal turn as a causal chain in a wider historical context. Earlier sequences in the countries' industrialisation influence developments since the 1990s. Norway's agri-food industrialisation is a causal historical chain of protecting small-scale farming across the country and maintaining self-sufficiency in relevant areas. Denmark's agri-food industrialisation is a causal historical chain of broadening export possibilities

and developing huge competitive industrial scale. Concerning path dependence theory, the 1990s neo-liberal turn, with its trade-liberal transformations and new ways of organising industrial production technologically, is another historical sequence that influences structural changes in the food industries. Here, the study systematically traces the historical emergence of structural characteristics of both industries and outlines causal and substantiated explanations of the transformation since the 1990s turn.

3.3.1 Macro-historical Process Tracing for Norwegian and Danish Food Industries

A brief explanation of main historical sequences is given below. Table 4 presents a summary of 20th century agri-food industrialisation in Norway and Denmark in terms of single milestones (see also Klimek and Hansen, 2017).

Concerning Norwegian development through the 20th century, the basic institutional features regulating Norwegian food were established by the cooperative marketing act (omsetningsloven) in 1936. The act delegated administrative authority to the cooperative movement for the regulation of specified raw produce. Various administrative procedures have been established to regulate volume and to avoid overproduction. Since then, the cooperatives serve a kind of double function. They are commercial players in the markets, and they maintain an administrative function regarding volume. Norwegian agrifood industrialisation is since that period centred around collectively organised domestic supply of raw produce. The early Norwegian cooperative movement intended to guarantee prices for farmers and sales opportunities in an agricultural system hampered by unfavourable geo-climatic conditions. This could be

TABLE 5 Milestones of path-dependent agri-food development in Norway and Denmark at the 1990s turn

Agri-food development	Norway	Denmark
Early 20th century industrialisation	 Early industrialisation focusing on national supply Cooperatives start regulating volume in the market (cooperative 	 Late 19th century grain crisis, conversion to animal-based products Agri-food industries leading in early Danish industrialisation
Post-WWII, 1950s & 1960s	 marketing act of 1930) A system of price/wage negotiations (general agreement of 1950) Domestic consolidation 	 UK exports, trade-liberal attitude Post-WWII European exports struggling Domestic consolidation, preparing for EU
First period of European integration, 1970s & 1980s Development since the 1990s neo-liberal turn	 1st rejection of EU membership(1972) Income equalisation act (1976) attempts at rural development 2nd rejection of EU membership(1994) EEA agreement(1994) WTO(1995) restrictions for subsidies Growing import competition Reduction of domestic capacity 	membership Period of subsidies (domestic market measures of 1960s) EU member (1973) GATT starting in 1986 CAP (starting in 1962) WTO liberalisation (1995) EU internal market (Maastrichttreaty 1993) International integration Extension of domestic and foreign capacity From exports to foreign direct investment (FDI)

seen as a contrast to Denmark were the early cooperative movement intended to support capital intensive technology that again would serve to develop competitive exports.

Later, since 1950, the agricultural agreement implied income negotiations between the Norwegian state and the two farmer associations. The agricultural agreement integrated Norwegian farmers into the coordinated model of industrialising Norwegian capitalism through a system of target prices. Target prices are average prices that agricultural producers are permitted to obtain in the market. They are the result of annual agricultural negotiations between the state and the two main farmer associations (Norges Bondelag, organising the medium-sized farms, and Norges Bonde- og Småbrukarlag, organising the smaller farms). In these negotiations, political concerns about income equalization between farmers and industrial workers play a role. The aim is to control domestic prices and secure farmers' incomes, independent of changes on the world markets. Negotiated prices, import restrictions and a system of supply – demand regulation are the main pillars of the nationalisation of Norwegian agriculture.

The income equalisation act (opptrappingsvedtak) of 1976 was a national attempt to impose the income equalisation objective more strongly and thus secure that small scale farming across the mountainous country could be maintained at a time when Sweden and Denmark rationalised their agricultural sectors (Olsen, 2010). In the late 20th century, the collectively regulated, but still regionally organised farmer cooperatives, merged. Since these mergers, two nation-wide organised cooperatives, Tine in the dairy and Nortura in the meat sector, dominated the Norwegian agri-food industries. Towards the turn of the century, Norwegian agricultural cooperatives were consolidated at the domestic level, as was the case in Denmark, too.

The Norwegian system of institutions that protect rural settlement and income equalisation for rural labour was developed in the post-WWII model of developmental capitalism (Fordism). This developmental path was stable until the 1990s transformation, but the contextual conditions for industrial food production have changed dramatically since then and put pressure on the national protectionist system. The Norwegian 'national structural growth barriers' thus have witnessed a breaking point in the nation's path of agri-food industrialisation. Norway had no export experiences until the 1990s turn and its food industry structure had developed behind toll barriers. Thus, the Norwegian agri-food complex, built on protectionist institutions after WWII, was unlikely to take advantage of the 1990s trade liberalisation as well as unlikely to take advantage of new technological ways of organising industrial food production. Therefore, and in terms of path dependence theory, Norway's food production since the 1990s turn has gone through a breaking point (reactive path dependence) and this is due to decisions made in earlier historical sequences.

Concerning Danish developments during the 20th century, a first and early sequence was connected to a crisis of Danish grain exports in the late 19th century. Denmark's main traditional agri-export item was grain. But this item was outcompeted by cheaper grain from countries such as the USA, Australia and New Zealand, due to new transportation possibilities (Menzel, 1988:182). This crisis forced Danish exporters to restructure. Denmark thus became a highly efficient producer of animal products, such as butter and meat. Until WWII, the industrial linkages that had already earlier developed in conjunction with agri-exports (Edquist and Lundvall, 1993), were further developed into world leading manufacturing and service sectors related to the agri-food industries (Senghaas, 1982:128). Basic political concerns, including those of the farmers and the two main cooperatives, focused on international competitiveness as income development in the Danish agri-food supply chain depended on access to foreign markets.

The Danish profile of modernisation changed dramatically in the 1960s with the implementation of the domestic market measures (hjemmemarkedsordninger). Until the 1960s agriculture was the largest export sector within Demarks economy, but after WWII terms of trade developed negative for the sector (Christoffersen, 1999:33). General Danish income rose, while the export markets of the agricultural sector stagnated and income development in that sector lagged behind (Kyed and Kærgård, 2005:122). The Danish export strategy was also strained by agrarian protectionism in most of its international markets in the early decades after WWII. This led to the foundation of the larger dairy cooperative MD (Mejeriselkabet Danmark), which later was integrated into the present Arla system. This new period for the first time showed permanent economic interventionism to back up income policies and structural transition in the agri-food chains.

Support increased continuously until 1973, when Denmark joined the EU and was submitted to EU internal agricultural regulations. From the early 1960s, the Danish export industries thus developed within an institutional framework that implied regulations and subsidies. In the 1960s Danish support clearly rose in aggregate terms, but they were quite moderate in international comparison. This Danish period of economic interventionism can be considered a counterpart to the post WWII Norwegian developments, particularly the general agreement of 1950. Both systems developed institutional frameworks that would integrate farmers into the social-democratic type of coordinated capitalism, indexing incomes in the agricultural sector to general macro-economic developments. Note also that this period of Danish recovery prepared the sector for EU membership in the 1970s.

As the sector depended on exports, farmers actively mobilized in favour of Denmark's EU integration in the 1970s. In contrast, Norwegian farmers and their cooperatives mobilized against Norwegian EU-membership. The CAP was

first established in 1962, consisting of different programs to align agricultural policies between the member countries. The CAP also organizes a system of agricultural subsidies. Danish farmers supported EU membership since EU subsidies were even higher than those organised under the domestic market measures. However, the liberal trend continued as European agriculture was increasingly liberalised. This started with the GATT negotiations of 1986, later leading into the WTO agreements in 1995. Since the 1990s, European agricultural support has been reduced.

The later consolidation of EU's internal market in the 1993 Maastricht Treaty, became yet another factor that impacted on the structural development of Danish food production. Denmark's EU membership generally implied full international integration with demand extension and competition on the domestic market. This led to structural developments that differ considerably from the Norwegian case. The EU enlargement in 1995 that made Sweden, Finland and Austria members of the union, had strong impact on the Danish food industry. In a situation of growing global competition, the Nordic food markets increasingly became an enlarged domestic market for Danish agri-food companies, and this contributed to strengthening Danish export ambitions.

The main conclusions of this grounded theory-inspired macro-historical process tracing is the identification of two distinct types of path-dependent economic development. Norway is going through a breaking point (reactive path dependence) and Denmark is moving down its given path of industrial food production (increasing returns). Since the 1990s neo-liberal turn, it has been more likely that Norway will proceed by protecting its national industries, but more likely that Denmark will deepen its export ambitions, both based on changes in the contextual conditions. These are explanations of macro-economic and macro-historical reach. At this final macro-analytical level, I was able to combine qualitative micro-oriented data with macro-historical developments.

4 Conclusions

In this article, I have discussed macro-qualitative research methodologies based on grounded theory procedures and specified for studies in comparative political economy. As shown in the above discussion, qualitative research can contribute to macro-economic studies. The research strategy presented in this article is not a compensation for the limits of quantitative standard approaches in economics, but a self-consistent methodology with its own style of reasoning. Knowledge possessed in such macro-qualitative studies is empirically grounded as it advocates a systematic attempt to generalise accumulated knowledge. Theoretical knowledge in terms of various heterodox concepts does not go beyond the data. Macro-qualitative theoretical concepts are contextualised generalisations of the data and ultimately do not go beyond the cases under investigation. This is the point of grounded theory research methodology, and

the above examination of the Norwegian and Danish food industries represents a generalisation of case-specific knowledge. The main conclusion of this macroqualitative case study is that two distinct types of path dependency have affected the countries' food industries since the 1990s. This is a contribution of macroeconomic and macro-historical reach but contextualised to the comparative cases under investigation. Theoretical concepts developed in the stepwise research enterprise belong to the cases under investigation without any claim to universal validity. As macro-qualitative research builds on the accumulation of knowledge, any theoretical concept that goes beyond the context of Norwegian and Danish food industries must be grounded in new attempts to accumulate knowledge. The knowledge accumulated in the above examination offers an explanation that ideally should compete with other explanations developed in related case studies within this research frontier of global food industries. In macro-qualitative political economy, we develop heterodox explanations, based on accumulated knowledge and without universal range or law-like validity, as in economics.

The stepwise research enterprise examined here is based on grounded theory procedures, as empirical input is possessed, combined, recombined and finally generalised. Each analytical level from micro- to macro-oriented analysis contains these grounded theory methodologies. The micro-oriented theoretical concepts become the basis for the meso- and macro-oriented concepts and this contains a productive accumulation and examination of data without any claim to universal validity. The examined theoretical concepts remain as heterodox qualitative explanations of economic development instead.

References

Barwise, P. and Robertson, T. (1992): Brand portfolios. *European Management Journal*, Vol. 10, 1992.

Boudon, R. (1991): What middle-range theories are. Contemporary Sociology. Vol. 20/4.

Bryant, A. and Charmaz, K. (2007): The SAGE handbook of grounded theory. London: SAGE.

Christoffersen, H. (1999): Danmarks økonomiske historie – efter 1960. Forlaget Systime. Crouch, C. and Farrell, H. (2004): Breaking the path of institutional development? Alternatives to the new determinism. *Rationality and Society*, Vol. 16:1.

Edgerton, D. L., Assarsson, B., Hummelmose, A., Laurila, I. P., Rickertsen, K., Vale, P. H. (1996): The econometrics of demand systems: with applications to food demand in the Nordic countries. Kluwer Academic Publishers.

- Edquist, C. and Lundvall, B.-Å. (1993): Comparing Danish and Swedish systems of innovation. In: Nelson, R. (Ed.), National Innovation Systems – A Comparative Analysis. OxfordUniversityPress,NewYork.
- Finch, J. H. (2002): The role of grounded theory in developing economic theory. *Journal of Economic Methodology*, 9/2. Routledge.
- Glaser, B. and Strauss, A. (1967): The discovery of grounded theory. Strategies for Qualitative Research. Aldine de gruyter.
- Hacking, I. (1999): The social construction of what? Harvard University Press.
- Hall, P. and Soskice, D. (2001): Varieties of capitalism The institutional foundations of comparative advantage. Oxford University Press.
- Hansen, H. O. (2013): Food economics industry and markets. Routledge.
- Kang, N. (2014): Towards middle-range theory building in development research: comparative (historical) institutional analysis of institutional transplantation. *Progress in Development Studies*, 14/3. Sage.
- Kaplan, S. N. & Strömberg, P. (2009). Leveraged buyouts and private equity. Journal of Economic Perspectives (American Economic Association).
- Klimek, B. (2015): Fusjoner og oppkjøp i norsk matindustri under økt internasjonal integrasjon siden 1990tallet. In: Bjørkhaug, Almås, Vik: Norsk matmakt i endring. Fagbokforlaget.
- Klimek, B. (2017): Food industry structure in Norway and Denmark since the 1990s—Path dependence and institutional trajectories in Nordic food markets. *Series of dissertations submitted to the Faculty of Social Sciences, University of Oslo, No. 631*—ISSN 1564-3991.
- Klimek, B. and Bjørkhaug, H. (2015): Norwegian agro-food attracting private equity capital; varieties of capitalism varieties of financialisation? *Sociologica Ruralis*.
- Klimek, B. and Hansen, H. O. (2017): Food industry structure in Norway and Denmark since the 1990s–Path dependence and institutional trajectories in Nordic food markets. *FoodPolicy*.
- Kyed, K. and Kærgård, N., 2005. Der liberalismen døde, landbrugsreformen 1961. In: 13 Reformer av den danske velfærdsstat. Syddansk Universitetsforlag.
- Lee, F. (2012): Critical realism, grounded theory, and theory construction in heterodox economics. MPRA paper: https://mpra.ub.uni-muenchen.de/40341/ (received 11.01.2018).
- Lee, F. S. and Cronin, B. (ed.), (2016): Handbook of research methods and applications in heterodox economics. Edgar Elgar.
- Mahoney, J. (2000): Path dependence in historical sociology. *Theory and Society*, Vol. 29.
- Menzel, U. (1988): Auswege aus der Abhängigkeit. Die entwicklungspolitische Aktualität Europas (2. Kapitel: Dänemark 1870-1940). Suhrkamp.
- Merton, R. K. (1968): Social theory and social structure. Free Press.
- Mjøset, L. (2006): No fear of comparison or context: on the foundations of historical sociology. *Comparative Education*, Vol. 42:3.

- Mjøset, L. (2007): An early approach to the varieties of world capitalism: methodological and substantive lessons from the Senghaas/Menzel-project. *Comparative Social Research*, Vol. 24. Elsevier.
- Mjøset, L. (2009): The contextualized approach to social science methodology. In: Byrne, David and Ragin, Charles C. (ed.): The Sage handbook of case-based methods. Sage.
- Mjøset, L. (2009a): The art of macro-qualitative modelling: an exploration of Perez' sequence model of great surges, In Erik S. Reinert, Rainer Kattel & Wolfgang Drechsler (ed.), Techno-economic paradigms: essays in honour of Carlota Perez. Anthem Press.
- Mjøset, L. (2015). A varieties approach to the varieties of capitalism, In Sean Ó Riain, Felix Behling, Rossella Ciccia & Eoin Flaherty (ed.), *The changing worlds and workplaces of capitalism*. Palgrave Macmillan.
- OECD statistics: agricultural policies and support.
- Olsen, P. I. (2010): Norsk mat etter supermarkedsrevolusjonen. Unipub, Oslo.
- Pawson, R. (2000): Middle-range realism. European Journal of Sociology 41.
- Pierson, P. (2000): Increasing returns, path dependence, and the study of politics. *American Political Science Review*, Vol. 94:2.
- Senghaas, D. (1982): Von Europa lernen Entwicklungsgeschichtliche Betrachtungen. Suhrkamp.