BUSINESS STRATEGY IN CHINA’S TRANSFORMATION:  
THE CASE OF DANFOSS

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Abstract: The broader dynamics at work in China’s transformation are the stuff from which corporate policy has to be made for foreign companies operating there. The country is undergoing four simultaneous transitions from a command to a market economy; from a rural to an urban society; from an autarkic to an open economy; and from a pillar of the now defunct communist system to a member of the global society of states, as illustrated by China’s membership of the WTO in 2002. Every dimension of corporate activity in China is affected. This article presents a forward-thinking guide for management engaged in business in China, and applies it the case of Danfoss, Denmark’s premier manufacturing company. The article emphasizes the importance of looking on China operations as an on-going learning process, the counterpart of which is the ongoing learning process in the party-state with regard to the open-ended transition to an unknown destination.

Key words: China, transformation, party-state, business, management.
How much should we commit to China? many business people ask. The answer depends much on how we look at the broader dynamics at work in China’s transformation, and its insertion into the global system. In the terms of traditional Chinese historiography, which posits history as cyclical, is the communist dynasty heading for a new golden age, or about to succumb to corruption and decay? The thesis here is that, if we start by a definition of corporate strategy as shaped in part by the top team’s view of what constitutes right policy, (Prahalad, Doz 1987) our top team has to consider the details of corporate activities in China, and the world, in terms of possible futures. Let us ask the following questions: what are some of the features of the phenomenon we call “globalization”? as a prelude to look briefly at four different interpretations of China’s possible futures; how is the party-state evolving? Then, what business conditions do we meet in China? Finally how do all the above impinge on the managerial issues of doing business in China? In illustration, we take the case of Danfoss, Denmark’s premier manufacturing firm (INSEAD—07/2005—5228).1

Contextual elements of corporate strategy.
The first requirement of our top team is to become familiar with the recent history of China, starting arguably with the open door policy in 1978—the year located at the base of the vertical line presented in Figure 1 below. When China’s paramount leader, Deng Xiaoping, embarked on a policy of reforms in 1978, he substituted development for class war, and launched China on its transformation from an autarkic and poverty stricken country, to its present condition where national income has quadrupled and at least 300 million people have been lifted from poverty.

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1 The case is built on extensive interviews by myself, and my co-author Natasha Lee-Evans, in Denmark, Asia Pacific, and in China in the course of 2004-05. We thank Jørgen Mads Clausen, Niels Christiansen, Claus Tønnesen and Kjeld Stærk from Danfoss for their valuable help and support.
China and “globalization”.

On the outer vertical of Figure 1 are listed some of the larger questions which our top managerial team should be asking themselves: what is happening worldwide in terms of the on-going redistribution of capabilities between the major powers and markets? How is this affecting the global structure? How is China incorporated into the global, interdependent economy? Not least, how is the transition proceeding in China? The answer to the last question is, in brief, that the process, given its complexity, has been unexpectedly successfully managed, and that China’s transformation and that of the world are intimately related one to another (Figure 2).
How complex this process is may be gauged by its four distinct, but related and synchronous features. China is experiencing a transition from a command- to a market-economy, under the monopoly power of the CCP. The country is undergoing a transition from a rural to an urban society, resulting in relative income gains for some, widening inequalities between town and country, and a huge peasantry numbering about 900 million still left to absorb into a modern manufacturing and service economy. China is in transition from autarky to deep interdependence with the rest of the world, measured for instance in the 60% of national production and income dependent on international trade, or by the existing stock of FDI as equivalent to 35% of GNP. Finally, China is in transition from membership of the international communist system, to participation in a global polity. Folding China into the global business system through membership in the WTO in 2002 represents a significant step in that direction.

These four facets of China’s transition—from command to market, from a rural to an urban society, from autarky to interdependence, from membership in the communist system to participation in the global polity—interact with four features of the world’s transformation. The first of these records the collapse of the communist system, the primacy of the USA, and the trend to fragmentation of political authority, as the number of states multiply and the variety of regulatory bodies proliferate. The second element is the relentless retreat of any alternative forms of government to ‘market democracy’, as various forms of despotism collapse, populations become better informed, market scope widens, and institutional competition takes its toll. The third element is the recreation
of the world market under the aegis of the western powers, and by the United States in particular, to reach a level of integration unknown since the first decade of the 20th century. The fourth element is the growth of the industrial or service corporation, initially based in a home country, and with subsidiaries or market outlets in host countries, towards becoming a trans-national group with subsidiaries and markets located around the globe, and with a widely dispersed shareholder community, and a non-national recruitment policy.

A summary of the relatedness between the two transitions of China and the world may be phrased in the following terms: China has negotiated a contested bargain with the United States, the prime world power; insertion of China into global markets is re-distributing relative economic gains and losses; the CCP as the political monopolist rejects democratisation as a formula capable of delivering on the extensive unfinished business of China’s transition; multinationals operating in China face severe competition on local markets, and a shrinking CCP corporate sector. In short, China’s transition is far from complete, and the world is far from having created a sustainable global polity.

Hence the question asked about China by foreign investors, among others, is also the question asked about the world. One set of answers points to convergent trends in the world economy as democracy spreads along with the search for global norms and institutions of governance (Kaul et al, 1999). The second set of answers runs along different lines: globalisation in this light is not a dissolvent to old conflicts, but a stimulus to old tensions as well as to new. As the world becomes a smaller place, frictions between peoples from different civilizations will rise (Huntington, S.P. 1993). Overall, this world of history introduces discretion in the human affairs, diversity and divergence, rather than linearity, integration and convergence.

The paradox is that both propositions provide a partial description of what is going on: a diversity of states in a non-homogeneous world, penetrated and shaped by global markets, operating powerfully to create a more homogeneous world civilisation; alongside aspirations to create a system of global governance out of the world’s existing institutional framework as the counterpart to a world of relentless competition between peoples, states, corporations and non-governmental organisations or currencies. It is this double condition of hope in a radiant future and fear flowing from very divergent capabilities to adapt which is characteristic of global affairs.

This double condition blows strongly through the affairs of China. Not surprisingly, opinions about where China may be heading range from a real and present danger of sudden regime death (Chang, 2001); to China as an introverted, and at best regional power (Segal, 1999); through to
China as a belligerent and assertive rising great power, (Christensen, Betts, 2001); or to the regime as having no option in the longer run but to “common marketise” China into becoming like the rest of the world (Fukuyama, 1989). My argument is that communist China is not dying but morphing into something else; the regime gives priority to domestic affairs in order to emerge in the longer term as a pillar of global society (Story, 2003). Success in this endeavour depends much on developing market institutions in an open society. As Hu Angang, the reputed economist from Tsinghua University has expressed it, “the historic task we now face is building a new national system”(Kynge, 2003).

**Evolution in the party-state.**

The factor of time is thus crucial to an understanding of China, and of how to operate there. The vertical line on Figure 1 stylises China’s transformation in four stages towards some point in the future( Rustow, 1970; Story, 1999), when consolidation of a noticeably different political and business system occurs. This approach does not allow us to conclude that China is on a smooth path of evolution, but it does help us to isolate the major challenges which lie ahead. First comes the pre-transition phase, accompanied by a growing list of problems which the incumbent power is unable to resolve. The key political detonator for change from command economy towards a more market-driven system was the initial consolidation of Deng’s position in 1978, leading to various market-oriented measures, growing inflationary pressures, and demands for accelerated democratisation, culminating in the brutal crack-down on the students demonstrating in Tiananmen square in June 1989(Qian,1999). After three anxious years, China’s leadership resumed market-opening—a trend confirmed in its response to the East Asian financial crash in 1997-98, and the subsequent successful bid to enter the WTO in 2002. WTO membership means incorporating global norms into Chinese legislation and practice.

Politically, the regime has not yet changed its governing norms. So far, former President Jiang Zemin has talked in traditional Marxist-Maoist-Leninist terms of the party as representing “three forces” essential to China’s future: advanced productive forces; advanced cultural forces; and the fundamental interests of the largest number of citizens. The definition distances the party from its roots in class warfare, but continues to assert its claim to the leadership of China. In other words, the party is on the cusp of the definitional phase when leaders start to distance themselves from previous policy paradigms. Were further steps in political rhetoric and practice to be taken, China would be embarked on regime change, where one destination would be a consolidated Chinese democracy,
located up the vertical path labelled “normalcy”. Regime change, and all the uncertainties associated with it, lies ahead in China.

A consolidated market democracy holds five, key features, (Linz, Stepan, 1996): a vibrant civil society, where organised groups are able to express their values and objectives autonomous of states; a political society, where citizens may elect their political representatives on a regular basis; the rule of law where due process prevails over rule by law; an efficient bureaucracy, where civil servants are accountable to courts and legislature; and an economic society, by contrast to a market system or a command economy. This listing indicates what tasks lie ahead, and how much remains to be done. China’s party state has to continue to move towards laying the institutional foundations of a constitutional order, if a market economy is to be consolidated.

**China’s business conditions.**

Business conditions are crucially structured by party state institutions, four key components of which are presented on the horizontal axis in Figure 1. (Whitely, 1999).

1. The prime force in China for reform is the tremendous competitive pressures running through the markets. Given the absence of clear property rights, and the party’s central role in allocating business risk, China does not present a level playing field for companies. There are at least four major types of corporate establishment in China: the large state enterprises in relatively protected markets; the state enterprises and collective enterprises in the competitive sectors, such as consumer electronics, foods, or textiles and where price competition is fierce and barriers to market entry low; the smaller enterprises, often attached to local governments, many of which are or have been in dire financial straits; and the booming private sector, whose crucial role the Politburo acknowledged in October 2003 by adopting further reforms to protect private property and the rights of entrepreneurs. By then, the private enterprise share of GDP has been estimated as 59% (OECD, 2005), employed more than 100 million people, provided the main source of new employment, were more efficient in the use of resources, and were present in all sectors.

2. The party-state dominates the financial system, through which business risk is allocated. True enough, China has moved away from the mono-bank system of 1978-79, as the number of intermediation channels between savers and borrowers has multiplied, along with the growth in the number of financial market agents. But the party-state still rules supreme over the financial system, including banks, insurance and securities markets. This creates major conflicts of interest. The banks continue to channel loans to loss-making enterprises, at the expense of the
needs of private businesses. On the securities markets in Shanghai and Shenzhen, the China Securities and Regulatory Commission (CSRC) has powers to prevent insider trading. But 90% of the 1200 enterprises listed on the two markets are state enterprises (Liu, Sun, 2003). Listing is decided by a highly politicized quota process, where new issues have been kept firmly in the communist party family. There is thus a glaring contradiction between the government’s efforts to crack-down on fraud in the financial markets, and its use of the media to talk China’s 60 million or so frequent share buyers into buying state enterprise stock.

3. The third key element of China’s business system is the party-state’s gradual abandonment of its key constituency, the urban working class, just as its control over the countryside has slackened since the dissolution of the rural communes in the early 1980s. The link between ownership and market has involved the re-assertion of managerial authority over operations (Feng, 1999). Maoist worker committees have been relegated to a subordinate position. More discretion for managers means separating government functions from enterprise operations, and the elaboration of corporate law to provide a framework for companies becoming either limited liability or joint stock companies. In essence, the party-state has decided against socialist corporate-based insurance, but at the same time has continued to provide bank loans to inefficient enterprises to maintain “social cohesion”. With 15 million or more new entrants to the job market per annum through to 2020, plus restructuring in state, township and village enterprises, unleashing private enterprise on China is the only way forward to create the jobs needed to avoid an explosion of unemployment and violence in countryside and cities. Unleashing private enterprise conflicts with providing the party-state constituencies with privileged finance, not least because job absorption is likely to occur in the development of the services sector, where private businesses are omnipresent.

4. The fourth element to condition China’s corporate reforms is the level of trust in workforce and society towards public officials. The evidence suggests that the general public in mainland China has rather low expectations about government. The public may complain, but people do not withdraw their support (Shi, 2001). There is thus a stock of lethargy on which the regime can draw as it proceeds on its way. But it cannot afford to take this passive support for granted. Private business and farmers have used the nascent legal system to protect themselves against local officials. Government promotion of communications facilitates the organisation of the discontented, who are too disparate to challenge the incumbent regime for the moment. What opinion polls do show is the widespread disapproval of corruption, accompanied by the penetration of
the party-state by organised crime converge (Ding, 2001). The communist honey-pot is too tasty for the sake of its guardians.

The paradox is that while the party-state insists on its leadership prerogatives in China, the Chinese economy is more than ever in the hands of consumers and savers. Companies, controlled by the CCP, have to adapt or die. So far, the CCP has preferred to adapt. If it is to cleave to this policy, as it has so far, the subsequent steps are clear enough: resources must be better allocated than hitherto, regulators particularly in the financial markets have to be more effective, corporate management has to be further taken off the drug of bank subsidy or rigged equity valuations, the party has to step much further back from corporate patronage, private enterprises have to be placed on a footing of equality with their competitors, and private property rights have to be inserted at the heart of China’s political system. What the CCP has going for it is the stock of public lethargy on which it can continue to draw. Let’s trace what this all means for foreign investors in China, using the example of Danfoss.

The managerial implications of China’s transformation.

Last on Figure 1 come the implications for corporations of China’s transformation, both of its political and of its business system. What this spells for foreign businesses seeking entry to, or already operating in China, we can examine by following the firm level at the base of our cube, in terms of market entry, human resource management, and production, marketing in China, and corporate alliances. The example we draw on is that of Danfoss, Denmark’s premier manufacturing company. But since China’s transformation is integral to the phenomenon of globalisation, we shall start with a sketch of Danfoss, and its Danish and European roots, and the learning which went on in the corporation as Danfoss went global.

Danfoss’ local roots in Nordals.

Danfoss manufactures a wide range of industrial control products (heating, air conditioners, motion controls) and is one of Denmark’s largest industrial groups, with over €3 billion sales and 17,500 employees worldwide in 2005. It has factories in over 21 countries and sales in over 100. The company was founded in 1933 by Mads Clausen in his hometown of Nordborg, on the small Danish island of Als, south-east of Jutland. By his death in 1966, he had built the company into a major European player across a wide range of industrial controls. His wife Bitten took over as chairman of the board, leaving the operations in professional hands. By the mid-1990s, Danfoss had risen to the top of Danish industry.
A number of points need to be made about the Danfoss corporate culture, its deep roots in the local community, and its prominence in Denmark. Danfoss’ historical roots in Denmark run deep.

1. Danfoss belongs to the Danish class of large, family-controlled firms such as Lego, Mærsk and Grundfos, and is still 99% owned by the family. At the helm of this industrial conglomerate is Jørgen Mads Clausen, the eldest son of founder Mads Clausen, who since becoming CEO in 1996 has taken Danfoss far beyond its European heritage. An engineer by training and family tradition, he was the first Clausen to seek an education abroad. He then spent 15 years working his way up through the firm, and eventually won board support—his mother was chairperson-- to appoint him CEO.

2. Despite some scepticism at his appointment, his provincial image went down well with the public and media alike. Nordals, where company headquarters is located, is really a company town. Danfoss builds houses, provides local ambulance services, sponsors local kindergartens, and—more recently—has invested in educational and advanced research. Despite the changes in international competition, Danfoss employs in 2005, the same number of people in Nordals as it did in 1966. The local mayor is social democrat

3. Danfoss is steeped in Danish and social democrat culture. Relations between management and unions are co-operative: operating in the open Danish media environment, corporate leadership attaches great importance to explaining the rationale of corporate policies. This has meant dealing with local concerns about “de-localisation”, and the potential loss of skilled jobs abroad. The top management line is that “globalisation” is inescapable, so what has to be done is to make the best of it for the sake of company and locality.

4. Danfoss is highly respected in Denmark. Bitten Clausen, still Danfoss’ first lady at over 90 years old, lives on the headquarter grounds, shops locally and is an intimate of the Queen. Jørgen Mads Clausen is active in promoting a pro-globalisation policy consensus in Denmark—where 80% of the workforce is unionized. The Copenhagen-media appreciate the company transparency and low profile culture, but financial market practitioners note that the corporate returns to the globalization strategy pursued since 1996—and particularly the China branch of it—have not yielded high returns. As Thomas Bernt Henriksen of Børsen, a leading business newspaper, has observed, “They provoke little criticism in the press… They’re investing their own money.”

Danfoss goes global.

In the early 1990s, Danfoss was still essentially a European player. The majority of production was located in Denmark and Germany and
Western Europe accounted for 90% of Danfoss revenues. Clausen’s vision was that in order to survive on an increasingly commoditised and competitive market, Danfoss had to combine product innovation—he had headed corporate research—with the promotion of global sales and production. Three key factors were selected to locate production: 1. **Regionalisation:** To be close to customers, Danfoss had to have a production presence in each region; 2. **Costs:** in a commoditising market, production needed to be located in cost-competitive countries. 3. **Focus:** to achieve scale benefits for complex ranges, each plant needed to focus exclusively on a small number of products.

The strategy was therefore for each region to solely produce the product types in greatest demand there, while also exporting globally: multi-purpose products for the European market, produced from Denmark; customised products for the US market, from Mexico; and mainstream products for Asia, from China. Central R&D would remain in Denmark. Long-term, the strategy was to have plants on each continent where demand was sufficient to guarantee optimal plant size.

To consolidate Danfoss’ global position in key markets, Clausen went on a major investment spree, spending US$275 million between 1996 and 2004. The company expanded organically, with new factories in China, Mexico and across Eastern Europe, and through acquisition, purchasing some 15 companies all across the world by end 2003. By then, Danfoss had over 50 factories on 5 continents, and Western Europe accounted for less than two thirds of sales. In parallel, Danfoss put in place a new organisational matrix structure: product divisions dominated, handling all aspects of production and key customer accounts; regional divisions provided support services to local plants and handled sales and marketing.

Going global confronted the company with multiple challenges. Not the least of these was the inevitable learning on the hoof as Danfoss internationalised. Managers who had only ever worked in Denmark were sent out to develop new locations and had to learn on their feet. The lessons proved painful in the company’s efforts to establish a presence on North American markets, where its major global customers were located. As a late entrant, Danfoss found it difficult to increase market share there; the initial offerings were not sufficiently tailored to local demand; supplying the North American markets out of Mexico ran into self-inflicted logistical problems—too many changes (product redesign, doubling of production, the installation of new equipment and the hiring of new staff) took place simultaneously. These difficulties were compounded by the mismatch experienced between Danfoss corporate culture and local work culture and teamwork. The lessons for China were
to work on crafting a ‘Danfoss China’ culture, to get into the market early, and to sharpen corporate preparations for entry to new territories.

With time, in-house awareness about new locations broadened, but this also opened up a gap within the company, between the group of travelling senior managers that were globalising the company, and the rest. The corporate response was to adopt a range of measures to address the problem, including: top level support for leadership courses for promising cadres; training programs at all levels of management where people of different countries network together; inter-corporate news channels, emphasising personal faces and stories; and temporary assignments—sometimes as long as two or more years—in other countries to learn about living abroad and to help diffuse technical knowledge around the company. These measures were applied to China as operations expanded there.

**Danfoss enters the China market.**

Danfoss took under a decade to move from serving the China market through a Hong Kong agent to operating a wholly owned manufacturing plant. Meanwhile, Chinese public policy was evolving rapidly, with a widening range of instruments being made available to foreign investors. Initially, the only form of investment allowed on the mainland was in the form of a joint venture with a party-state enterprise, and foreign companies were discouraged from establishing sales offices on the mainland without local production. But in 1993, the leadership launched the “socialist market economy” policy with a view to attracting in foreign direct investment: the analysis informing this policy line was that with the collapse of the USSR, China had no option to joining the world economy, and that the ongoing redeployment of multinational investment was an opportunity to be seized. The interaction of evolving public policy, and a collective corporate learning process about how to operate in China may be illustrated as in Figure 2. The interactions yield a widening range of policy instruments, from joint ventures to wholly-owned enterprises and holding company status—extended unevenly across a widening range of sectors. With entry to WTO in 2002, China was committed to a sequenced opening of these sectors to international competition.
Danfoss’ top management interest in China began growing in the early 1990s. The Japan bubble had burst and many of Danfoss’ key customers were expanding fast in China - all projections pointed to dramatic growth. The prime attraction was the large domestic market, but there were also the attraction of using China as an export platform, exploiting China’s low unit labour costs to serve global markets—blue-collar workers cost 1/10 of those in Denmark and white-collar 1/5 to 1/6. By 1995 an entry plan had been drawn up and accepted by the board. As CEO, Clausen became the corporate champion for China, chaired the China country board and pushed the project vigorously. The company was set up as a wholly-Danish owned company from the start, in order to retain managerial autonomy and control. Unity of command was assured by Clausen’s position as CEO, while family ownership ensured that corporate strategy could play for the longer term.

Danfoss China began production in 1996 in a hired factory of 5,500m2 in the Wuqing Development Area, an industrial development zone some 90km southeast of Beijing in the province of Tianjin. Wuqing, a district of 500,000 inhabitants, was chosen for several reasons: 1/ proximity to market demand for radiator thermostats in cold North China; 2/ its coastal location was convenient for exports; 3/ low cost levels; and 4/ cooperative local government authorities. One important motive was that Danfoss was a relatively large company in a very small development park, which meant that the company would get plenty of attention from the local authorities (Hoover, 2006) Claus Tønnesen, the plant manager, met the Wuqing mayor once a month to keep him abreast of
developments. In return, the local authorities helped Danfoss crack down on counterfeiters, and helped out on the granting of licenses and financial support. Tønnesen became the first foreign citizen to be appointed an honorary citizen of Wuqing.

The early years found managerial energies taken up by daily firefighting: developing the right culture, building the supply base, handling production transfer logistics, developing the export platform and building up the brand — all in a new and challenging, idiosyncratic environment. No-one had anticipated how rapidly sales would grow and logistics and supply problems continued to eat away profits. The Wuqing operation did not break even until 2002. That year, Danfoss moved into a new 12,500m² factory down the road, that it had purchased when it first entered China. Work meanwhile raced ahead on further factory expansion, with a doubling of the plant size approved in September 2003 and ready an impressive 9 months later. An additional 100,000m² was purchased for expansion beyond that. By 2006, ten years after launch of the China project, Wuqing had been expanded four times and housed seven product lines served by 650 employees. Output had grown at 42% per year since the opening of the new plant; sales offices were set up across the country, and the brand had become market leader on many lines. Global Danfoss sales to China accounted for 4% of Danfoss worldwide revenues, up from below 1% in 1996.

When Danfoss started production at Wuqing, management had anticipated growing local demand for two products: radiator thermostats, and expansion valves. But the thermostat market never materialised. Danfoss had bet on the Chinese’ authorities demand for energy-saving measures and growing urban housing developments - but despite some promising early agreements, both the public funds and the political will to push these forward was lacking. It was the expansion valves which unexpectedly took off. Cooling products had exploded in China since the early 1990s, driven by demand in the hot south from a growing middle class of some 300 million people. In the coastal regions, new facilities requiring equipment were springing up as far as the eye could see, from subways to restaurants and supermarkets,

Failure on thermostats was offset by growth of exports out of Wuqing, accounting for 90% of output in the first year and falling over time to about 40%. This dual targeting of the domestic and export markets was the salvation of the project. Danfoss thereby secured the volumes necessary to get costs down and quality up: “we could start with a relatively high scale serving customers outside China”, one manager recalled. “We weren’t dependent on a market that wasn’t yet there”. It also boosted marketing worldwide: global customers valued Danfoss’ China presence, despite the concerns about “Made in China”, because
Danfoss presence there as a supplier might help them in the longer to grow in the US. This experience was a salutary lesson to management about the difficulties in penetrating mainland markets: Danfoss’ main markets were now far away in the south of China, and abroad.

**The challenges: human resources and the problem of loyalty.**

Getting the HR function right, as Danfoss management knew, was probably the single most important task they faced. As Claus Toennesen, Wuqing plant manager stated, “If you can’t make the people issues work, forget it.” The key was to work towards a Danfoss China culture—a blend which united what the Danish managers considered the Danish humble and open approach, with the focus and hard work of the Chinese. This was no mean task as along with the hard work came an inherited Chinese attitude in the workplace, characterised by deep distrust of authority and of others, and its corollaries of passivity, secrecy, and acquiescence in whatever the hierarchy decides. “The first times I held meetings with my key managers, one Danfoss manager said, there was total silence”.

There were two related dimensions to Danfoss policy with regard to HR in China: Danfoss workplace relationships in China are on the radar screens of a range of social auditors from Denmark and elsewhere. Managing this would be crucial to preserving goodwill in Denmark. Operating in China meant that Danfoss had to conform to Chinese regulations, while introducing its own style and HR practices. This was reflected in the Wuqing plant, where the organisation design was flat, with deliberately few managers and expats (six in 2004). There were no trade unions, but spaces were available to post proposals for improvements. The physical environment was carefully designed, with bright Danish architecture, open plan offices and a canteen shared by everyone. Free transport to and from work was provided. Open communication was essential to establish an atmosphere of trust, and plenty of information was circulated on company performance, employee perceptions, and salaries. In particular, the Wuqing management was proud that blue collar loyalty to the firm was very high: blue collars would turn up with families on Sundays to show off their workplace, while Danfoss management fostered the pride that went with being able to produce to world standards of excellence.

Danfoss management was also successful in retaining white collar employees, but not without difficulties. At stake was the development of viable cultural mix to fit the company. One immediate problem was to find managers who knew the Chinese market, language(s) and culture(s), while also being at ease with the Danfoss way of doing things. Initially, a Chinese-born Canadian was appointed as president alongside a Danish
plant manager, as Danfoss felt his understanding of both Chinese and Western language and culture would provide a bridge. But his Chinese leadership style proved too traditional for the more open culture Danfoss was seeking to develop and eventually a European sales manager was appointed President. Here, the criteria for selection were for managers who had broad cross-functional and cross-divisional experience in Danfoss, but then knew little about conditions in China. “My preparation was by far not enough,” said Tønnesen. “And the biggest danger was that I wasn’t aware of it at the start.” The upshot was for the ex-pat managers in Wuqing to operate as coaches to coax staff into taking more responsibility or to be ready to express an opinion. Disconnected by the local culture and language, they had to rely on Chinese managers to get things done.

Chinese managers had already moved into key positions in Wuqing by the time the “second home market” strategy was launched. This was particularly the case for marketing, finance and HR. Finding and keeping the right people for management positions was a task where much of the responsibility had to be delegated to the Chinese staff. They also had to know how to read a curriculum vitae in order to minimise cheating. Once hired, the challenge was retention. Competition for qualified people was extreme and trained managers were a scarce resource. Danfoss paid a 10% salary premium, and emphasised individual training and long-term development. But corporate provision of training only added to marketability. The key was to develop loyalty. As one Chinese manager stated, “to succeed in China, Danfoss will have to let go and be more like a Chinese company… to combine the best of Danish ways with the best of Chinese, who have a deeper knowledge of how things work here, but with local management [and strong back-up from Danish regional heads].” A Danish manager’s response to this was that “the Chinese do business with people, not with companies. If someone changes company, the contacts follow that person.” In short, the Chinese Danfoss managers in 2004 worried that Danfoss was still ‘too Danish’ for China; and the Danish worried about its overdependence on Chinese staff.

The challenges: building the supply chain.

There were two related challenges to the building of a supply chain in China: one was to integrate corporate global logistics in order to reap the benefits from cost savings from cheap labour and materials. Danfoss set up a major global logistics project to optimise the global supply chain. Priorities were to achieve top delivery and after-sales service, continuously reduce global inventory, improve reliability and availability, and generally keeping operations as lean as possible. As one Danfoss manager stated, “When you move from local production in Denmark to
globalised production for globalised sales, you can lose all the money you’ve earned, just by messing up the supply chain logistics.” The other challenge was that traditional clients were nervous about their reliable Danish products being replaced by ‘Made in China’ ones. In either case, logistics problems leading to quality or delivery failures would tarnish the brand.

Success in setting up the China operation depended heavily on full support from Nordals. After the problems in Mexico, advance planning was run from headquarters, with frequent visits to China. Production transfers to China were managed closely: materials and equipment were initially sourced from Denmark; design changes were made sequentially; Chinese technicians were sent to Denmark to learn. Modern logistics tools were introduced: computerised inventory, Kanban systems, and close monitoring of key production cost items. The process involved much learning by doing, but by 2004, customers who had worried that delivery would suffer in China had come to consider Wuqing as one of their best suppliers.

To build up the local supply base, the Danish purchasing manager was stationed in China for eight months, to train the local purchaser and bring back knowledge to Denmark. This was critical to Danfoss’ success in sourcing, both for the local factory (building competencies of local staff) and for Danfoss abroad (bringing home experience). Localising supply was critical as materials accounted for the bulk of variable costs. Early on, the selection of suppliers was driven by which supplier was available. With time, Danfoss learnt to discriminate, set up specific quality teams, and coached intensively. ISO (International Standards Organisation) norms were implemented. As Kjeld Staerk, until 2004 global head of the Commercial Refrigeration & Air-Conditioning (A/C) Controls division (RC Commercial), at Danfoss emphasised: “You have to climb the ladder in the right order. Focus first on quality and delivery; once these were secure, focus on cost and engineering issues; and, only later, deal with knowledge and R&D transfer.” Trustworthiness, decent systems and professional management were a bonus. Many of the suppliers chosen were from Hong Kong and Taiwan, or Japanese JVs. By 2004, between 50-70% of materials were locally sourced, and Danfoss was synchronising all the elements of the process of moving abroad, from logistics to product development and R&D.

Attracted by the momentum behind Wuqing, the product division heads decided to get on board. Seven new product categories were in operation, or in preparation at the Wuqing factory. In 2003, Danfoss announced that it was setting up three International Purchasing Offices (IPOs) in China to source cheap materials for Danfoss factories all around the globe. Here was a major opportunity to reduce supply costs. Many global parts were
already sourced in China, but performance was patchy and not coordinated across different divisions. The IPO task was to bring this all under one global umbrella, to improve synergies in the process and reduce the number of suppliers. This trend to outsource in China in turn created great concern among European suppliers. Huge cost reductions would be required to compete with Chinese suppliers, and hard to achieve even if they relocated there. But with quality converging to international levels, price and service were increasingly critical. So Danfoss began to encourage its European suppliers to “Get yourselves a Chinese partner”, urging firms to merge, buy Chinese factories or set up local joint ventures. This is what Danfoss had and was doing.

**The Challenges: Going for market leadership.**

There were a number of convergent considerations which pushed Danfoss’ top management to put many more eggs in the China basket. The first of these was continued fast growth. China rode out the 1998 Asian currency crisis, and had then had joined the WTO in 2002. Private final consumption was rising at 5-6% per annum on average, as were savings. Heavy government investment in infrastructure fuelled demand for cooling units in new buildings and facilities. Preparations were rushing ahead for the Beijing Olympics of 2008. The main unknown was China’s development as a whole, given the political, economic and social risks involved in managing its transition. Clausen came round to the view that fears of a financial meltdown of the Chinese financial and corporate system had been overdone, and that growth there was sustainable at around double digit rates. Furthermore, the promise of the single market and currency in Europe—Danfoss home market--had not shown up, and was not likely to show up. By contrast, Clausen saw China as well on its way to creating a single internal market under a single sovereign.

Second, competition was hotting up. Within a matter of years, China had become the 3rd largest manufacturer worldwide of industrial controls after the US and Japan. Global original equipment manufacturers (OEMs) were rushing into the market, with companies such as Carrier and York, providing 55% of Danfoss domestic sales. They brought Danfoss’ major rivals, such as Alco, with them. Alco’s parent company, Emerson—the US$14 billion global leader in industrial controls--was determined to succeed in China. Large Chinese manufacturers provided the remaining 45% of Danfoss’ domestic sales, but local manufacturers sprang up to supply the market. Their product quality was rising at an alarming rate without significant price increases, through strict focus on total cost control and financial support from state-owned banks. One Chinese player, Sanhua, was doing particularly well in the medium and low end products, where markets were deepest. Once its market leadership would
be established there, they could attack Danfoss on the upper end of the market, with the cash flow coming from their volume production.

Third, top management shared a sense of anxiety. The likelihood was that China would set the world market price for years to come. So whoever came out top dog in the China market for industrial controls would be a prime candidate for leadership on the world market. Looking forward, analysis showed clearly that the days of Danfoss charging premium prices in the top end of the market were numbered, yet that was the revenue source on which the company counted to build a truly nationwide brand and distribution network. Costs had been kept down by reliance on local distributors, but this left Danfoss at arms length with end customers. And returns on the policy of globalization—associated with Clausen’s leadership—were not yet in.

Two events caught Clausen’s attention, and determined him to develop a more elaborate corporate strategy for China. First, he had read an article about a large European manufacturer that was happy with its 40% market growth in China, until it discovered that the entire market for its product was growing by 80%--in other words, that the company was losing market share. Clausen had frequently voiced similar concerns about Danfoss to his China management team. Second, travelling from Kazakhstan through China’s western province of Xinxiang, he was struck by the relatively good roads, the hi-tech equipment installed in some of the plants he visited, and a luxury refrigerator, which would not have been found in a large Danish town. His conclusion was that Danfoss had to move fast and forcefully, before rivals consolidated their lead in the China market and drove Danfoss back to being one of the many small players there. This is what had happened in the US, Japan and in Korea: Clausen was determined not to repeat the experiment in China.

The new vision, announced end 2004, was to make China Danfoss’ “second home market” after Europe. This meant achieving a 50% yearly growth in sales. But the new target was to be market share—not an easy task, given limited official data. After six months of investigation, top management found that the company was skimming the market and capturing only a few percentage points share in most of their product lines. Their products—in effect designed for the European market, along European standards—served the high end of the market, and some of the mid-range market, but not the low end. And it was the low end of the market where the growth, and the potential were highest. The calculation was that if they offered the right products at the right prices, they could achieve a market share of from 15-20%, roughly equal to the market share in Europe. Expansion would A step in that direction would be achieved by quadrupling of sales by 2008. The China strategy entailed at least four further challenges, relating to human resources; intellectual
property rights; binding the China into the global Danfoss structure; and keeping support in Denmark.

*Developing the corporate software of trust.*

A major challenge following from the China as second home market vision was that a unit of 650 people would have to come up with the resources to hire 3000 by 2008. The challenge was all the greater because success of the overall strategy would depend on Danfoss internalising, and retaining the skill sets needed to win in the China market. Overcoming the latent distrust between expats and local managers was therefore essential, if the firm’s longer term objectives were to be achieved. As Clausen knew (McKinsey, 2006), “we need their (Chinese) help to find solutions to the challenges of growing quickly in the Chinese market”. So with the help of the Copenhagen School of Economics, Danfoss designed a three-month development programme for Chinese and other Asian leadership talent. The programme is high priority, enjoys top level backing, and is clearly seen as the key to creating a Danfoss-compatible corporate culture. It is one step on the way to the goal of a 100% Chinese-run Danfoss operation in China. Success here would transform Danfoss in the coming decade in as yet unimaginable ways, as Clausen has commented. What could be predicted, though, is that Danfoss people in China would be sharing competences and learning around the global corporation and with its suppliers and clients. There was no escaping the urgency for Danfoss to foster the loyalty, skills and trust required to prosper as a global corporation.

*Protecting intellectual property.*

Penetrating the low-end of the industrial controls market meant that Danfoss would have to hire local engineers to develop simple products, designed for the China market. Engineers and researchers in China were in any case much cheaper than in Europe. To acquire them, Danfoss established product development centres, while acquiring Chinese companies to draw on their local knowledge of the market. These centres, in conjunction with local acquisitions, would ensure much greater product customisation to the local and Asian markets, as well as faster responsiveness to customers on technical problems. Basic research would remain in Denmark, but the long-term goal was to transfer product development to their respective ‘lead factories’ around the world. In China, this would leave Danfoss vulnerable to intellectual property infringements. There were only a limited number of measures that the company could take, in addition to limiting the number of people with access to all technical details in China. One was to deter copycats by vigorous pursuit, with private detectives, close co-operation with
international competitors, also concerned to protect their technologies, and, importantly, the backing of the Wuqing authorities. But ultimately, Danfoss would become increasingly dependent for protection of its intellectual property rights on the loyalty of its researchers and employees.

**Tying Danfoss China into the global operation.**

Getting deep into China meant in effect creating a powerful Chinese Danfoss, which was tied into corporate global activities. Within Danfoss’ matrix structure, the China organisation acted as a host to product divisions rather than as an independent decision-making unit. Nesting this unit into the whole organization would be a longer term task. As a leading American authority on China, Ken Lieberthal (Lieberthal, 2004) has argued, the relative importance of division vs. country unit changes over time: initially the local office is little more than a staff office for divisions setting up; as operations develop, an assertive country office is needed to control and steer rapid growth to meet local conditions; once these have been mastered, divisions once again come to the fore with global integration. Throughout the process, solid local management with strong direct links to the board is essential, as is ready support from HQ. In turn, Danfoss would have to cultivate a consistent face towards government, as the Chinese government views and treats corporations as a single entity. This was another major reason for Danfoss working, under direct involvement of top management, to establish a corporate identity emphasizing the mutual interests of the company, region and country, while approaching government in a spirit of partnership.

**Keeping support back home.**

Finally, Danfoss had to learn how to adapt its tradition of social responsibility to the demands placed on the organisation by its own global market strategy. The method was to expand on its traditional commitment to Nordals by developing competence clusters in Schlesvig and the rest of southern Denmark. “We can’t stay here in Nordborg, if the commercial sector around us continues to get weaker. There’s no immediate danger right now, but if we don’t do something soon, we could face serious problems,” said Clausen. Similarly, top management spent much time and effort in dialogue between employees, customers, partners and suppliers. The intention, as with other large Danish firms, is to foster a balance between family life and work. Social democracy in Danish politics thus has a counterpart in the behaviour of family firms as pillars of local society. Their legitimacy is rooted in the balance they strike between value creation and community support, and the heart of this deal is Denmark’s A and B shareholding system, which, combined with a fund
structure very similar to other Scandinavian countries, keeps Danish family firms out of the hands of foreigners. Globalisation, and China in particular, challenged this tradition in two ways.

First, the fear of jobs moving to China created a pervasive anxiety about the future within the company in Denmark and Europe—still in 2006 accounting for 60% of sales. Jobs in Europe were being shed, as the company re-distributed and expanded production and sales in emerging markets, especially in eastern Europe and China. Danfoss policy was to use Denmark’s flexible labour laws as a key tool in adapting swiftly to shifts in demand, easing people out of work in downturns, and hiring in upturns. As Clausen made clear, Denmark’s flexible labour laws, combined with an effective safety net, was a key tool for the company in managing the process of corporate globalisation. But this tool was not available in other locations in Europe, notably in Germany.

Second, family ownership of the firm enabled top management to concentrate on the long term, without undue focus on next quarter’s results. If the family was to retain ownership, financing for the expansion policy would have to come from internal funds or debt. Financing expansion through debt was not compatible with the company’s profile and internal funds could only be generated by a combination of strict cost control, a surge in revenues, and innovation. This left public funding and a share float. Much of the $100 million planned for development in China came from government backing. But Clausen saw no urgency to dilute ownership—still 99% in family hands. Clients in Asia Pacific preferred to deal, he argued, with family-owned, rather than management controlled firms. His preference, he stated, was for Danfoss to combine the professionalism of listed firms, with the culture of a family firm—clearly a preference for the longer term retention of ownership and control by the family. What was not in doubt was that Danfoss’ globalisation strategy was high risk; Clausen considered that staying home in the European market was even more risky.

Conclusion.

What are some interim conclusions to be drawn from this paper? The first is that Figure 2’s schematic representation of the interaction between China’s transition and the phenomenon we call “globalisation” indicates that many things could go wrong in the future, such as for instance, the capacity of the global structure to absorb China’s emergence; the urgent demands on Chinese policy to meet commitments under the WTO in an interdependent world market; the inevitable pressures which may be anticipated for regime change or evolution to accommodate a better educated and more urban population; or a backlash against the presence of the multinationals on the China market. The paradox here is that
whereas the multinationals seem to occupy a very strong position on the China markets, on closer examination, their position—Danfoss’ top management’s perception illustrate the point—is far from secure. The competitive pressures running through the markets both weigh on Chinese policy-makers to adapt, and challenge the multinationals to put more eggs in the China basket or face marginalisation in the foreseeable future.

Second, Figure 1 illustrates the point that the transformation of China’s position in the world system, of its domestic politics and business system have been the stuff of which corporate policy in China has been made. Danfoss’ move over the years to what may be recognized in retrospect as a policy of globalization involved management climbing a steep learning curve, however much effort was expended on preparing ahead and seeking to anticipate the opportunities and costs entailed in going abroad. The operative words used by managers in describing their experience ex post were “learning on the hoof”, “trial and error” and “firefighting”. In fact, the Danfoss method was a mixture of foresight and more or less speedy adaptation—rather like Chinese public policy. The interaction of the two was visible in the way that Danfoss chose to enter the market—first exploring through a sales outpost in Hong-Kong, then scouting to set up operations on the mainland, agreeing initially on a joint venture, and finally taking the plunge with a 100% owned plant in Wuqing. It was also recognizable in the types of challenges which Danfoss faced: the importance of fostering loyalty in a market where local managerial talent was scarce; the need to invest heavily in developing the supply chain; tough competition in a market characterized by overproduction in most industries; copycat tactics; and avoiding price competition like the plague.

Third, the transformation of China’s position in the world system, of its domestic politics and business system will continue to the stuff of which corporate policy in China is made. That is the bet Clausen has taken in his “second home market” strategy. His bet is that party-state management of the country’s transition to date is far beyond what many commentators expected in the 1980s, and the 1990s, and that this record has a good chance of serving as a guide to how the transformation of China is likely to be conducted in the future. It is not that Danfoss top management underestimate the many grave challenges facing China: indeed, they repeatedly state that the future will not be all plain sailing, that their will be setbacks, that wages are likely to rise along with the yuan in relation to the dollar, and that China will not be able indefinitely to gain position in world markets and politics without concessions. It is just that their reading of the past record indicates that China may well succeed in managing the transition through to the 2020s and beyond,
when the country could be well on the way to creating a modern system—Clausen adds, that that would mean China becoming a constitutional democracy. The chances are sufficiently high to justify Danfoss taking the plunge, and going in much deeper to the China market.

Fourth, getting deep into China goes along with Danfoss’ accelerated policy of globalization. Along the way there, the company has emerged from being organized along functional lines as a Danish exporter; to becoming a multi-domestic corporation entering the markets of Europe, first western, and then after the fall of the Berlin wall, into central-eastern Europe and Russia; through to becoming a global player, with a growing presence in North America and then in China, and the Asia Pacific. This has involved Danfoss in moving to a matrix organization, with reporting lines of the field operations primarily to product division chiefs, but also to regional heads. The specificity of the China operation—typical of other multinationals—was to have a local president, with the status to open government doors, and the ceo as chairman of the China board. In all other dimensions, Danfoss was on its way to Sumantra Ghoshal’s model of a global corporate citizen, serving the global and not primarily the national or regional market. The characteristics of such a global citizen, as Ghoshal argued, were all present in Danfoss: increasingly efficient product divisions; sensitivity to local tastes, raising glass ceilings in order to embed loyalties to the firm; managing knowledge transfers across frontiers; and developing a global learning capability, requiring active development of leadership skills. In one dimension, though, Danfoss has not followed the model: it has not become a shareholder-driven corporation. It has remained loyal to its roots, indeed to its identity. And the specificity of it all is that its leadership is comforted in this specificity by the rise of China, and the Asia Pacific. It would be enough to make Marx and Mao turn in their graves.

*Berlingske Tidende* (2002)“Danske virksomheder overser aktionærer,”, 30 October.


