Changing value chain strategies of Danish clothing and fashion companies, 1970-2013

By Kristoffer Jensen and René Taudal Poulsen

Over the last four decades, the clothing industry has seen one of the most radical, global transformations of any industry, and Western European clothing companies have been put under strain. To the surprise of industry observers and academics, however, Denmark continues to hold expansive and profitable companies within this industry. Both the trade itself and industry observers see the present success of Danish fashion as the result of Danish pioneering in international outsourcing. The article challenges the commonly told story, arguing that the present success should be seen as the result of new companies entering the sector rather than the transformation of old ones. The article demonstrates that value chain strategies are constantly in the making and successful ones rarely remain competitive for long.

Introduction

Over the last four decades, the clothing and fashion industries have been radically transformed on a global scale. New, low-cost production centres in Eastern Europe, Latin America and South East Asia have challenged old industrial districts in Western Europe and North America. Increasingly value chains have been fragmented and the individual value-adding activities, from design of clothes over cutting and sewing to distribution and marketing, now take place in various locations and often in different continents.¹

The Danish clothing industry is an example of an old Western European industry, which has encountered increasing competition from new players in low-cost countries. It has had to reconsider business strategies accordingly. Despite the external pressures and the high Danish labour costs, several, and notably some large, fashion companies are headquartered in Denmark. During the period of intensifying global competition, the Danish fashion companies have increased their turnover and key Danish actors have recently expressed ambitions of developing Copenhagen into the world's fifth fashion cluster after Paris, London, Milan and New York.²

The development of the Danish clothing industry has surprised Danish industry observers, and academics have paid attention to the industry for the same reason. In a report from 2006, Andersen, Bøllingtoft and Christensen argued that Danish clothing companies had shifted their focus away from production towards high-value adding and knowledge intensive activities, such as design and branding. The companies had successfully created value by positioning themselves strategically in new, global production networks.³ Similarly, Danish business historians have noticed the recent transformation of the industry, even though research in the field has been sparse until recently.⁴ Christoffersen described how labour intensive textile and clothing manufacturing

Kristoffer Jensen, born 1973. PhD in history. Curator at Danish Museum of Industry and visiting scholar at University of Southern Denmark. Has primarily published on the impact of globalization on the Danish manufacturing sector.

René Taudal Poulsen, born 1976. PhD in fisheries history from the University of Southern Denmark, Esbjerg in 2005. Associate professor in shipping economics at Copenhagen Business School from 2012.

had relocated to low-cost countries and how new players had successfully transformed the industry.⁵ He said: ⁶

While domestic textile production contracted, an important group of trade companies emerged, which handled design, organized textile production in low-wage countries in South East Asia or other places and handled distribution. This group grew rapidly and expanded internationally both in terms of sales and production. Therefore an important textile sector remained in Denmark, but in a post-industrial form, where manufacturing itself was no longer a key economic activity.

In the industry's self-conception, revised value chain strategies are seen as key success factors. Many companies have prospered and expanded because they have adopted sophisticated value chain strategies, focused on high-value adding activities only and outsourcing simple production activities. In 2008 Jørgen Kjær Jacobsen, chairman of the industry association, Danish Textile and Clothing (Dansk Textil og Beklædning, DTB) emphasised that Danish textile and clothing companies were global pioneers in terms of outsourcing. When competition from low-cost countries in Southern Europe and later Eastern Europe and South East Asia had made certain production activities unviable in Denmark, Danish companies had quickly relocated such activities abroad. Hence, Danish companies had strengthened their competitive position and increased their revenue in a highly competitive, global environment.⁷

The commonly told story of a successful industrial transformation needs revision for three reasons. Firstly, it is highly retrospective. The development was far less linear or straightforward than usually told. The story only traces the development of the present-day dominating strategies and leaves out uncertainties and alternative avenues of development. It conceals the fact that Danish companies adopted a multitude of value chain strategies, some of which led numerous companies into decline. Secondly, the narrative from the industry association largely neglects the fact that growth was produced by newcomers, not existing companies. The Danish development was not so much a case of industrial transformation as a case of radical change, propelled by new entrants with new value chain strategies. Thirdly, 'Dansk Textil og Beklædning' forgets that it itself fought for various protectionist schemes for approximately two decades in order to seal Danish clothing production from international competition.

In this article we analyse the development of the Danish clothing and fashion industries after 1970, in order to evaluate the multitude of value chain strategies and try to explain why Denmark still has profitable and expanding companies in this business despite its high labour costs. We use the concept of value chain in Michael Porter's generic sense, which splits value adding into a number of sequential activities, spanning from inbound logistics over operations to marketing, sales and services. We define a value chain strategy as top manager decisions on the company's position in the value system and it involves two main issues: One concerns which activities to engage in and which to outsource (make or buy-decisions). The other concerns locational issues (where the various activities should be located and how the individual activities should be controlled and integrated into a coherent value chain). We divide the value chain into up-, mid- and downstream activities. Upstream, design and product development take place. Midstream, the manufacturing processes such as cutting and sewing are performed. Finally, marketing, branding and distribution are referred to as downstream activities.

International framework

By 1970, the clothing industry had reached a mature development stage in which well-proven production technologies changed only slowly and where a cost focus was highly important to corporate competitiveness. Midstream activities remained labour intensive and the work force generally required only short training. Industrial latecomers had opportunities to enter the business and could potentially gain a competitive advantage based on low labour costs. In 2007 Dicken stated:¹⁰

The manufacture of clothing is an ideal candidate for international subcontracting. It is highly labour intensive; uses low-skill or easily trained labour; and the process can be fragmented and geographically separated, with design and often cutting being performed in one location (usually a developed country) and sewing and garments assembly in another location (usually a developing country).

Several countries from Southern Europe, Latin America and South East Asia have entered the global clothing markets after 1970 and Eastern Europe joined after 1990. The new exporters generally derived competitiveness from a large, well-disciplined and low-cost labour force. The process was also facilitated by increasingly fast and reliable container transport. Moreover, new information technologies have gradually enabled cheap and fast information exchange in dispersed networks. Lead times from design to finished products have been shortened and high fashion firms can now quickly respond to constantly changing consumer requirements. It is now feasible to exchange drawings in true colours electronically, a precondition for spatial separation of design and production. Similarly, the new electronic tracking of stocks in widespread systems has facilitated this process. 12

Political power relations and trade politics have also influenced the development of the clothing and fashion industry. Already in the 1960s, the industry became a battleground for international trade policy. Strong interest groups in the established production centres in Western and Southern Europe and North America battled to preserve the status quo, arguing that the old centres needed protection and time to transform. Their advocacy resulted in an international trade regime with various restrictions, and protectionism became widespread after the 1960s. Europeans and North Americans used import quotas, tariffs and various labelling schemes for clothes to protect their domestic industries. The so-called Multi Fibre Agreement (MFA) epitomised this development. Implemented in 1974 with the long-term goal of gradually liberalising the textile and apparel trade, the MFA sat the boundaries for global textile and clothing trade and allowed various trade barriers during an interim period, in order to give Western European and US players time to upgrade and prepare for intensified competition. The MFA was subsequently renegotiated several times and the interim period lasted for three decades.

Danish protectionism

Trade policy also became a contested issue in Denmark, a fact which is often forgotten by present-day industry observers. In the 1970s and 1980s, the Clothing Producer Industry Association (Beklædningsindustriens Sammenslutning, BS) and the Textile Manufacturers' Association (Textilfabrikantforeningen, TEX) fought a coordinated battle for protectionism. They argued that Danish companies, like Western European colleagues, needed time to prepare for global competition, demanding protection in an interim period. In 1973, BS and TEX supported Danish membership of the EEC, because they expected a more protectionist stand from European authorities than from Danish authorities. The two associations were deeply dissatisfied with the attitude of the Danish government because Denmark had given developing countries favourable

access to its market through a unilateral lowering of tariffs in 1972. BS and TEX believed that the EEC would embark on a more protectionist course. ¹⁶

Following Danish EEC membership in 1973, negotiations regarding the actual import quotas stipulated in the MFA became part of joint European negotiations. Initially, BS and TEX expected to start a joint lobbying effort with the trade associations of the other member states, but they soon realised that their interests did not always converge. ¹⁷ Moreover, protectionist lobbying damaged the industry's reputation in Denmark: 'There was some discussion as to whether the claim for protectionism should be continued, since that course leads to considerable bad will unfavourable to the clothing industry.' ¹⁸ As part of Danish foreign policy, Denmark paid development aid to several developing countries in order to help them industrialize. The Danish policy conflicted with the trade association's arguments for import limitations for developing countries. ¹⁹

BS' efforts to limit Danish clothing imports also caused a clash within the organization itself, because a large share of these imports derived from BS' own members. ²⁰ In the 1970s, many clothing manufacturers realised the advantages of supplementing Danish production with low cost manufacturing in Southern Europe. The role of the association in regard to members with import problems was discussed. The chairman of the board of BS argued for association assistance to members with import problems, but the majority of members turned his suggestion down. In 1974 it was agreed that: 'BS neither can nor shall prevent the individual member from importing finished articles, but it cannot be considered BS's duty to help them in that respect'. ²¹ Later in the 1970s, the issue was raised again, but it was agreed to maintain the industry policy from 1974. ²²

Discussions on protectionism continued into the 1980s. A report by the Danish Ministry of Industry from 1985 can serve as an example of the prevailing Danish discussions at the time and illustrates how clothing manufacturers were able to set a national, political agenda. The report analysed 'the competitive position of the Danish textile and clothing industry, including the need for protection' and 'identified specific Danish problems, interests and priorities for the upcoming international negotiations concerning the MFA...' The report examined the potential effects of trade liberalisations on Danish industry and concluded that the Danish companies generally performed better than competitors in other Western European countries in terms of employment level, productivity and exports. Some products in the 'sensitive part of the industry' were at danger in case of a liberalisation, while others would not experience any great difference under a liberal trade regime. Most notably, clothing production would likely suffer in case of an intensified competition from low-cost countries in developing countries. The authors of the report, however, were unable to forecast changes in employment in case of liberalisation. The authors of the report, however,

Danish free trade

In 1987, BS reformulated its policy on international clothing trade: "... we all have something to gain from allowing our members to supplement their own production with products made by foreign subcontractors." A few years later, BS and TEX made a common statement, arguing that all markets should be opened through gradual trade liberalisation. Danish politicians should work internationally to stop production subsidies. To Growing Danish clothing exports in the latter half of the 1980s had demonstrated the potential advantages from international integration and explain the new association policy, which also became more aligned with Danish politicians' anti-protectionist stands.

The opening up of Eastern Europe at the end of the Cold War from 1990 strengthened this tendency further. Generally, production in Eastern Europe suffered from low productivity, but several countries, including Poland, the Baltics and Rumania, had a long engagement in the clothing industry. Low labour costs and the proximity to the large Western European consumer markets made Eastern European countries attractive sites for low-tech clothing production. Moreover,

Eastern Europe was not part of the MFA, and thus not trade restricted. Productivity in Eastern Europe soon improved through inflow of western know-how.²⁹ This dramatically changed the competitive environment for the Danish textile and clothing sector and Danish clothing imports from Eastern Europe rose rapidly after 1990.

In 1991, the Danish textile and clothing industry association made a cost-benefit analysis of production in Eastern Europe for its member companies, concluding that in many cases mass production for sewing was cheaper in Eastern Europe than in Denmark. Small series of clothes, on the other hand, could be sewed more profitably at home. Hence: "...production at home and abroad can supplement each other in a division of labour, where small series, for instance test- and repeat orders are sewed here [in Denmark], and the large series are sewed abroad." 30

For companies, unfamiliar with production in Eastern Europe, there were many challenges to overcome and the Danish industry association soon produced a manual with recommendations for companies, wishing to pursue new value chain strategies.³¹

The opening of Eastern Europe changed the structure and the fundamental conditions of the Danish industry, and many players in the industry gradually modified their position accordingly, shifting towards a more liberal perspective. Still in the 1990s, the pace of liberalisation was contested and several Danish manufacturing companies continued to prefer a very long period of transition to free markets. Several developed countries experienced a similar gap between clothing importers on the one side and manufacturers on the other. For instance in the US, a conflict between free traders and protagonists of protectionism also developed into a fierce battle over trade regimes during this period, so Denmark was not unique in this regard.

For many years, the textile and clothing trade were kept out of negotiations in the General Agreement on Tariffs and Trade (GATT) and later the World Trade Organization (WTO), but after 1994 a gradual integration of clothing into GATT/WTO was made. Subsequently, international trade quotas were gradually removed. From the late 1990s, China experienced rapid growth and industrialisation and gained strength in clothing manufacturing. Some Western countries still opted for protectionism in the 2000s, but the Danish trade association argued that import restrictions hampered Danish business. From the 1990s, the most successful Danish companies in the industry preferred free trade and used foreign sourcing extensively. The success of these companies tipped the balance in favour of free trade. The protectionist strategy had failed, demonstrated by the fact that the adaptation, which was anticipated by US and Western European protagonists of protectionism, had failed to materialise: The majority of the old manufacturing companies established before 1970, especially those in the clothing industry, proved unable to adjust to the new global competition and gradually disappeared. It took more than three decades to change the trade system, and clearly protectionism postponed the transformation. It could not, however, save old, entrenched industrial structures in Denmark or elsewhere in the developed economies.

Fully-fledge value chain strategy

In Denmark protectionist arguments were often combined with a fully-fledged value chain strategy, which aimed at maintaining clothing production in Denmark. In 1970, Denmark had several hundred textile and clothing manufacturers with a single production site, holding up-, mid- and downstream activities in-house. Many of these companies continued to pursue this strategy after 1970, owning and retaining activities in Denmark, and changing little in terms of value chain configuration. The fully-fledged value chain strategy is often forgotten today, for the simple reason that it was generally a losing one. In the 1990s large numbers of small and medium-sized companies exited the industry, and many of them had pursued exactly this strategy and had thus failed to lower costs to competitive levels.³⁷ As often winners write history, and the successful fast-

fashion companies with radically different value chain strategies have tended to focus mainly on their own story. Hence, the losers in the transformation process are often forgotten.

Tage Vanggaards Kjolefabrik exemplifies the fully-fledged value chain strategy. Established in 1933 as a traditional production centred business with one Danish production site, the company expanded considerably in the 1950s and 1960s. Tage Vanggaard, the founder, focused on product design and successfully applied efficient marketing, when selling dresses to Danish and other Scandinavian consumers. At the peak in 1969, the company employed more than 600 people, but decline set in from the 1970s. Vanggard could neither reformulate the company strategy nor transfer the responsibility of the company to a younger, professional management. Instead his priority was control of the company. After many years with disappointing results, the company was finally closed down in 1991. The case demonstrates how insufficient incremental strategic shifts were during a period of dramatic changes in clothing markets. Family ownership set up strong restrictions on the company's room to manoeuvre and seen in retrospect Vanggard's stable value chain strategy represented a passive and inefficient response to the challenges of the time.³⁸

The case of Vanggaard was not unique. On the contrary, there are numerous examples of Danish clothing manufacturers, which failed to adapt to the new, global competitive setting. Between 1972 and 1988 728 companies within textiles and clothing were closed down, and in 1998 Nielsen and Pedersen estimated that approximately 300 companies had left the business between 1987 and 1997, mainly within clothing manufacturing, which thus almost disappeared as a Danish manufacturing industry. Danish labour costs exceeded international standards. As global trade was gradually liberalised, the salaries paid in Danish manufacturing proved too high to sustain a profitable, low-tech business in Denmark (Table 1). The fully-fledged value chain strategy failed to address the challenges of the industry and the global transformation of value chains. From a present day perspective, it is clear that fully-fledged value chain strategy was a re-active one and it may be difficult for present day observers to understand why some company managers and owners choose to rely on it for so long. When analysing retrospectively, it is tempting to make such negative judgments of past strategies. But it is important to remember that the defensive strategy was often combined with more offensive actions to reduce production costs through automation.

TABLE 1. Hourly labour costs and productivity index in the clothing industry, by country, 1998.⁴⁰

Country	Hourly wage in DKK	Wage index, DK = 100	Productivity index, DK = 100
China	1,37	2	70
Latvia	2,75	3	75
Lithuania	2,85	3	75
Morocco	5,58	7	70
Turkey	8,44	10	85
Poland	9,82	12	80
Portugal	16,30	20	85
Denmark	81,68	100	100

Automation

The idea of competing through automation was widely used by Danish clothing manufacturers both before and after 1970. The aim was to neutralise the effect of high Danish wages, but clothing manufacturers soon faced the problem that the handling of cloth, a flexible, three-dimensional material, was difficult to automate. In the 1980s the trade associations became increasingly aware of the trade-off between flexibility and automation, and they changed recommendations to their members accordingly. The focus on design and selling was to be downplayed, while technological upgrading projects should be given full attention. In 1983, the Association of Danish Employers (Dansk Arbejdsgiverforening) initiated a project concerning strategic development in Danish manufacturing companies, named Change from Within (Forandring indefra), and the textile and clothing associations participated and disseminated new ideas from the project to their members. As one of the association's reports said:

Change from within challenges the sales centered strategy and attempts to bring production in focus. Changes in production processes must be planned well in advance, and thus production processes should lead the process of change.

This perspective was highly centred on production, and represented an engineer's view on business development. According to this view, companies should change continuously and production itself should initiate such changes.

The case of Brandtex illustrates the automation strategies' advantages and limitations. It was the most extreme Danish case of automation in clothing manufacturing, and it inspired many Danish colleagues in the 1970s and 1980s. During this period, Brandtex become the largest player in the Danish clothing industry, employing more than 1,000 people. Established in 1935, the company concentrated production on slacks for mature women from the 1970s. Mature women were not as heavily influenced by fashion trends as other segments, a fact which supported the company's automation strategy. Brandtex invested heavily in production technology and made large-scale rationalisations, notably in cutting and warehousing. Large-scale production was also propelled by an increase in foreign sales. Max Petersen, CEO of Brandtex, saw low design variability of its product range as a virtue: 46

Designers may be dispensed with if one is good enough. If one is automated enough. [... Designers] want to make something new all the time, or they wouldn't be designers, and if one makes new things all the time one can't mass-produce. For instance, we have invested 225,000 DKK in a pocket machine, and it can only make one shape of pocket, so it's no use if your designer invents new pocket shapes all the time.

Brandtex experienced frequent and exclusively positive media coverage in the 1970s and the 1980s, and was perceived as a Danish bulwark against cheap and implicitly poor foreign products. As Petersen expressed it in a newspaper interview: "They are welcome to come on with all their underpaid labour and cheap goods. We can now produce a pair of slacks in nine minutes, and the others cannot match that."

Nevertheless, after the middle of the 1980s the Brandtex management gradually lost faith in the automation strategy. Consumers increased their demands for details in clothing and greater collection variety. Hence clothing companies could no longer dispense with designers. The demand for more design and variation increased sewing time, and thus increased the pressure for lower production costs and a relocation of mid-stream activities to low-cost countries. 48

In our firm we have the maxim that items of clothing with a production time of more than 10 minutes need to be made abroad in order to be profitable. Other products we may advantageously make at home. The fact is, however, that we are forced to stake increasingly on design. That demands a longer production process.

The external pressure led Brandtex to reformulate its value chain strategy, basing it on offshoring after 1990.

Offshoring

Following the opening up of Eastern Europe, Danish clothing companies had to face new competition, but also gained new, low cost production opportunities. Brandtex was one example out of a large group of production-oriented clothing companies that started offshoring to Poland to reduce costs in the early 1990s. Manageable geographical distances from the Danish head offices to Poland enabled a close connection between management and production. At a strategy seminar in 1994, the Brandtex management concluded: "The products should move to more fashion orientation [...] in order to meet the consumers' needs." ⁴⁹ In order to reduce overheads the company had to move mid-stream production activities to the company's own, new factories abroad. Maintaining production know-how was seen as decisive: 'Keep production and technology know-how for the main products within the Brandtex organisation - competitive advantage'. ⁵⁰

The skirt producer Lindon is another case on Danish offshoring to Poland in the 1990s. Like Brandtex, Lindon had hoped for long to maintain production in Denmark, but finally concluded that a dramatic reduction of costs was a prerequisite for survival in the 1990s. Setting up a factory in a neighbouring country seemed like the best alternative to Danish manufacturing. Similar to Brandtex, Lindon maintained design, cutting, quality control, packaging, marketing and distribution in Denmark while moving sewing to a Polish site, which was controlled by onsite Danish management. ⁵¹

In the early 1990s both productivity and production quality lagged far behind on the Polish clothing production sites due to outworn machinery and untrained labour, but technology transfer from companies like Brandtex and Lindon soon followed and narrowed the knowledge gap between Denmark and Eastern Europe. The development increased the incentives for Danish companies to produce in Eastern Europe, but wage levels grew rapidly in Eastern Europe in the same years. ⁵² The increasing Polish wage levels combined with reduced global trade barriers meant that Poland often only became a stepping-stone for Danish clothing manufacturers on their way to cheaper production centres in Asia and the offshoring value chain strategy proved short-lived.

Backward integration in retailing

Even though Brandtex, Lindon and some other traditional clothing manufacturers demonstrated a capability for strategic changes, the most dynamic players in Denmark, who came to define the successful value chain strategy of the 2000s, came from elsewhere. Many of the new players originated from the 1960s and focused on fashion design and retailing, i.e. up- and downstream activities, while leaving midstream production activities to Danish and foreign subcontractors. Generally the archives of these companies have not been open to historical researchers, but it is possible to analyse their development based on annual reports, industry journals and interview-based case-studies from business economists.

In official statistics, the new players were defined as retailers, and therefore excluded from the traditional clothing industry category. Bestseller is the most expansive example of this group. It owns brands such as Jack & Jones and Vero Moda, and has an annual turnover surpassing 18 billion DKK and several thousand retail shops, notably also in China. Founded in 1975, Bestseller started as a single shop, and grew fast from the early 1990s with new brand stores in Denmark and abroad,

partly with local franchises. Bestseller utilised feed-backs from its retail chain to cater for consumers' design requirements. Traditional clothing manufacturers could not get the same wealth of information from selling their products through independent retailers, which often represented numerous brands. Tight market connections and deep market insights proved decisive for the Danish fashion companies following the late 1980s, when consumer culture started to shift more quickly. The retailers contributed to this development by shaping consumer culture. Fashion innovation researcher Yen Tran described the role of present day fashion companies:

In the development of stylistic innovation, connection to the users appears to be a sophisticated process involving observation, evaluation, intuition, subjective decision, and the creative combination of diverse and partially contradictory trends. In this process however, the final responsibility of offering fashion statements rests with the fashion firms and not with consumers.⁵⁷

Successful retailers do not only owe their growth to efficient market insights, they influence the market itself. Hence, retailers have improved their bargaining position relative to traditional manufacturers.

IC Companys, the second largest enterprise within Danish fashion today, like Bestseller, never possessed midstream activities. The company management states that their core competences are within design and trade and the company possess 'the ability to develop and expand international brands'. ⁵⁸ IC Companys grew through mergers and acquisitions. ⁵⁹ The company has built a multi-brand platform with many functions, such as sourcing, logistics, HR and finances, common for all brands. The brands of course maintain a high diversity, but the common platform produces considerable economies of scale. ⁶⁰ The company uses the concept 'value chain optimisation' to describe its efforts to reduce production costs. ⁶¹ Interestingly, clothing labels from Peak Performance, an IC Companys brand, currently says 'Designed in....' rather than 'Made in...'. The emphasis on design, not production site, demonstrates that the design is valued higher than production, and design is used increasingly in the marketing of clothes.

The existence and increasing success of companies like Bestseller and IC Companys, that develop their own designs and produce within tight networks with subcontractors mainly in South East Asia, challenge the traditional picture of Danish clothing manufacturing. According to the Danish Statistical Agency, Bestseller and IC Companys belong to the service sector, not manufacturing, but the two companies do not work as traditional wholesalers, which buy finished products for distribution through retail channels. On the contrary, they develop new products, which they bring to the market through a very tight network of foreign subcontractors. This development has also occurred in many other Western countries, and Lane and Probert have also emphasised this entanglement between manufacturing and retailing: ⁶²

Due to the widespread abandonment of the manufacturing function by clothing firms and the adoption of some direct sourcing by most retailers, the boundaries between types of firms have become increasingly blurred and difficult to draw.

Lane and Probert nevertheless argued that the new type of firms "... still execute certain essential pre- and post-production functions and, in many cases, continue to command manufacturing skills and knowledge". ⁶³ In the Danish case, the transformation, described by Lane and Probert, has clearly also taken place, and it was triggered by backward integrating retailers, most notably the Bestseller group. Since the 1990s, Bestseller has inspired many of the remaining clothing manufacturers in Denmark to outsource mid-stream activities and establish own retail chains instead of owning all activities in the value chain.

Outsourcing

The gradual movement from offshoring to outsourcing, which occurred in Denmark in the 1990s. was analysed by Nielsen and Pedersen in a study for DTB. Writing in 1998, when outsourcing was reshaping the Danish clothing and fashion industries, the two authors identified three value chain strategies or business models as they preferred to call them. The three models were distinguished by ownership and geography. Nielsen and Pedersen labelled the three models Outward Processing Traffic (OPT), Cut, Make and Trim (CMT) and Sourcing from Own Design (SOD) and each model represented a stage in the outsourcing process (See Table 2). Similar labels are used in the international literature on the industry. ⁶⁴ As outsourcing progressed, Danish companies moved from OPT via CMT to the SOD model and value chain strategies increasingly departed from the traditional in-house production model. 65 In the OPT model only the most labour intensive activities, sewing and packaging, were outsourced, whereas other activities took place in Denmark. According Nielsen and Pedersen, CMT represented 'a step up in the outsourcing process'. 66 Further activities were outsourced abroad, including cutting and quality control. Procurement was maintained in Denmark for reasons of quality concern, but otherwise manual processes were outsourced to foreign companies. Travelling controllers ensured quality control in the foreign suppliers' sites. SOD was the most radical model, in which only design, logistics and distribution, which represent the most knowledge-intensive activities, remained in Denmark.

TABLE 2. Value chain strategies. 67

Activity	OPT	CMT	SOD
	Outward Processing	Cut, Make and Trim	Sourcing from own
	Traffic (1985-90)	(1990-95)	Design (1995-)
Design	Denmark	Denmark	Denmark
Logistics	Denmark	Outsourcing, Denmark	Outsourcing, Denmark
Procurement	Denmark	Outsourcing, Denmark	Outsourcing, Eastern
			Europe
Processing	Outsourcing, Denmark	Outsourcing, Southern	Outsourcing, Eastern
		Europe	Europe
Cutting	Outsourcing, Denmark	Outsourcing, Eastern	Outsourcing, Asia
		Europe	
Sewing	Outsourcing, Southern	Outsourcing, Eastern	Outsourcing, Asia
	Europe	Europe	
Packaging	Outsourcing, Southern	Outsourcing, Eastern	Outsourcing, Asia
	Europe	Europe	
Quality control	Denmark	Outsourcing, Southern	Outsourcing, Asia
		Europe	
Branding	Denmark	Denmark	Denmark

The core competencies of the SOD-model companies were not within production as such. In fact, many such companies valued design and marketing higher. Some traditional manufacturing companies, which originally held the main value chain activities in-house, had succeeded in transforming into SOD model companies by emulating innovators such as Bestseller. This transformation was not an easy one, and the cases of Brandtex and Lindon can shed some light on this process. ⁶⁸

In the early 1990s Brandtex and Lindon had both offshored mid-stream activities to Eastern Europe, but managers in the two companies soon decided to abandon their own foreign production

sites. From the late 1990s, they started to outsource cutting, sewing and trimming. At the same time, Brandtex and Lindon faced distribution problems. They sold their collections through independent retailers, which had a variety of brands in the same shop, but competition from new brand stores set up by companies such as Bestseller, IC Companys and Swedish H&M intensified. In response, both Brandtex and Lindon started to offer shop-in-shop solutions to their independent retailers. In this way, retailers saved cost for decoration, which were partly transferred to the brand owners, and brand owners could standardise their marketing throughout the retail network. The shop-in-shop solutions required fairly broad collections, and Brandtex and Lindon had to expand in this regard. As expressed on a board meeting at Lindon: "We should expand and raise turnover in our existing retail network by broadening our collections and adding more themes to our collections [...] We are seen upon as a supplier of niche products." A growing need for fast fashion also laid pressure on the company:

We should avoid falling behind in terms of fast deliveries. Even though this has a number of drawbacks, Lindon has to act quickly. Otherwise retailers will go elsewhere to buy products. [...] Retailers are forced by consumers to be more active – i.e. constantly provide new products.

The pressure to broaden collections and increase the number of shifts between collections caused Brandtex and Lindon to abandon their own production sites.⁷¹

Environmental and industrial relation issues also made it difficult to maintain control of production sites. When Lindon offshored production to Poland it aimed at low Polish wages. But, it was a direct order from the company board to the daily management that: 'The working environment in Poland should equal the one in Frederiks [the Danish factory]'. This ideal was increasingly difficult to maintain, when competing with companies using an outsourcing business model: Large brands tend to move production to low-cost areas without restrictions on their own production capabilities and disregarding labor and working conditions. 73

On a more general basis, researchers Lane and Probert have confirmed that Western firms, in spite of CSR-slogans, indirectly use outsourcing to lay pressure on environmental protection and labour rights:⁷⁴

The garment industry not only sources from countries with the lowest wages but further pushes down costs by utilizing workers with the lowest bargaining power – women and (im)migrants and other unregistered employees.

The increasing distance between Western fashion company headquarters and midstream activities often reduces or blurs problems with midstream labour conditions. Production costs are lowered, but in many cases, labour working conditions are also lower than conditions in Western countries and this fact explains the pressures experienced by Danish companies such as Lindon.

In search for flexibility and reduced production costs, Lindon and Brandtex started outsourcing around 2000. But especially Lindon soon faced the problem that not much was left of the company when mid-stream activities were abandoned. Brandtex, in an effort to emulate Bestseller, tried to replace the lost part of the value chain by the setting up of a large-scale retail chain, but plans were quickly abandoned when the management had to realise it did not possess the necessary retailing competences. Brandtex, renamed BTX-Group in 2005, remains a player in the Danish fashion industry. It owes its continued existence not alone to the Brandtex brand itself, but to the acquisition and development of new brands, which were never manufactured in Denmark. ⁷⁵

Limits to outsourcing

Growing fashion exports have fuelled Danish optimism in the last two decades, and a 2005 study from Copenhagen Business School stated that 'the future seems promising'. It concluded that:⁷⁶

Several key representatives of the fashion industry predict that Danish companies will have a strong competitive position under the new market conditions, as the outsourcing strategy is well established in the Danish clothing industry and most companies have managed to strike a unique balance between price, design and branding. ... One of the reasons for the success of Danish clothing abroad is the reputation Danish fashion designers have for representing unique styles and design.

Some observers were sceptical about these ambitions, arguing that Copenhagen did not have sufficient scale to compete with foreign fashion centres. Subsequent developments have confirmed that optimism ran a little high in the middle of the 2000s. The dreams about developing Copenhagen into a global fashion centre did not materialise, and many small fashion businesses had hard times during the 2008-09 financial crisis. In short, Danish fashion has generally remained expansive, but on a more modest scale than anticipated in the middle of the 2000s.

Industry observers have also recently started to question the outsourced value chain strategy. Several academics have argued that outsourcing may cause unanticipated problems to the outsourcing company, and ultimately an erosion of important technical know-how. ⁷⁹ On a general level, Bettis, Bradley and Hamel have focused on such unintended consequences, arguing that non-strategic outsourcing could cause a long-term erosion of outsourcing companies' core-competencies. ⁸⁰ Companies' cost cuttings through outsourcing are often built on the misconception that design and manufacturing could be easily separated. In many cases suppliers have made encroachments on the outsourcing company's core competencies and outsourcing companies have often proved unable to hold market knowledge away from suppliers. In the context of the clothing and fashion industries, observers have argued similarly. Said Lane and Probert: ⁸¹

Outsourcing of production [...] has been shown to be a progressive process, and more and more steps in the value chain have become externalized. While this may enhance the share of value captured by firms and their investors in the short term firms lose their industrial experience and expertise. This eventually undermines their competitive advantage.

In Denmark industry players, including DTB, have also voiced some concern in this regard. In 2000, DTB saw outsourcing as prerequisite for survival in highly competitive global markets, but advised companies to keep a certain Danish basis production in order to maintain long-term competitiveness. The company Kello can serve as an example of this perspective. Established in 1983, Kello designed, produced and sold high-quality clothing for women. It started as a traditional clothing company with in-house, Danish production, but embarked on the outsourcing avenue in the 1990s. First stop was Poland, and then followed the Ukraine and the Baltics. Only five seamstresses, who produced proto-types for the company, remained in Denmark. In a 2004 research interview, Kello managers stated an explicit concern about the unintended consequences of outsourcing. Outsourcing of production activities to foreign partners could potentially cause the Danish companies to lose production know-how, which was crucial when negotiating prices and delivery terms with suppliers. Future generations with little personal experience in clothing production could encounter problems gaining access to such know-how in Denmark. Sa

An international trend, where companies prefer production near consumers to low-cost country outsourcing, has also recently emerged. A 2011 study made by Cachon and Swinney demonstrated that companies with a 'fast fashion approach' tend to generate higher profits than competing clothing companies. ⁸⁴ Targeting demanding customers, a fast fashion approach combines

capabilities for trendy designs with quick responses and short lead-times. The approach often has high costs, because expensive labour, located close to the market, is used extensively instead of low-cost outsourced production. These companies, however, avoid end-of-season clearance sales, which are expensive, and they are excellent at matching inventory with demand. Furthermore, they produce trendy clothing, which is appreciated by demanding customers. Quick responses and short lead times allow companies to follow customer design demands more closely. Moreover, production close to consumers may also facilitate corporate social responsibility, which can prove important if future costumers will start to question the social problems related to outsourcing.

In Denmark some evidence also suggests that value chain strategies may be changing again. Bestseller, the leading Danish example on outsourcing, recently bought shares in Bombay Rayon, an Indian clothing manufacturer and retailer. Bestseller described this as a portfolio investment, but industry observers also emphasised the advantages of gaining a more direct control of a subcontractor: *Large players have easier access to a resource which is sometimes scarce, i.e.* production capacity with suppliers. With a shareholding in supplier companies, they can more easily control the supply chain. 85

The issue of value chain control also reached the public's attention in the spring of 2013, when a Bangladesh building holding clothing manufacturing suddenly collapsed, causing the dead of more than 1,100 workers. The disaster demonstrated poor labour working conditions in clothing production in developing economies. It reached both international and Danish news, and the public started to ask whether the labour working conditions clashed with corporate social responsibility (CSR) of the fast fashion companies. ⁸⁶ The full effects of this debate on the fast fashion companies remains to be seen, but it is evident that CSR issues and consumer's concerns with labour conditions may hold a potential to affect value chain strategies.

Conclusion

The clothing industry is often seen as a pioneer in the globalisation literature. Dickerson put this eloquently: 87

For many years, the textile and clothing sectors have been on the forefront of globalization. No industries are more broadly dispersed around the world than textile and clothing. Just as the textile industry led the industrial revolution, textile and clothing production has been among the first sectors to be part of today's global shifts in production and trade.

Historically, the textile and clothing industry transformed earlier than other industries, and over the last four decades it saw one of the most radical, global transformations of any industry. Global shifts caused a squeeze on traditional production centres and old business strategies. In a statistical sense, large parts of the Danish industry no longer belong to the manufacturing sector. Instead the label 'fashion industry' is now commonly used.

Since the 1970s, and due to technological changes and gradual trade liberalisations, the Danish textile and clothing industry has been forced to compete head-on with low-wage countries. The industry has followed several strategies in an attempt to address the challenge. For many companies a first response was to argue for protectionism or at least a slow-down in the pace of trade liberalisations. Today this is often forgotten, but the quest for protectionism followed by the industry's trade associations in the 1970s and 1980s was indeed supported by the majority of its members.

For many companies, the protectionist course was combined with an internally focused strategy, best labelled fully-fledged value chain strategy. Companies in this group saw no need for change or proved unable to adjust despite realising the need for change. The vast majority of these mainly privately owned companies disappeared in the 1980s and 1990s. The lacking ability of these

firms to adapt to the new competitive setting could lead to the conclusion that family business within the textile and clothing industry holds no future, but that would be misleading. At the time of writing, family businesses remain widespread and some of the most profitable companies in the trade, notably Bestseller, are family controlled.

The fully-fledged value chain strategy was mainly defensive. Automation, combined with lobbyism, represented a more offensive response to international competition. In the clothing industry automation was also used in the 1970s and 1980s, but already in the 1990s this strategy proved difficult to combine with product flexibility as demanded by customers, who increasingly required fashion.

In the 1990s the inherent problems in the automation strategy led clothing manufacturers into offshoring. Companies hoped to benefit from lower labour costs in Eastern Europe. Manufacturing skills were seen as pivotal and foreign production in factories was controlled from Danish head offices. Leadership in manufacturing was seen as a source of competitive advantage within these companies. However, in many cases offshoring only proved to be a stepping-stone on the way to outsourcing. Despite low labour costs in Eastern Europe, Danish firms could not escape the fundamental dilemma between automation and flexibility. The need for flexibility was constantly growing as consumers demanded more details and more rapid shifts between collections. Though not thoroughly researched, it would be fair to assume that the changed signals from the consumers in the 1990s were at least partly due to the influence of successful retailers. Bestseller, IC Companys and multinationals such as H&M started to influence consumer habits.

Outsourced midstream activities and a strong focus on design, distribution, branding, and selling are the characteristics of today's most expansive Danish fashion firms. According to the commonly told narrative, this business model came from the clothing industry itself, but this story neglects the highly important and dynamic role of retailers. The transformation of the Danish clothing industry resulted from pressure from retailers, who integrated backwards into design and distribution. To survive, manufacturers had to copy the success of retailers. Retailers have a direct connection to consumers enabling them to react more rapidly to shifts in consumer culture than traditional clothing manufacturers.

Outsourcing meant giving up midstream activities in the value chain, and allowed companies to focus stronger on design and distribution. Many of the traditional manufacturers had to realise, though, that substituting the lost parts of the value chain with new and more profitable parts was a difficult task and often they lacked competences within design and distribution. The long-term consequences of the present day dominating outsourcing strategy remains to be seen, but many researchers have stressed that problems can arise from the separation of design and manufacturing. Predicting future directions of the clothing industry is difficult, but the Danish case can serve as a reminder that new value chain strategies are constantly in the making and successful ones rarely remain competitive for long.

References

Andersen, P.H., A. Bøllingtoft, and P.R. Christensen. *Erhvervsklynger under pres: Globaliseringens indflydelse på dynamikken i udvalgte danske erhvervsklynger.* Aarhus: Handelshøjskolen i Århus, 2006.

Ballund, B. 'Bare fremad på catwalken'. *Børsen*, February 7, 2008.

Bartlett, C.A., S. Ghoshal, and J. Birkinshaw. *Transnational Management*. Boston: McGraw Hill, fifth edition, 2008.

Barthélemy, J. 'The seven deadly sins of outsourcing'. *Academy of Management Executive*, 17 (32) (2003): 87-98.

Bestseller. Key figures 2010, www.bestseller.com, Accessed on 2013, July 12.

Bettis, R.A., S.P. Bradley, and G. Hamel. 'Outsourcing and Industrial Decline'. *Academy of Management Executive*, 6 (1) (1992): 7-22.

Brambilla, I., A.K. Khandelwal, and P.K. Schott. 'China's Experience under the Multi-Fiber Arrangement (MFA) and the Agreement on Textiles and Clothing (ATC)'. In *China's Growing Role in World Trade*, eds. R.C. Feenstra and S.-J. Wei, 345-87. Cambridge, Mass.: National Bureau of Economic Research, 2010.

Brenton, P., A.M. Pinna, and M. Vancauteren. 'Adjustment to globalisation: A study of the footwear industry in Europe'. In *Globalisation and the Labour Market: Trade, Technology and Less-skilled Workers in Europe and the United States*, eds. R. Anderton, P. Brenton and J. Whalley, 72-95. London: Routledge.

Broeze, F. *The Globalization of the Oceans: Containerisation from the 1950s to the present.* St. John's, Newfoundland: International Maritime Economic History Association, 2002.

Beklædningsindustriens Sammenslutning. *Annual report 1989/90*, Beklædningsindustriens Sammenslutning.

Børsen. 'Bestseller tættere på Indien'. Børsen, November 15, 2011.

Cachon, G.P., and R. Swinney. 'The Value of Fast Fashion: Quick Response, Enhanced Design, and Strategic Consumer Behavior'. *Management Science*, 57 (4) (2011): 778-95.

Cline, W.R. *The Future of World Trade in Textiles and Apparel*. Washington D.C: Institute for International Economics, 1990.

Christoffersen, H. *Danmarks økonomiske historie efter 1960*. Aarhus: Systime, 1999. Cleanclothes. http://www.cleanclothes.dk/ accessed on November 15, 2013.

Coe, N.M., P. Dicken, and M. Hess. 'Global production networks: realizing the potential'. *Journal of Economic Geography*, 8 (2008): 271–95.

Contractor, F.J., V. Kumar, S.K. Kundu, and T. Pedersen eds. *Global Outsourcing and Offshoring: An Integrated Approach to Theory and Corporate Strategy*. Cambridge: Cambridge University Press, 2011.

Danmarks Statistik. *Industristatistik 1966-1980*, Statistiske Meddelelser 1970-1982. København: Danmarks Statistik.

Danmarks Statistik. *Industristatistik* 1981-1989. København: Danmarks Statistik.

Danmarks Statistik. *Erhvervsbeskæftigelsen 1990-2006*, Generel Erhvervsstatistik, Statistiske Efterretninger 1990-2006. København: Danmarks Statistik.

Danmarks Statistik. *Statistikbanken*, http://www.statistikbanken.dk/ERH17X. Dansk Textil og Beklædning. *Annual reports 1997-2008*. Herning: Dansk Textil og Beklædning.

Dansk Textil & Beklædning. *Udviklingen i den danske Tekstil- og Beklædningsindustri 1987-1999*. Herning: Dansk Textil & Beklædning, 2000.

Dicken, P. Global Shift: Mapping the Changing Contours of the World Economy. London: Sage, 2007.

Dickerson, K.G. *Textiles and Apparel in the Global Economy*. Ohio: Merill, third edition, 1999. Fabrikantforeningen for trikotage, textil og beklædning 1983/84.

Ferdows, K. 'Making the Most of Foreign Factories'. *Harvard Business Review*, 75 (2) (1997): 73-88.

Gereffi, G., J. Humphrey, and T. Sturgeon. 'The governance of global value chains'. *Review of International Political Economy*, 12 (1) (February 2005): 78–104.

Glasmeier, A., J.W. Thomson, and A.J. Kays. 'The Geography of Trade Policy: Trade Regimes and Location Decisions in the Textile and Apparel Complex'. *Transactions of the Institute of British Geographers*, New Series, 18 (1) (1993): 19-35.

Harrigan, J., and G. Barrows. 'Testing the Theory of Trade Policy: Evidence from the Abrupt End of the Multifiber Arrangement'. *Review of Economics and Statistics*, 91 (2) (2009): 282-94. IC Companys. *Annual reports* 2006/07 and 2008/09. Copenhagen: IC Companys.

Hoberg, S. et al, eds. *Snit: Industrialismens tøj i Danmark*. København: Museum Tusculanum, 2011.

Illeris, S. 'The Herning-Ikast textile industry: an industrial district in West Jutland'. *Entrepreneurship & Regional Development*, 4 (1992): 73-84.

Illeris, S. 'Outsourcing of textile and clothing industry from Denmark to Baltic transition countries'. In *Global-Local Interplay in the Baltic Sea Region*, eds. J.W. Owsinski and M. Johansson, 56-68. Warsaw: Interfaces Institute & Swedish Institute for Regional Research, 2000.

Illeris, S. *Hernings Erhvervshistorie*, 1950-2006: Herningbogen 2007. Herning: Historisk Forening for Herning Kommune, 2007.

IMAGINE. *The Danish Fashion Industry Annual Mapping 2005*. Copenhagen: IMAGINE. Creative Industries Research at Copenhagen Business School, 2005.

Industriministeriet. Dansk Tekstil- og Beklædningsindustri – en undersøgelse af konkurrencesituationen. København: Industriministeriet, 1985.

Jensen, K., and L.K. Skyggebjerg. 'En kjolefabriks kamp for overlevelse'. *Erhvervshistorisk årbog* (2009): 303-25.

Jensen, K. 'Successful Strategy leading to lock-in – Lessons from the Danish Garment Industry, 1960 to 2000'. *Scandinavian* Economic *History Review*, 58 (3) (2010): 220-38.

Jensen, K. 'Tage Vanggaard – Skandinaviens største kjolefabrikant'. In *Trangen til vækst*, eds. K. Jacobsen and P. Hansen, 179-93. Odense: Syddansk Universitetsforlag, 2011.

Jensen, K., and C. Gråbacke. 'Appropriate Reactions to Globalisation? – Interest group theory and trade associations in clothing between 1970 and 2000 – a comparison between Denmark and Sweden'. *Business History*, 55 (2) (2013): 215-35.

Jensen, K. 'Beklædningsindustriens møde med globaliseringen – brancheorganisationer og individuelle virksomheder under pres, perioden 1960-2000'. Odense: Syddansk Universitetsforlag, 2013.

Jyllands-Posten. 'Brandtex sætter alle klude'. *Jyllands-Posten*, September 19, 1990.

Jørgensen, S.T., and R.B. Hansen. *Brugerdreven innovation i dansk mode – den 5. globale modeklynge?* København: FORA, March 2005.

Lane, C., and J. Probert. *National Capitalisms, Global Production Networks*: Fashioning the value chain in the UK, USA, and Germany. Oxford: Oxford University Press, 2009.

Levinson, M. *The Box: How the Shipping Container Made the World Smaller and the World Economy Bigger.* Princeton: Princeton University Press, 2006.

Maskell, P. *Nyetableringer i industrien – og industristrukturens udvikling*. København: Arnold Busck, 1992.

Mathiesen, H. 'Kommentar: Dødsdømt modeprojekt for offentlige penge'. Tøj, April 13, 2010.

McIvor, R. 'The influence of capability considerations on the outsourcing decision: the case of a manufacturing company'. *International Journal of Production Research*, 48 (17) (2009): 1-22.

Melchior, M.R. '*Dansk på mode*'. PhD diss., Danmarks Designskole, Kunstindustrimuseet and Kunstakademiets Arkitektskole, 2008.

Mody, A., and D. Wheeler. 'Towards a vanishing middle: Competition in the world garment industry'. *World Development*, 15 (10-11) (1987): 1569-84.

Nielsen, G., and S.H. Pedersen. *Dansk tekstil & tøj 1987-1997 – en branche i bevægelse*. Herning: Dansk Tekstil & Beklædning, 1998.

Nørregaard, P. 'Lavprisimporten - hvad gør vi ved den?'. *Teknisk tidsskrift for textil og beklædning* (February 1975): 4-9.

Politiken. 'Modebranchens væksthus lukker'. Politiken, December 16, 2011.

Politiken. 'Menneskerettighedscenter: Fabrikskollaps var brat opvågning for Vesten', *Politiken*, May 17, 2013.

Politiken. 'Danske virksomheder underskriver aftale om Bangladesh'. Politiken, June 24, 2013.

Porter, M.E. 'Competition in Global Industries: A Conceptual Framework'. In *Competition in Global Industries*, ed. Michael E. Porter, 15-60. Boston: Massachusetts, 1986.

Reeslev, C.K. En rebel bliver børsnoteret - En fortælling om Niels Martinsen, InWear og IC Companys. København: Gyldendal Business, 2009.

Textilfabrikantforeningen. Annual rapport 1975/76. Herning: Textilfabrikantforeningen.

Textil- og Beklædningsindustrien. *Annual reports* 1990-99. Herning: Textil- og Beklædningsindustrien.

Textil. 'Design – forvridning eller nødvendig produktudvikling?'. Textil (22 January 1982).

Tran, Y. 'Organizing Innovation in a Turbulent Fashion Market. Four papers on how fashion firms create and appropriate innovation value'. PhD diss., Copenhagen Business School, 2010.

Acknowledgements

We would like to express our thanks to Mogens Rostgaard Nissen from Dansk Centralbibliotek for Sydslesvig, Brian Vejrum Wæhrens and John Johansen from Aalborg University, Torben Pedersen from Copenhagen Business School and the other participants of the research project "Global Operations Networks: Challenges for Danish SME's Competing through Operations" (GONE Project) for valuable advice. We would also like to thank the anonymous reviewer for valuable comments to the manuscript. René Taudal Poulsen would like to thank the Strategic Research Council for financing his part of the research.

⁷ Dansk Textil og Beklædning. annual report 2008, 4.

¹ Contractor, F.J. et al., eds. Global Outsourcing and Offshoring.

² Melchior, M.R. 'Dansk på Mode', 65; Jørgensen, S.T., and R.B. Hansen. *Brugerdreven innovation i dansk mode*.

³ Andersen, P.H., A. Bøllingtoft, and P.R. Christensen. *Erhvervsklynger under pres*, 22-3.

⁴ Recent work published in English include Jensen, K. 'Successful Strategy leading to lock-in' and Jensen, K., and C. Gråbacke. 'Appropriate Reactions to Globalisation?' For those able to read Danish the edited volume, Hoberg, S. et al., eds. *Snit*, provide a good overview of recent approaches to the field.

⁵ Christoffersen, H. Danmarks økonomiske historie, 71.

⁶ Ibid. Our translation.

⁸ Porter, M.E. 'Competition in Global Industries'. For discussions on value chains and global changes in manufacturing see also Coe, N.M., P. Dicken, and M. Hess. 'Global production networks'; Gereffi, G., J. Humphrey, and T. Sturgeon. 'The governance of global value chains'.

⁹ Dickerson, K.G. *Textiles and Apparel in the Global Economy*, 18-20; Lane, C., and J. Probert. *National Capitalisms, Global Production Networks*, 34-7.

¹⁰ Dicken, P. *Global Shift*, 276.

¹¹ Broeze, F. The Globalization of the Oceans; Levinson, M. The Box.

¹² Dickerson. Textiles and Apparel, 204-52; Dicken. Global Shift, 249-77.

¹³ Cline, W.R. *The Future of World Trade in Textiles and Apparel*; Dickerson. *Textiles and Apparel*, 335-546; Glasmeier, A., J.W. Thomson and A.J. Kays. 'The Geography of Trade Policy'; Harrigan, J., and G. Barrows. 'Testing the Theory of Trade Policy'.

¹⁴ Glasmeier, Thomson and Kays. 'The Geography of Trade Policy', 24-7; Cline. *The Future of World Trade in Textiles and Apparel*, 145-68; Dickerson. *Textiles and Apparel*, 336-567; Harrigan and Barrows. 'Testing the Theory of Trade Policy'; Brambilla, I., A.K. Khandelwal, and P.K. Schott. 'China's Experience under the Multi-Fiber Arrangement'.

¹⁵ The two associations merged in 1990 under the new name Textile and Clothing Industry (Textil- og Beklædningsindustrien). Renamed Danish Textile and Clothing (Dansk Textil & Beklædning) in 2007, and renamed again in 2009 to Danish Fashion and Textile (Dansk Mode & Textil). The name changes clearly signify the main industry changes.

¹⁶ Jensen and Gråbacke. 'Appropriate Reactions'.

¹⁷ Textilfabrikantforeningen. *Annual rapport 1975/76*, 6; Nørregaard, P. 'Lavprisimporten - hvad gør vi ved den?'

¹⁸ Beklædningsindustriens Sammenslutning (hereafter BS) board meeting 25 May 1972. Danish Business Archives, BS, box no. 1

¹⁹ Jensen, K. 'Beklædningsindustriens møde med globaliseringen', 43-54.

²⁰ BS meeting, 5 June 1973. Danish Business Archives, BS, box no. 1.

²¹ BS annual general meeting, 25 March 1974. Danish Business Archives, BS, box no. 1.

²² BS board meetings held on 22 and 23 June 1978. Danish National Archives, the archive of Ebbe Herluf Sahlertz's, box no. 27.

²³ Industriministeriet. *Dansk Tekstil- og Beklædningsindustri*.

²⁴ Ibid., 5.

²⁵ Ibid.

²⁶ BS board meeting, 1 December 1987. Danish National Archives, the archive of Ebbe Herluf Sahlertz's, box no. 27.

²⁷ BS, annual report 1989/90.

²⁸ Ibid

²⁹ Illeris, S. 'The Herning-Ikast textile industry'; Dickerson. *Textiles and Apparel*, 14-5, 239; Illeris, S.

^{&#}x27;Outsourcing of textile and clothing industry'; Illeris, S. Hernings Erhvervshistorie.

³⁰ Textil- og Beklædningsindustrien. *Annual report 1991*, 10.

³¹ Textil- og Beklædningsindustrien. Annual report 1996, 14-5.

³² Textil- og Beklædningsindustrien. Annual reports of the 1990s.

³³ Dansk Textil og Beklædning. Annual report 1999-2000, 8.

³⁴ Glasmeier, Thompson and Kays. 'The Geography of Trade Policy', 20; Cline. *The Future of World Trade*.

³⁵ Harrigan, and Barrows. 'Testing the Theory of Trade Policy'; Brambilla, Khandelwal and Schott. 'China's Experience under the Multi-Fiber Arrangement'; Jensen. 'Beklædningsindustriens møde med globaliseringen'', 52-54.

³⁶ Cline. *The Future of World Trade*; Glasmeier, Thompson and Kays. 'The Geography of Trade Policy'; Dickerson. *Textiles and Apparel*; Harrigan and Barrows. 'Testing the Theory of Trade Policy'; Brenton, P., A.M. Pinna, and M. Vancauteren. 'Adjustment to globalisation'.

³⁷ Nielsen, G., and S.H. Pedersen. *Dansk tekstil & tøj 1987-1997*.

³⁸ Jensen, K., and L.K. Skyggebjerg. 'En kjolefabriks kamp for overlevelse'; Jensen, K. 'Tage Vanggaard'.

³⁹ Maskell, P. Nyetableringer i industrien, 70; Nielsen and Pedersen. Dansk tekstil & tøj, 8.

⁴⁰ Nielsen and Pedersen. Dansk tekstil & tøj, 2.

⁴¹ Jensen. 'Successful Strategy leading to lock-in'; Mody, A., and D. Wheeler. 'Towards a vanishing middle', 1271, 1277, 1281; Glasmeier, Thompson and Kays. 'The Geography of Trade Policy', 24; Dicken. *Global Shift*, 258.

⁴² Jensen. 'Beklædningsindustriens møde med globaliseringen'', 54-64.

⁴³ Fabrikantforeningen for trikotage, textil og beklædning 1983/84, 5-6, 23-4.

⁴⁴ Ibid., 23-4. Our translation.

⁴⁵ Jensen. 'Successful Strategy leading to lock-in'.

- ⁴⁶ Textil. 'Design'. Our translation
- ⁴⁷ Article from the newspaper *Ekstra Bladet* found in the press-clipping books of Brandtex. No date, but must be 1980. Our translation
- ⁴⁸ Jyllands-Posten. 'Brandtex sætter alle klude'. Our translation
- ⁴⁹ Brandtex. *Company concept*, November 11, 1994. The archives at Brandtex.
- ⁵⁰ Ibid.
- ⁵¹ Jensen. 'Beklædningsindustriens møde med globaliseringen', 160-171.
- ⁵² Ibid., 164-9.
- ⁵³ Melchior. 'Dansk på Mode', 67-8.
- ⁵⁴ Bestseller. *Key figures 2011/12*.
- ⁵⁵ Lane and Probert. *National Capitalisms, Global Production Networks*, 96-100.
- ⁵⁶ Tran, Y. 'Organizing Innovation in a Turbulent Fashion Market', 68.
- ⁵⁷ Tran, Y. 'Organizing Innovation in a Turbulent Fashion Market', 68.
- ⁵⁸ IC Companys. *Annual reports* 2006/07, 8.
- ⁵⁹ Reeslev, C.K. En rebel bliver børsnoteret.
- ⁶⁰ IC Companys. Annual reports 2008/09, 25.
- ⁶¹ Ibid., 2.
- ⁶² Lane and Probert. National Capitalisms, Global Production Networks, 2.
- 63 Ibid
- ⁶⁴ Dickerson. Textiles and Apparel.
- 65 Nielsen and Pedersen. Dansk tekstil & tøj, 4.
- 66 Ibid.
- ⁶⁷ Based on Nielsen and Pedersen. *Dansk tekstil & tøj*.
- ⁶⁸ Jensen. 'Beklædningsindustriens møde med globaliseringen', 131-182.
- ⁶⁹ Lindon, board meeting, June 27, 1995. The private archives of Poul Lindy Hansen. Our translation.
- ⁷⁰ Lindon, board meeting, May 8, 2001. The private archives of Poul Lindy Hansen. Our translation.
- ⁷¹ Jensen. 'Beklædningsindustriens møde med globaliseringen', 146-155, 164-182.
- ⁷² Lindon, board meeting, February 20, 1996. The private archives of Poul Lindy Hansen. Our translation.
- ⁷³ Lindon, Comment from the CEO to the company board of Lindon April 22, 1996. The private archives of Poul Lindy Hansen Our translation.
- ⁷⁴ Lane and Probert. *National Capitalisms, Global Production Networks*, 287.
- ⁷⁵ Jensen. 'Da beklædningsindustri blev modeindustri', 144-182; www.btx-group.com
- ⁷⁶ IMAGINE. The Danish Fashion Industry Annual Mapping 2005, 36.
- ⁷⁷ See for instance Mathiesen, H. 'Kommentar' and Ballund, B. 'Bare fremad på catwalken'.
- ⁷⁸ Politiken. 'Modebranchens væksthus lukker'.
- ⁷⁹ See e.g. Ferdows, K. 'Making the Most of Foreign Factories'; Barthélemy, J. 'The seven deadly sins of outsourcing'; Bartlett, C.A., S. Ghoshal, S., and J. Birkinshaw. *Transnational Management*; McIvor, R. 'The influence of capability considerations on the outsourcing decision'.
- ⁸⁰ Bettis, R.A., S.P. Bradley, and G. Hamel. 'Outsourcing and Industrial Decline'.
- ⁸¹ Lane and Probert. National Capitalisms, Global Production Networks, 295.
- ⁸² Dansk Textil & Beklædning. *Ûdviklingen i den danske Tekstil- og Beklædningsindustri*.
- ⁸³ Andersen, Bøllingtoft and Christensen. Erhvervsklynger under pres, 43, 121-4.
- ⁸⁴ Cachon, G.P., and R. Swinney. 'The Value of Fast Fashion'.
- ⁸⁵ Børsen. 'Bestseller tættere på Indien'. Our translation.
- ⁸⁶ Politiken. 'Danske virksomheder underskriver aftale om Bangladesh'; Politiken.
- 'Menneskerettighedscenter: Fabrikskollaps var brat opvågning for Vesten'; Cleanclothes 2013.
- ⁸⁷ Dickerson. Textiles and Apparel, ix.