

Framing Sustainable Exports in Theory and Practice

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Abstract

Increasingly exporters need to take into consideration sustainable exports. This paper is an academic exercise that seeks to develop an analytical framework to demonstrate sustainable exports as a market embedded inter-organisational function. Influences of this investigation include institutional economics and sociology. The developed framework guides investigation of three published cases of exporting behaviour. Here we re-tell the narratives following this alternative framework. New insight on each case includes considerations of sustainability as well as exporting as an emergent exchange process. This framework also gives guidance for a new research agenda on the topic of sustainable export.

Keywords: Sustainable exports, framing, overflowing, exchange economy, integration, interdependency.

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1. Introduction

This paper aims to develop a new approach to analysing sustainability as market contingent export behaviour. Exporting is a key business process given the increasing globalisation of the world economy. Business processes are commonly managed, applying deterministic thinking (Rzevski and Skobelev, 2014). This paradigm implies using detailed plans generated based on historical data. Svensson and Barfod (2002) state that producing has increasingly shifted from material processing to competence in managing product information.

Furthermore, Closs et al. (2008) point out how market diversity coupled with technology-driven augmented product complexity escalates business process complexity. According to Blackenfelt (2001), modularisation is a managerial conciliation that safeguards market responsiveness balanced with cost efficiency functionality. This implies heightened uncertainty in exporting.

According to Sztomka (1993, p. 84-85), uncertainty has several sources. These sources are:

- 1) design faults,
- 2) operator faults,
- 3) the inevitability of unrecognised (latent) effects,
- 4) "the reflexivity of social knowledge, which, at the very moment that explains society and makes it seemingly more predictable, may influence the course of social processes in unpredictable ways" (ibid. p. 84), and
- 5) "extreme differentiation of power, values and interests among members of society and their groupings, which results in rampant relativism and eliminates simple consensual guidelines for defining and appraising social situations" (ibid. p. 85).

This implies a need to develop managerial approaches to handle uncertainty in an increasingly complex globalising marketplace.

In addition, the problem of sustainable exports is addressed. Sustainability from a business viewpoint fundamentally addresses issues concerning balancing economic considerations, commonly the focal business concern, with societal and environmental concerns (Álvarez et al. 2017). Securing exports explicitly as a sustainable process increases complexity since involving society and nature in addition to business concerns increases uncertainty. The business process is in cases of sustainable production conceptually viewed as circular. Ecosystems thinking represents a viable approach to viewing the business process. Following Halinen et al. 2012), even in such complicated networked business structures, the linearity of the business process remains as an empirical phenomenon, mainly because all activity follows a sequentially interdependent "time-flow". Such time-flows represent accordingly phenomenon which may be studied in its network context as an emergent process. This includes a way to approach export management behaviour.

This paper develops an alternative way compared to deterministic planning thinking to analyse and practise exporting as an emergent managerial process. Literature from institutional economics (i.e. transaction cost economics) and sociology (i.e. on economics) are balanced to

provide conceptual development and understanding of how firms interact to secure sustainable exports. This directs attention to how actors think and behave in a networked context to achieve sustainable exports, from institutional economics understanding regarding features of the firm and reasoning to integrate with business relationships paired with sociological reasoning for how people perceive the economic action that exporting is. This provides a fresh analytical framework used to analyse data from an already published qualitative survey (Glavee-Geo and Engelseth 2016). Despite the growing importance of sustainability issues, very few studies have focused on the examination of marketing strategy sustainability in international settings (Zeriti et al. 2014), neither has there been many studies on sustainable exports. In this paper, we seek to fill the knowledge gap where we provide a conceptual understanding of sustainable exports by drawing on the sustainability literature and social and institutional economics. We present and analyse case narratives to posit sustainable exports as systemic processes that are emergent and network-contingent. The purpose of our study is three-fold. First, we aim to develop a conceptual model for achieving sustainable exports. Then we empirically ground this model. Finally, we seek to point out the limitations of this study to thereby point to some directions for further research. Next, we review the literature to provide the theoretical lens to guide our discourse and as the basis for the conceptual model. This is followed by the method. We then present the findings and discussions of the study, and lastly, the conclusion.

2. Literature review

Export is an organizationally challenging activity due to its inter-organisational character. Firms abide due to the economic incitement in a reality of organising economic activity superseding firm borders as transactions between firms (Coase 1937). This transaction economy defines a firm and positions how a firm relates to exchange on the market with other firms. Richardson (1972) notes that the distinction between the market and the firm is fuzzy since the economic activity is characterised mainly by intermediary forms, what Williamson (1979) denotes as "relationships". These relationships represent the organisational context of inter-firm interaction. Interacting in a marketplace in economic life is swathed in uncertainty. This is in part dependent on the fact that most firms rely on many business relationships to carry out the economic activity: the complicated and therefore usually complex character of any industrial network.

Furthermore, when exchange processes cross inter-firm boundaries, the notion of plan and control as managerial tools weakens. It is in this setting of interaction that humans try to manage their business activities. It results from seeing this as a normal mode of economic activity that the concept of "bounded rationality" is founded (Cyert and March 1963). Uncertainty is accordingly a key feature of managing inter-organisational relations, and this management is not a chaotic activity. It is neither irrational. It follows a logic of bounded rational actors managing exchange as emergent exchange processes to support the supply of goods and services; the production economy. Export represents aspects of both a production and exchange economy.

First, focusing on the exchange aspect of export, managing exports occurs in a firm embedded in an international marketplace. This activity is inter-organisational. Explaining the reasoning to carry out business with other firms, may be associated with interdependency and power (Emerson 1962). One firm needs the other. However, the nature of these firms that intermingle on the market varies. Some are large, and others are small. Furthermore, how the

purchasing or selling firm perceives the importance of a supplier or customer may vary for several reasons, including the degree of technological complexity and the differentiation of the offering on the market. There are two perceptions of relationship importance, the sellers and the buyers.

The industrial network in which exports take place is accordingly characterised as a set of inter-firm linkages. The links can be more or less loosely coupled (Weick 1976). This assumption leads to intriguing ideas regarding how to organise economic activity in an industrial network characterised by a complicated mesh of divergent but complementary; indifferent and competitive but sometimes cooperative to enhance each other's business relationships. Managing exports involves thus sets of loose business relationship couplings. Alternatively, the firm may choose to develop its business relations with selected suppliers or customers. Economising networking activity is often related to limiting the supply base of a purchasing firm. In practice, all firms have sets of different business relationships that to varying degrees are important to them and show varying degrees of integration.

The reasoning for why firms in practice choose to develop some business relationships for exchange purposes and not to the same degree develop others is often not clear. Thompson (1967) sheds light on the logic of interaction in supply networks by classifying interdependency as a mix in varying degrees of pooled, sequential and reciprocal interdependency apparent in business relationships. Especially industry characteristics create reasoning on how firms carry out the economic exchange. In physical distribution, interdependency is mainly sequential, one activity following the other. In services, however, pooled or reciprocal interdependency is most prevalent. In cases of pooled interdependency in services, cases of higher uncertainty, production can be organised as a technical and relatively automated combination of resources. Coupling between firms in such cases may be looser. In cases of increased uncertainty, such as when exporting technically advanced products subject to a fast rate of technological change, interdependency is reciprocal. The customer learns from each purchase about the product offering through interaction in the business relationship. In line with the Uppsala school (Johanson and Vahlne, 1977), experience and learning are, therefore, an important aspect of export.

Exchanges associated with export take place in an industrial network structure. The organisational structure may be characterised as a "supply chain". This wording denotes systematic activity in the network to integrate firms, thereby creating synergies that enhance the total performance of all the collaborating firms (Christopher 2016). "Integration" is a key SCM concept (Harrison et al., 2019). It is both in this conceptual context, both a norm and value of planning the development of a network structure (Halldorsen et al. 2003). A supply-oriented network is composed of more or less heterogeneous actors that do business with each other or compete with each other based on perceptions of degrees of complementarity (Gadde et al. 2010). In a network structure the strength of integration changes dependent on perceptions of interdependency. "This state is fragmented since integration is measured in business relationships, that the importance of these may change as interdependencies fluctuate, or are simply chosen by managers to alter the characteristics" (Janusz et al. 2018 p. 465).

Firms involved in export are complementary to the degree they are heterogeneous organisational entities. They reap these benefits of complementarities through integration, the degree that the costs associated with the exchange are higher than trading on a marketplace. In

this picture, the reasoning for the strengthening of relationships ties is never clear-cut. It does not follow in business practice a plan to optimise the exchange economy. These relationship bonds may grow, weaken or remain much the same based on a perceived change of the value of the relationships. This value perception associated with exchange is in motion, and it is network contingent. "This description provides thus the foundation for considering reasons for how interaction changes based both on changes in the contextual factors, interdependency and integration" (Janusz et al. 2018 1 p. 465).

Interdependency explains how and why business relationships integrate as well as how and why do the actors need each other. Regarding the strength of ties, Demsetz (1993), discusses the difference between short-term and long-term business ties. This impacts on the level of inter-firm integration, stating (ibid.) based on transaction cost theory (Coase 1937, Williamson 1975), that in cases of market stability firms integrate meaning long-term planning and investing in the relationship. Long-term planning includes hierarchical governance as the most extreme form. Under more unstable market conditions, firms act in relation to each other with a short-term time horizon. This represents market governance. The form of governance in each relationship a firm is involved in impacts on the design of the network structure, the supply chain. This perception of network structural context is framed and also changes; albeit at a slower pace than managerial and production operations. This also changes at a slow pace the organisational context of interaction to export; which informs firms' degree of networking, how strong are the ties between them and basis of exchange.

How do we approach the notion of managing exchange to support export as production? Goffman (1971) introduces "framing" as a concept to understand how individual actors relate to uncertainty in social activity. "The frame establishes a boundary within which interactions – the significance and content of which are self-evident to protagonists – take place more or less independently of their surrounding context" (Callon 1998, p. 249). Using the concept of "framing" to interpret export activity means focusing on actors involved in export, as groups, or interacting individual managers. Frames are associated with a more or less continuous mental model these actors have of, in this case, exporting. Focusing on framing in exports means that research focus is directed to a micro-level of export management, how actors think about exporting. This is important given that mental models shape decisions, and these decisions as a sum of activities over time create a pattern of export management and processes over time. Since these places focus on experiences, the cognition of export, learning is a key element here. When describing exports of a firm, framing exports represent a stable pattern of exports. They are cognitions measured both at an individual and up to a firm level. Still, framing, however stable, also changes over time as export managers, as Johanson and Vahlne (1976) point out, learn through exporting.

Since export is an exchange activity, it is also a managerial process supporting production. The orders from export direct the production process. The inter-organisational context of exporting means that uncertainty is a key factor in economising exports. How these actors frame export is an inter-organisational learning experience. This learning includes the borders of activities in the relationship, who does what when exporting. Framing may be studied by applying the sociological concepts of roles. We then move into the realm of theatrical performance. Roles are associated with expectations of others to the performer. The framing by a performer, through a relatively stable mental model, develops through interaction and is

enacted by the environment. This points out that framing may be disturbed; there may be leaks to this picture. Callon (1998) calls these leaks "overflowing".

In transaction cost economics (TCE), the notion of imperfections is central to the reasoning of market behaviour (Coase 1937). It also moves research focus from the economics of resource allocation to the institutional level, the reasoning for why and how firms exist as a networking entity. The inter-organisational challenge of networking becomes a focus in this form of institutional economics. Williamson (1993) points within the fields of economics and sociology concerning inter-organisational economic behaviour, the research has a high level of abstraction. It, therefore, lacks detail to analyse specifics of interaction. Transaction cost economics addresses this problem of research detail. The reasoning to organise production within a firm or to trade to acquire the resources it needs is the focus of TCE. This is definitely an important business problem. The problem of "make or buy" from a firm perspective is addressed in the current rich outsourcing literature found in the fields of purchasing and industrial marketing. In this study, we continue on another line of investigation following a process view, to understand the micro-level logic of interaction and problems therewith. The concept of "overflowing", when related to the already introduced concept of "framing" is helpful here.

Framing includes a core notion that markets may be understood as "...a system of relationships between agents" (Callon 1998, p. 251). This implies that the human actor, with their life experiences and perceptions of reality, shape their lives, including decision-making in a professional context. "Framing defines the effectiveness of the market because, in this closed interactional space, each individual can take into account the viewpoint of every other individual when reaching a decision" (Callon 1996, p. 251). Just as the institutional economist cites market imperfections, the sociologist Callon (1998) suggest that the means to cope with that decision-making is never a perfect process that follows rules of rational behaviour. He cites that two micro-level process imperfections prevail in economic interaction. First, perfect framing may be difficult to achieve. This is in business practice cloaked in degrees of uncertainty. It is certainly the case in exporting management and why export is, importantly, a learning experience for firms involved in such business practices.

Furthermore, Callon (1996) points to that framing may be deliberately transgressed, what Williamson (1975) denotes as opportunism. Clearly, the case of opportunistic behaviours is associated with norms and ethics of business. Industrial network theory (Håkansson and Snehota 1995) cite that to the degree the integration develops in a business relationship, trust grows, and opportunism may cease. This is also important since economic *misbehaviour* is costly. Being ethical is being 'smart' (Glavee-Geo et al., 2021). The point here is mainly that overflowing represents the micro-level imperfections of managerial processes associated with the exchange.

In this paper, we follow the concepts of "framing" as proposed by Goffman (1971) and balancing framing with overflowing as proposed by Callon (1996) to create an analytical framework to guide research in practical export behaviour. This is in practice a process approach. A process-focused view directs the focus to the micro-level interactions as a series of sequentially organised tasks flowing a timeline. Processes are associated with an exchange in two layers: long-term development and short-term operations. Processes can be characterised as part of a production economy and an exchange economy (Hammervoll 2014). Management

designs exchanges, the transactions that bind firms together. The different managerial functions such as production planning and control, marketing and sales, or sourcing and purchasing are all also administrative functions that can be characterised likewise as production operations as a series of sequentially organised tasks. Therefore, we posit that at a higher level of abstraction, production, and management follow the same organising logic as labour. All such processes unfold over time (Pettigrew, 1997; Van de Ven, 1992). They are therefore complex at two levels: a long-term planning-oriented level and a short-term operations level. Plans are thus one of many factors influencing operations. Resource development, pooling, and use are enacted and adjusted by managers. This constitutes exchange as a complex process where long-term less-detailed plans are contextual. This also underpins the importance of networking, framing and overflowing to gain experience, to develop improved industrial functions such as exporting as a process.

In addition to the managerial level associated with an exchange (securing transactions), production in exports constitutes technical practicalities. This process resides at a mainly logistical production level, i.e. goods storage, handling and transport. How these logistics processes are carried out is subject to varying degrees of flexibility. In relation to overflowing, export may be either proactive or reactive. Integration is posited to support learning in the supply network where exports take place. However, as indicated by Weick (1976), coupling between actors vary on a continuum from loose to tight. There is no absolute measurement of whether a relationship should integrate. One indicator is found in transaction cost economics. The question on coupling may be related to transactions costs. From sociology, Callon (1996) points out that it is also vital to cover the entire picture of the economics of trade to view relationships as institutionalised; they are socially embedded in a professional culture. Here framing and overflowing directs research to how perceiving those different individual firms does business with is a continuous learning process.

Finally, in the framework, we consider the case of sustainable exports. Krause et al., (2009) state that in developing sustainable production as a business, it is vital to as a first step to identify and assess the various "components of sustainability". The triple bottom line (TBL) (Elkington, 1998) highlights the need for organisations to measure sustainability in all three areas of economic, social and environmental sustainability on equal terms (Dyllick and Hockerts, 2002). This implies that networked companies apply long-term thinking, taking the interests of the coming generations into consideration.

According to Carter and Rogers (2008) components of producing include economic performance (the financial consideration of business and shareholder value creation), environmental stewardship (preservation of the natural environment and natural resources, waste minimisation and reduced emission) and finally social equity, which relates to a firm's purchasing social responsibility (such as human rights, local community and people development, cultural diversity, fairness and safety). This breaks the general issue of export sustainability into measurable components.

The effective management of the TBL is widely believed as a catalyst in improving efficiency and profitability over the long term (Closs, Speier and Meacham, 2011). Fiorino (2010) states that this broader perspective on production, sustainability as an approach, aligns economic considerations with socio-political systems and environmental needs (and the many organisations increasingly seek to include environmental aspects of performance in their

business models in line with the triple bottom line concept (Birkin et al., 2009b). The TBL approach suggests that besides economic and shareholder value creation, organisations need to engage in activities that ensure environmental preservation and social development at an equal level. Adopting sustainability as a long-term measure of economic performance guides an organisation to take a responsible position on economic prosperity, environmental quality, and social justice (Bai and Sarkis, 2010).

3. Conceptual model

In this framework, sustainability is for research purposes understood as one of the key factors to consider when analysing exports. The preceding discussion provides the basis for the following circular model for analysing exporting as both a managerial activity encompassing the aspect of export as production:

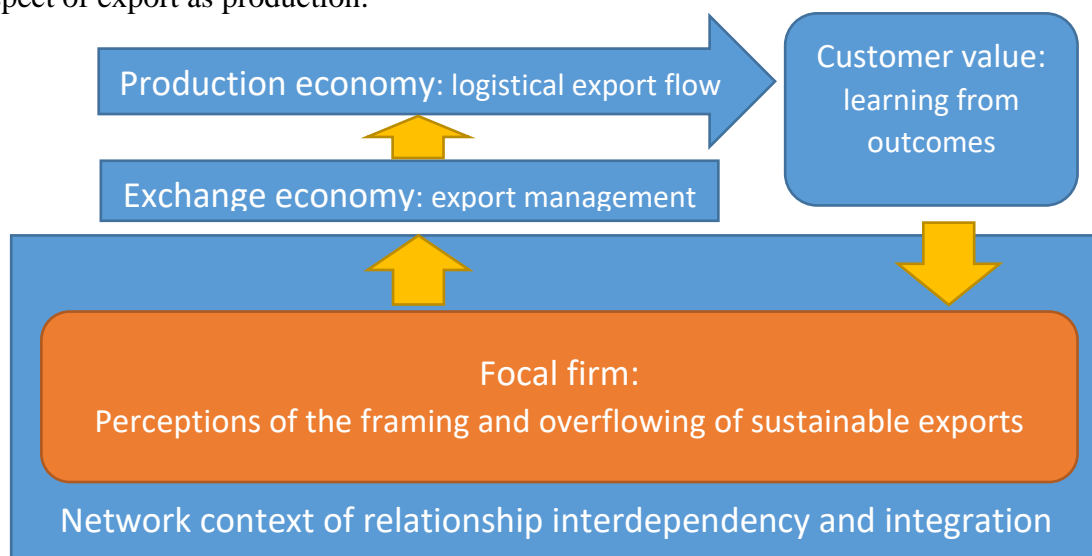


Fig. 1. Conceptual model of exporting

The model in figure one depicts the importance of attaining customer value as the prime objective of economic behaviour. This is depicted as the source of learning, perceiving customer value. This envelops customer perception of sustainability as satisfaction and not as a normative goal. The focal firm is as discussed importantly embedded in the network context, and this represents the grounds framing and overflowing as emergent properties. This context is governed by perceptions of interdependency. The exchange economy consists of export management of transactions as well as supporting the production of exports. The model describes a systemic relationship meaning exports are viewed as a circular learning process. The model thus proposes analysing export behaviour by accounting for first the following:

Firm perceptions of sustainable export as:

1. **Interdependency and integration:** to understand who, why and how the export firm transacts on the market
2. **Framing and overflowing:** to attain meaning in exporting
3. **Exchange economy:** as an emergent export management practice
4. **Production economy:** flow as emergent process supported by export management
5. **Sustainability perceived:** by the exporting firm as customer value.

6. **Systemic features:** of the above as a circular learning process

Analysis of these topics are sequentially dependent, meaning understanding develops in a step by step manner, starting with considering the structural characteristics, interdependency and finalising with an overall perception of systemic features of export.

4. Method

In this study, we apply as examples secondary data in the article "Safeguarding export and import transactions through relationships and networking" (Glavee-Geo and Engelseth 2016) which we have already published in the "International Journal of Export Marketing". We use portions of this data, three of the five case firms presented in this article as well as raw-data in the form of interview transcripts used to create these three case narratives. The article by Glavee-Geo and Engelseth (2016) provides five briefcase narratives on exporting from Norway. The purpose of this empirical presentation is to exemplify analysis as discussed in the preceding analytical framework.

The research issues of this study influenced the form these case descriptions has. They were:

"1) how do firms engaged in international buyer-seller relationships make use of an appropriate governance form in international trading to safeguard their business relationships?

2) Which factors influence the choice of these governance modes in international trading? This analysis includes considering both trust and opportunism as determinants for safeguarding cooperation.

3) Does trust or opportunism or some mix of these explain how companies safeguard their transactions in their international business relationships? (Glavee-Geo and Engelseth, 2016, p. 49).

The research questions illustrate how this work is a blending of TCE and literature on exporting and international marketing. We believe that the same data can fruitfully be discussed based on the new framework, thereby refreshing our findings. The findings section discusses three of the previously studied companies (Glavee-Geo and Engelseth 2016). Each of these company-related discussions starts with a brief introduction of the individual companies, followed by a discussion of the six topics brought forth in the analytical framework. The conclusion section addresses the overall research issues.

5. Findings and discussion

5.1 *Brødrene Sperre*

"Brødrene Sperre AS is a small and medium Norwegian enterprise which was established with the main objective of exporting. Thus, more than 90% of its turnover comes from export. The company is a leading supplier of frozen pelagic fish as well as salted and dried fish. Though available records show the company was established in 1969 (see Table 2, Glavee-Geo and Engelseth 2016), the company has a rich family heritage dating back from the 1950s, as traditional processors of salted, dried and frozen white fish (mostly cod) as well as frozen pelagic fish. The company has a state-of-the-art processing facility and logistics centre exporting seafood worldwide (Sperrefish, 2015). Brødrene Sperre AS (hereafter BS) inbound

logistics consist of receiving fish from fishing boats (frozen or fresh). Pelagic is graded into different sizes, packed into cartons and frozen for storage in the cold stores. Dried salted fish is rather more process intensive. Fish received by BS is mostly frozen. It is defrosted, split in half and salted and moved to cold storage after a couple of weeks of drying" (Glavee-Geo and Engelseth 2016, p. 54).

5.1.1 Interdependency and integration

The company sells a commodity-type product, fish. Predominately market governance is applied. Some customers are more important, and these relationships are governed by contractual relationships. Sales are, to some degree based on the seasonal catch of wild fish. In cases of fresh fish distribution, the sales must be administered promptly. When fish are frozen, the durability of the product is extended, and the goods can be stored for sales. Interdependency is sequential since this is physical distribution. However, the products are also, to some degree, reciprocally interdependent in cases of fresh fish distribution since volumes can vary on a daily basis. The exporter chooses, however, to simplify these transactions by upholding a set of good customer relationships and pool through relatively simple trading the exports through this set of easily available customer relationships.

5.1.2 Framing and overflowing

The exports are framed through experiences of a relatively stable set of relationships. The exporting task is relatively simple and routine. This is in part due to that the product is a simple commodity. The overflowing, or export challenges, occur mainly in relation not to trading, but the logistics. The main challenge is in cases of fresh fish sales where variation in demand needs to be negotiated with variation in who purchases the fluctuating volume offering.

5.1.3 Exchange economy

Exchange costs are mainly related to overflowing. The more routine trading associated with framing exports as a sequentially interdependent goods flow supported by transacting in a network of pooled customers that to a limited degree need to be negotiated due to logistical variation.

5.1.4. Production economy

Export of seafood is a sequentially interdependent flow of commodity goods. The aim of any such production is an optimised smooth flow that reduces the application of inventory except in cases that goods can be speculated on the market awaiting better prices. Speculation is only feasible in the case of frozen products.

5.1.5 Sustainability perceived

Wild catch of fish is very reliant on nature in many ways. The seafood products are in Norway strictly regulated to protect the various species from overfishing. The supplies of seafood are also uncertain since this is a wild catch. In a marketing context, the main aspects of sustainability in exporting these fish products is that they are traceable. Traceability secures confidence on the market that the products are legitimate, caught in compliance with fishing quotas. Besides, traceability secures confidence in that this food product is safe for human consumption. In the marketplace, seafood is generally considered healthy for human consumption. However, there is growing awareness that seafood is susceptible to the growing

pollution of the oceans resulting in reports that seafood should at the current stage not be overeaten. The call for sustainable fishing has become ever more topical while the sustainable development goal 14 emphasise the conservation and sustainable use of the oceans, seas and marine resources.

5.1.6 Systemic features

Brødrene Sperre AS has through many years of practice built up a high competence in purchasing seafood products, producing and then distributing them. A substantial portion of their production is exported. There is no automated system that governs these exports. Coordination is mainly manual, and this highlights human resources as flexible. This is related to that this is a form of supply chain that needs to some degree be agile. On the other hand, the simplicity of the product also entails that manual coordination is possible. Therefore, overflowing is mainly handled through negotiation in reciprocally interdependent relationships that are sufficiently integrated.

5.2 VARD

"VARD is one of the major global designers and shipbuilders with headquarter located in Norway. The company designs and build specialised vessels used in the offshore oil and gas exploration, production and oil services industries. The company operates with ten strategically located shipbuilding facilities to maintain its reputation as a reliable shipbuilder with a focus on quality and trust" (Glavee-Geo and Engelseth 2016, p. 54).

5.2.1 Interdependency and integration

Shipbuilding is characterised by a high degree of modularisation and outsourcing in the industrial network. This means that ship construction is characterised by a pooling of sequentially interdependent flows to the shipyard. This network is characterised by many interdependent relationships, most of whom are regional.

5.2.2 Framing and overflowing

The actors know one-another, and integration is relatively informal in this technically quite advanced network. Trust is, therefore, one of the key features of developing interaction in this network. Overflowing is associated with breaches in the network's good atmosphere.

5.2.3 Exchange economy

All business is governed through relational contracting. The contractual exchanges are the quality measure for interaction. In this network, contracting is never completely repetitive since each ship constituted an individual project organisation. Besides, the technology used to build these ships is always developing. No two of the offshore supply vessels built are ever alike. Exchange is therefore composed of reciprocally dependent negotiations.

5.2.4. Production economy

Each ship needs to be supplied by parts, components and services form a range of different suppliers. These supplies also need to be timed since the shipbuilding process is in itself sequentially dependent. Design precedes hull construction, which precedes fitting the ship.

5.2.5 Sustainability perceived

The main perception of sustainability in the case is that of the workplace environment. The construction of a quality vessel in an efficiently timed manner is dependent on labour motivation, which again is dependent on the workplace environment. Another feature pertinent to the case is associated with the technology used to propel the ships. More environment-friendly propulsion systems are changing the design of ships. Recent innovations in the design and manufacture of hybrid vessels, autonomous vessels, and electric vessels can significantly reduce the environmental footprint of shipping and increase energy efficiency sustainably (Fjørtoft et al. 2020).

5.2.6 Systemic features

Ships may be produced anywhere in the world for use likewise anywhere. During their use, they may be positioned globally. The regional aspect of this case is related to how exporting goods of high quality is achieved through regional network interaction. The market strength is, therefore rooted in this case in a relatively local network and the quality of business relationships that is contingent on a global marketplace. The maritime cluster in the northwest Norway despite being national has strong interconnections to the global maritime industry (Grimstad et al. 2020).

5.3 Stokke

"The company has no official main office because its philosophy is to appear international with equal emphasis in its operation in all the countries in which it has a presence. The two offices in Oslo and Aalesund have the main responsibility for product development, IT, finance, logistics and supply chain management and marketing. In 1972 Stokke AS created the iconic and innovative *'TrippTrapp-chair'* for children. Since 2006 the company has focused on children's equipment, such as highchairs, strollers, and furniture for the nursery. In 2014 Stokke AS had a turnover of over one billion Norwegian Kroner. Stokke AS has a strong focus on a brand where quality and innovative thinking is essential" (Glavee-Geo and Engelseth 2016, p. 55).

5.3.1 Interdependency and integration

Although the company started as a furniture manufacturer making a wide range of furniture products based on the same technology, the company has evolved to focus on producing equipment for children using varying forms of technology. They have, therefore outsourced all production and focused on product design and marketing. Although they in Norway are a relatively large company, in a global setting they are merely a niche company. They, therefore, strive to uphold a limited number of relationships on a long-term basis with a limited number of producers, mainly in Europe, and a limited number of distributors worldwide.

5.3.2 Framing and overflowing

Stokke AS is a highly specialised firm, and this defines their market position. Given the quality of a few long-term relationships, the actors have developed over time good bonds. Being a small

company, the company still perceives threats of opportunism. The suppliers may use their designs for own purposes, and customers may choose to sell competing products.

5.3.3 Exchange economy

Exchange is characterised by long-term negotiations that set the space for interaction in the business relationships. Interaction on a daily basis is therefore routine both with suppliers and customers.

5.3.4. Production economy

Production of the company is limited to design and to manage the logistics of supply. Manufacturing is a purchased service and is a part of the exchange economy. Exporting, in this case, is relative. This is not a traditional exporting company since production is located across many places in Europe and the logistics flows of products to much the same customers, may criss-cross each other.

5.3.5 Sustainability perceived

The firm strives to retain a high-quality market position to attain premium prices for their products on the market. Herein lies an aim to produce products that are vied as safe and environmentally friendly. Their production of baby strollers is done in a factory in The Netherlands using assisted disabled labour in a government-run workplace. The production of children's chairs is located close to the wood resources.

5.3.6 Systemic features

Stokke AS production is fragmented, diversified and therefore to some degree, flexible. This flexibility means that the company may rapidly change their market positioning. Sustainable export, therefore, is rendered an aim that must continuously be monitored and developed through networked initiatives and relationships.

5. Conclusion

Analysis reveal the applicability of the developed conceptual model (see fig.1). The context is multi-layered and therefore complex. In this study, we have applied this view to approach the issue of sustainable exports. Sustainability is an issue that increases complexity as it widens the realm of which management must take into consideration upon decision-making. Sustainability from a process view regards how people frame reality to manoeuvre; in this case, do the exporting. Research grounds at an initial stage in research a theoretical view that exporting in a sustainable manner is an emergent managerial process. Furthermore, sustainable exports are characteristics of the technicalities of the logistics of export as well as the basis of the exchange. This provides a view that sustainable export is more than simply a norm to appear "green and nice" in the marketplace to enhance appeal to societal aims as well as achieving competitive advantage to the extent that customers demand sustainable production from the exporters. Exporting differs from the domestic supply in most of the cases in that an international market demands enhanced competence acquired in-house or outsourced. Furthermore, when comparing the cases, the issue of sustainable export is revealed as highly industry, and even company-specific. Attaining sustainable exports varies greatly, and much of the reasoning for this is related to, in line with Thompson (1967), industrial particularities.

This approach points to both new ways to research as well as develop export practices. The limitations of the mainly academic exercise this paper represents point to further research that may refine this approach, attempting to model the concepts and test out the relationship these have with each other. This is a rudimentary analysis. Collecting data using this same analytical framework would strengthen this study. Directions of further research can simply involve using the conceptual model to both collect data as well as analyse it. The fundamental contribution is as stated in the introduction, to view managerial activity fundamentally as an emergent process. Studies may also focus on portions of this analytical framework, such as (1) focusing on sustainable exports as framed realities on a micro-level, (2) how variation in interdependency in different companies and industries impacts on sustainable export practice and (3) the more detailed roles of the exchange and production economies in securing interaction to achieve sustainable exports.

References

- Álvarez, M.E.P., Bárcena, M.M. and González, FA (2017) 'On the sustainability of machining processes. Proposal for a unified framework through the triple bottom-line from an understanding review', *Journal of Cleaner Production*, Vol. 142 No. 4, pp. 3890-3904.
- Bai, C. and Sarkis, J. (2010) 'Integrating sustainability into supplier selection with grey system and rough set methodologies', *International Journal of Production Economics*, Vol. 124, No. 1, pp. 252-264.
- Birkin, F., Polesie, T. and Lewis, L. (2009) 'A new business model for sustainable development: an exploratory study using the theory of constraints in Nordic organisations', *Business Strategy and Environment*, Vol. 18, No. 5, pp. 277-290.
- Blackenfelt, M. (2001) 'Managing complexity by product modularisation. Doctoral thesis. Department of Machine Design', *Stockholm Sweden Royal Institute of Technology*, No. 1.
- Callon, M. (1998) 'An essay on framing and overflowing: economic externalities revisited by sociology', in M. Callon (ed.) *The Laws of the Market*, Oxford UK, Blackwell.
- Carter, C. and Rogers, D. (2008) 'A Framework of Sustainable Supply Chain Management: Moving Toward New Theory', *International Journal Physical Distribution and Logistics Management*, Vol. 38, No. 5, pp. 360-387.
- Closs, D., Jacobs, M., Swink, M., and Webb, G. (2008) 'Toward a theory of competencies for the management of product complexity: Six case studies', *Journal of Operations Management*, Vol. 26 No. 5, pp. 590-610.
- Closs, D., Speier, C., and Meacham, N. (2011) 'Sustainability to support end-to-end value chains: the role of supply chain management', *Journal of the Academy of Marketing Science*, Vol. No. 39, No. 1, pp. 101-116.
- Coase, R. (1937) 'The Nature of the Firm', *Economica*. Blackwell Publishing, Vol. 4, No. 16, pp. 386-405.
- Christopher, M. (2016) *Logistics and Supply Chain Management*, Pearson: Edinburgh Gate UK.

- Cyert, R. and March, J. (1963). *Behavioural Theory of the Firm*. Oxford: Blackwell.
- Demsetz, H. (1993) 'The theory of the firm revisited', in Williamson, O.E. and Winter, S.G. (Eds.): *The Nature of the Firm: Origins, Evolution and Development*, Oxford University, Oxford.
- Dyllick, T. and Hockerts, K. (2002). Beyond the business case for corporate sustainability. *Business Strategy and the Environment*, Vol. 11, No. 2, pp. 130-141.
- Elkington, J. (1998) 'Partnerships from cannibals with forks: The triple bottom line of 21st-century business', *Environmental Quality Management*, Vol. 8, No.1, pp. 37-51.
- Emerson, R. (1962) 'Power-dependence relations', *American Sociological Review*, Vol. 27, No. 1, pp. 31–41.
- Fiorino, D.J. (2010) 'Sustainability as a conceptual focus for public administration', *Public Administration Review*, Vol. 70, No. 1, pp. 78-88.
- Fjørtoft, B. E., Grimstad, S. M. F. and Glavee-Geo, R. (2020) 'Motivations for CSR in the Norwegian maritime cluster: stakeholder perspectives and policy implications', *Maritime Policy & Management*, Vol. 47, No. 8, pp. 1-17.
- Gadde, L.-E., Håkansson, H., Persson, G. (2010) *Supply Network Strategies*, Wiley, Chichester UK.
- Glavee-Geo, R. and Engelseth, P. (2016) 'Safeguarding International Buyer-Supplier Relationships: The Case of Exporting Firms of the Sunnmøre Region of Norway', *International Journal of Export Marketing*, Vol. 1, No. 1, pp. 48-76.
- Glavee-Geo, R., Engelseth, P. and Buvik, A. (2021) 'Power imbalance and the dark side of the captive agri-food supplier–buyer relationship', *J. Bus Ethics*, <https://doi.org/10.1007/s10551-021-04791-7>.
- Goffman, I. (1971) *Frame Analysis: an essay on the organisation of experience*, Chicago: Northeastern University Press.
- Goldbach, M., Schneidewind U. (Eds.). *Strategy and Organization in Supply Chains*: Physica Verlag, Berlin.
- Grimstad, S. M. F., Glavee-Geo, R. and Fjørtoft, B. E. (2020) 'SMEs motivations for CSR: an exploratory study', *European Business Review*. Vol. 32, No. 4, pp. 553-572.
- Håkansson, H. and Snehota, I. (1995) *Developing Relationships in Business Networks*, Routledge, London.
- Halldorsson, A., Kotzab, H., and Skjott-Larsen, T (2003) *Inter-organisational theories behind Supply Chain Management* – discussion and applications. In Seuring, S., Müller, M.,
- Halinen, A., Medlin, C.J. & Törnroos, J.-Å. (2012), 'Time and process in business network research', *Industrial Marketing Management*, Vol. 41 No. 2, pp. 215-223.
- Hammervoll, T. (2014) 'Service provision for co-creation of value: insights from exchange- and production economy perspectives', *International Journal of Physical Distribution and Logistics Management*, Vol. 44 No. ½, pp. 155–168.

- Harrison, A., Skipworth, H., Van Hoek, R. and Aitken, J. (2019) *Logistics Management and Strategy: Competing through the Supply Chain*, Harlow UK: Pearson.
- Janusz, A., Bednarek, A., Komarowski, L., Boniecki, P., Engelseth, P. (2018) 'Networked Interdependencies and Interaction in a Biotechnology Research Project', *IMP Journal*, Vol. 12, No. 3, pp. 460-482.
- Johanson, J. and Vahlne, J.-E. (1977) 'The internationalisation process of the firm: a model of knowledge development and increasing foreign market commitments', *Journal of International Business Studies*, Vol. 8, No. 1, pp. 23-32.
- Krause, D.R., Vachon, S. and Klassen, R.D. (2009) 'Special topic forum on sustainable supply chain management: introduction and reflections on the role of purchasing management', *Journal of Supply Chain Management*, Vol. 45, No. 4, pp.18-25.
- Pettigrew, A.M. (1997) 'What is processual analysis?' *Scandinavian Journal of Management*, Vol. 13 No. 4, pp. 337–348.
- Rzevski, G., and Skobelev, P. (2014) *Managing Complexity*, Southampton UK: WIT Press.
- Richardsson, B. (1972) 'The Organisation of Industry', *The Economic Journal*, Vol. 82, pp. 883-896
- Svensson, C. and Barfod, A. (2002) 'Limits and opportunities in mass customisation for "build to order" SMEs', *Computer Industry*, Vol. 49, No. 1, pp. 77–89.
- Sztomka, P. (1993) *The Sociology of Social Change*, Blackwell: Hoboken NJ.
- Thompson, J. D. (2003) [1967]. *Organisations in Action: Social Science Bases of Administrative Theory* (With a new preface by Mayer N. Zald and a new introduction by W. Richard Scott ed.). New Brunswick, New Jersey: Transaction Publishers.
- Van De Ven, AH (1992) 'Suggestions for studying strategy processes: A research note', *Strategic Management Journal*, Vol. 13, No. S1, pp. 169–188.
- Weick, K. (1976) 'Educational organisations as loosely coupled systems', *Administrative Science Quarterly*, Vol. 21, No. 1, pp. 1-19.
- Williamson, O. (1979) 'Transaction Cost Economics: the governance of contractual relations', *Journal of Law and Economics*, Vol. 22, No. 1, pp. 231-261.
- Williamson, O. (1993), *The Logic of Economic Organization*, In O. Williamson and S.G. Winter (eds.) *The Nature of the Firm. Origins, Evolution and Development*, Oxford UK, Oxford University Press.
- Zeriti, A., Robson, M. J., Spyropoulou, S. and Leonidou, C. N. (2014) 'Sustainable export marketing strategy fit and performance', *Journal of International Marketing*, Vol. 22, No. 4, pp. 44-66.