

THE OEM-OBM DEBATE: FACTORS INFLUENCING CHINESE FIRMS' BRANDING DECISIONS IN THEIR INTERNATIONALISATION PROCESS

Ian Wilson¹

Abstract

A key international marketing decision for many Chinese (and firms from other emerging markets) is whether to internationalise their own brands - labelled by the Chinese as OBM (Original or Own Brand Manufacturing) - or to be international players by acting as contract manufacturers (labelled by the Chinese as OEM (Original Equipment Manufacturing) for foreign brand owners (FBOs). The paper discusses some of the extant research on the advantages and disadvantages of each business model and then focuses on primary research conducted amongst 8 Chinese firms in electronics and textiles and the OEM-OBM decisions they face. In so doing, it discusses some of the factors influencing such decisions and proposes a framework for reviewing them as firm and environmental circumstances change.

Keywords: OEM, OBM, internationalisation, brand, China.

Introduction

The emergence of Chinese brands into international markets is a topic of importance for both the Chinese and their potential Western competitors. For the Chinese, it is a question of acquiring competitive strengths, exploiting market opportunities and it is also a question of national pride. For Westerners, there is the likelihood of more competition from some strong players and, in some situations, the likelihood that erstwhile collaborators will become future competitors. As yet, few Chinese brands have established themselves as major players on a global basis but firms such as Haier, Galanz and others have become significant forces in some product sectors and market segments in some country markets. A key international marketing decision for many Chinese (and firms from other emerging markets) is whether to internationalise their own brands or to be international players by acting as contract manufacturers for foreign brand owners (FBOs). This paper focuses on the development of Chinese firms in electronics and textiles and the decisions they face in international markets, particularly whether to pursue an OEM or OBM strategy and discusses some of the factors influencing such decisions.

Moving from OEM to OBM is a critical decision facing a number of Emerging countries at this time. In 2002 the China Brand Strategy Promotion Commission was established to help advance top Chinese national brands. The reasons are clear. According to Business Week 2003 (Fan, 2006), the world's top 100 "consumer and retail goods brands which rely on overseas production" achieved sales of US\$3,500 billion while the top 100 OEMs in the Asia Pacific region, which supply those companies, achieved a sales turnover of only US\$84 billion. Further, on average, the gross margin on OEM products was 19% while on OBM goods it was 27% (China Daily, 2008). At individual firm level, it is estimated that 60% of the price of an iPhone 4 is for Apple's design and engineering, marketing costs and

¹ Business School, Staffordshire University, England, e-mail: i.a.wilson@staffs.ac.uk

profit while 31% is for components and only 1% for soldering, assembly and packaging by the Chinese OEM.

While evidence for the precise figures may not be perfect, the general picture is clear and movement from OEM towards OBM has been apparent for some time in some (but relatively few) cases. For example, the Hong Kong Trade Development Council reported in 2003 that many firms planned to develop ODM (Original Design Manufacturer) business., This was driven by the desire to shift the basis of competition from price to design, to respond to customer needs and as a preparatory step to building brand names (HKTDC, 2003). Gereffi and Memedovic (2003) report that The Republic of Korea is the most advanced among East Asian NIEs in developing OBM production and brands.

1. Literature review

The literature review examines the advantages of an OEM branding strategy in facilitating the export of Chinese made products. It then addresses the wider issues which impinge on the OEM-OBM debate and some of the pathways available to firms which wish to develop from an initial OEM base. It then examines some of the dangers of not shifting strategy and, subsequently, the problems associated with shifting.

Although it may not be seen as a branding decision by the firms themselves, the choice of an OEM business model is a decision not to brand products and which will also largely determine its initial foreign market entry mode strategy (Wilson, 2006). In the first instance, this is likely to be through passive exporting (Clarke and Wilson, 2009) i.e. FBOs seeking OEM suppliers may contract these to manufacture products for them.

A firm with an unknown brand name, perhaps based in a country with negative country of origin cues, will find it difficult to market to foreign countries. OEM branding is one strategy which by-passes these hurdles. It reduces the costs of marketing dramatically and endorses the product with the customer's brand name. Very importantly, the product is sold through the customer's already established marketing channels. There may be further advantages for the contract manufacturer if the customer provides assistance with technology or perhaps insists on quality controls which improve the manufacturer's quality standards. Large volume orders with programmed delivery schedules may also result in the manufacturer being able to hone their processes so as to further reduce costs and become even more competitive.

Relationships built will increase the manufacturer's learning about its customer and their markets. This may encourage the OEM to then engage in active exporting. Ultimately all this learning, together with the credibility and references resulting from having already sold in the market should make it easier for the contract manufacturer to later supply the market on an OBM basis should it wish to.

Hobday et al (1998) also discuss the contribution made by OEM business as a mechanism for Taiwanese and Korean firms to overcome entry barriers into foreign markets and force continuous improvements in contract manufacturer quality. Goldstein et al (2006) and Yang (2006) also emphasise the benefits of the OEM system in having to conform to the QA systems of the GPN (global production network) flagship firms.

Van Grunsven and Smakman (2005) studied the 'pathways' taken during the 1980s and 1990s by firms in the Singapore garment industry. They identified 7 development trajectories amongst the 57 firms analysed and found that OEM strategies inevitably resulted in internationalization as foreign buyers seek sourcing opportunities. However, whilst a few OEM firms had added the production and marketing of their own brands, OEM supply remained the basis of their business. Some of the OEM firms had added additional services, effectively moving towards an ODM situation. Amongst the limitations in moving from OEM to OBM, they identified the difficulty for large firms in returning to short runs and the

‘credibility gap’ between design, marketing and retail on one hand and manufacturing on the other.

However, Hobday et al (1998) report that many firms wish to break out of their OEM role and transform from latecomers to leaders. Yeung (2007) describes three corporate strategies of leading Asian firms. Firstly, some firms have moved from being subcontractors to become ‘strategic partners’ of the lead firms in global production networks (GPNs). Secondly, some firms have chosen to develop expertise in niche sectors such as specialized components. Thirdly, some firms have chosen to make the ‘quantum leap’ to become GBOs (global brand owners).

Child and Rodrigues (2005) classify Chinese internationalization routes as partnerships (either through OEM arrangements or J-Vs); acquisition of foreign brands, technology and market position; and organic international expansion, as illustrated by Haier. Additional to the advantages noted earlier of the OEM route, they refer to the opportunity to preserve their independence, benefit from scale economies and achieve a reputation for manufacturing excellence which may (as in the case of Galanz) confer sufficient bargaining power that they can badge their products as ‘made by Galanz’ whilst also branded by the GBO.

In contrast to the advantages of OEM, Lee and Kim (2004) suggest that, because they did not shift from an OEM to an OBM strategy, Korean toy producers have all but disappeared. From 700 OEMs a few years ago, only OBM Aurora and two ODMs remain. They could not compete with Chinese OEM producers. A second risk is that low margin business coupled with a possible reliance on the customer for product improvement means the manufacturer will lose the ability to create and maintain a product edge and become dependent on low price for winning orders.

The academic literature seems to give less coverage to the challenges posed by moving from OEM to OBM. The costs of switching from OEM to OBM must not be underestimated. For example, the possible additional costs – both monetary and time - of building a brand overseas, compared to contract manufacturing on an active or passive exporting basis, are likely to include R&D, product development, name search and registration, international market selection, market entry mode selection and implementation, marketing channel selection and management, marketing communications and marketing planning. On top of this, a number of other factors are necessary for success. Wreden (2005) claims that many Asian firms switching from OEM to OBM need to develop an understanding of branding and to see it as an investment rather than just a cost. He suggests that they tend to equate branding with advertising rather than the “ability to develop emotional and experiential ...relationships with customers”.

The options facing a firm which wants an OBM strategy are whether to follow a single or multi-brand strategy and whether to retain an OEM strategy as well. TCL, for example, has several brands whilst Haier has its one corporate brand. The arguments for each strategy have been extensively documented. One key advantage of multiple brands is that it allows more market segments to be targeted and therefore potentially greater sales. Retaining an OEM strategy also means more opportunity provided that the OEM and OBM options target different segments.

However, the OEM plus OBM option raises the danger of the firm’s business model being “stuck in the middle” in a Porterian sense (Porter, 1988) if the same SBU (strategic business unit) is engaged in both types of activity. This is because OEM requires an emphasis on low costs while OBM requires additional expenditures usually necessary to create differentiation. The managerial skills and employee attitudes are also necessarily different. The Taiwanese laptop computer firm Acer resolved the conflict by deciding to focus on R&D and marketing and outsource its manufacturing to other OEM firms (Yang, 2006). A different approach was taken by Asus by allocating its OEM business to a wholly owned subsidiary.

Nevertheless, other Taiwanese firms such as Arima, Clevo, Elite and Twinhead continue to house OBM and OEM business in the same organization (Yang, 2006).

2. Methodology

The area within China selected as the sample frame has been referred to (Yang and Hsia, 2007) as the Greater Suzhou Area (GSA) and is a relatively new industrial cluster within the Yangtse River Delta. It includes the cities of Suzhou and Kunshan, Suzhou itself being under one hour from Shanghai by fast train. The area has been a major recipient of cross border investment from the Taiwanese IT industry, seeking primarily a lower cost base but also opportunities to sell in the mainland Chinese market. Five firms were interviewed in the electronics industry, including makers of computer products and other consumer durables, of which four were Taiwanese owned. The other three firms were in the textile industry, one of which was Singaporean owned.

The industries selected are characterised by the Chinese OEM – Western OBM model. The selection of the specific firms was driven by convenience. They were all identified as being of sufficient size and experience to be able to comment on the research issues. The number of employees in the GSA sample varied from 200 to around 100,000. An obvious limitation of the research is the limited sample size and the consequent omission of very large and very small firms. Responses from large OEMs are likely to differ significantly from small OEMs. For example, some OEMs are now so large and so expert in quality mass manufacturing and technology development (for example, Foxconn and Quanta) that they are probably in a very powerful position relative to brand owners. Nevertheless, the prime purpose of the research is to raise and conceptualise the relevant issues, not to quantify them. The interviewees were either the Chief Executive, the Chief Financial Officer or Product Marketing Managers. They were chosen on the basis of their knowledge of the research issues. A translator was present at all times but six of the interviews were held in English directly with the respondent and two relied on the translator. The discussions were held in the company premises and lasted between one and three hours.

The respondents were provided with a limited briefing in advance but it was emphasised that the purpose of this was not to direct the conversation but to allow any form of preparation which they might consider relevant. Indeed, the respondents were encouraged to take the discussion in directions which were most pertinent to them. In this sense, the research was largely inductive with the hope that it might lead to some generalisations for theory development (Pressey and Mathews, 2003). This approach leaned towards Glaser's perspective that the researcher should start with no pre-suppositions (Easterby-Smith et al, 2002).

3. Primary Research Findings

Firm 1 started selling Chinese brand clothes in the early 1990s making rapid progress and building its first factory in early 2000s and expanding capacity greatly in 2005. Recently it obtained approval to produce for a number of famous Western brands so that currently, some 40% of sales are for export of these via the GBOs. Of the 60% sold in China, 95% are Western brands but, again, they are sold through to GBOs and through their marketing operations in China. 5% of sales are Firm 1's own brand which it would like to sell in foreign markets. Firm 1 has its own design centre in China which includes European staff and designs for both European and Chinese markets. The problem is a limited knowledge of the European market and the marketing channels. Management also believes that the firm is not yet big enough but anticipates it will be in the future.

Firm 1's management has the energy and resources to further develop its own brand portfolio. The motivation to do so is partly that OEM offers limited profit and development

opportunities but also for the personal esteem which comes from ownership of a successful brand. Firm 1 is also interested in acquiring Western brand names either under license or by acquisition of production assets. One idea is to export semi-finished products to be finished abroad and then imported back into China in order to exploit the price premium associated with a Western country of origin (COO).

Firm 2 is a major supplier to two GBOs of clothing products for sale in Greater China only. Firm 2 is free to sell to other customers abroad and is currently talking to a third GBO which identified them because of their industry reputation. However, the existing GBOs do not want Firm 2 to manufacture for Chinese brand owners for the Chinese market. One of the GBOs is worried about industry legislation in China and so is encouraging Firm 2 to open a new factory outside China. Additional drivers are lower costs and bias against products 'made in China'.

Firm 2 said that their only focus is on manufacturing and that they were happy with the margins made. Moreover Firm 2 believed that the GBOs are re-assigning more margin to the manufacturers as they seek to enhance their brand image via quality and greater attention to supply chain corporate social responsibility issues. Firm 2's plan to remain as an OEM does not preclude it from building a B2B brand within the OEM business and it has been rewarded for quality by one of the GBOs allowing it to attach a 'made by Firm 2' label to garments produced.

Firm 3's parent company is in Singapore and manufacturing only is undertaken in China. Sales from Chinese production are 80% to the USA and 15% to Europe. It does have a design function in Singapore but most business is still according to the GBOs designs. Although it sells to around 10 GBOs, it is a strategic partner to one.

Firm 3 would like to do OBM for the Chinese market. Firstly because of a belief it would give them more control over their business, secondly because a lack of knowledge of Western markets and tastes and concern about customer reaction there to 'made in China'. However, management thinks OBM would be problematic because of the likely reaction by GBOs and the prevalence of counterfeiting, making it unprofitable to invest in brand building.

Firm 4 provides a variety of OEM products and services ranging from assembly only to manufacture of complete products with or without design or procurement and has no plans to change. The reasons are that, firstly, they specialise in manufacture and have key competences in product knowledge, manufacturing processes and cost down; secondly, as an OBM they would have to bear the market risk e.g. unsold inventory; thirdly, OBM would bring them into conflict with their current clients. However, in terms of new growth directions, Firm 4 is now considering an own brand consumer electronic product which will not compete directly with existing GBO customers for that product. This might be achieved by customisation for specific final customers or marketing to different geographical territories. In either instance, Firm 4 would consult with its GBO customers first.

Firm 4's business strategy involves choosing a product category in which to compete and then select customers, which would normally be GBOs. For example, Firm 4 would not select cell phones or lap top computers because there is no margin in OEM. Secondly, the customer would be selected on the basis of market standing (share), growth expectations, and management competences, particularly financial skills. Using this approach means that international market selection is based on targeting individual customers rather than countries.

Firm 5 is a Taiwanese company which has done OEM business for many years and moved to China for lower costs. TV sets are produced only for a Taiwanese – North American JV and branded on an ODM basis. Computer screens (which they regard as

complete products) are sold to many GBOs. 100% of production is exported and they seek new customers and new countries. They also wish to grow via NPD.

If Firm 5 had sufficient funds, they would consider OBM but currently have decided to focus on OEM. OBM would take 3-5 years to achieve brand awareness and cost too much in advertising and after sales service. They also doubted whether they would have the design expertise to meet consumer tastes. Management felt a further requirement for OBM would be the need to embrace CSR practices. Interestingly Firm 5 prefers to sell to manufacturers rather than distributors because of a belief that the latter can help Firm 5 improve its image. However, Firm 5 will sell to distributors if those distributors have their own brand.

Firm 6 manufactures a range of products including vacuum cleaners, central vacuuming, kettles, bikes, electric bikes (developed for China and now exported to Italy), humidifiers, fryers. 99% of vacuums are exported, of which 66% to Europe, 20% to USA and the rest to another 65 countries.

Firm 6 was originally state owned but was privatised and began its new life with exports on an OEM basis being initiated by a French importing distributor some 14 years ago. Most customers (around 200) today are distributors but more and more supermarkets are buying direct including leading retailers in the US, France and the UK. Firm 6 also exports to some GBOs. Since 1997, Firm 6 has undertaken R&D and, from 2002, has increasingly worked with customers on joint design. Working with confidentiality clauses, this helps both parties in that Firm 6 upgrades its technology and foreign partners get exclusive products. This type of project business now accounts for over 50% of sales.

In the Chinese market (which accounts for only 1% of sales) they sell under their own brand. Firm 6 would like to do OBM in export markets as well but believes that the costs would be too high, particularly establishing a selling network, developing relationships with retailers and advertising. Management also believes that Chinese brand names are not popular. Despite current design capability, R&D is still the biggest hurdle. Firm 6 needs to develop new product concepts in order to give people a reason to change from the brands they know.

After an estimated 10 years Firm 6 may have enough money, design capability, people and after service to be able to build their own brand and Firm 6 will probably focus on export OBM unless OBM performance in China has improved by then.

Firm 7 began with OBM in Taiwan but because Taiwan is small they accepted OEM orders. Later, under pressure from OEM customers, Firm 7 separated OEM and OBM businesses in terms of manufacturing plants and business decisions. This arrangement is advantageous with OEM generating volume and bargaining power with suppliers while OBM generates higher profit margins. However, within Firm 7, some believe that OEM customers are not completely satisfied and a full split may take place later.

Firm 7 makes for GBOs, sometimes undertaking R&D and sometimes not. In terms of product categories, Firm 7 makes OBM notebooks, cell phones, big screen TVs and computer motherboards. Recently, they launched an own branded laptop designed for global markets beginning with the USA, followed by China and Japan.

All OBM products are made in China while plants in North and Central America just produce for OEM. Firm 7 has sales companies abroad e.g. in Russia and India which only sell OBM products. Sister companies seek OEM business in these countries.

Firm 8 started as OEM with a gross margin of 3-4% but after 20 years switched to OBM and achieve a gross margin of 10%. Now they need to raise volume to increase profits. 30% of current sales are made in China, 40% in Europe and 10% in South America. Their plan is to sell to more and more countries. For Firm 8, OEM is really just assembly. Firm 8's objective is to rival the industry majors and it sees R&D as the mechanism.

In summary, the primary research generally confirmed the existing literature in terms of the difficulties faced in shifting from OEM to OBM and within this, the specific problems of building brands internationally. Additionally, however, it did highlight a broader range of issues affecting this decision which are summarised in the next section where research conclusions are made in two areas. These are, firstly, the present status of the firms in terms of OEM-OBM and intended future pathways; secondly, the factors which influence the OEM-OBM decision.

4. Conclusions and discussion

Whilst there are no absolutely clear dividing lines, the firms in the research could be broadly grouped as follows. One firm is already OBM only having been established specifically for this purpose. Three are currently largely doing OEM business and plan that this will continue to be the predominant focus. The reasons are that they have developed their core competences in manufacture and in the provision of associated services. However, even one of these firms has recently introduced a new product under its own brand name. Four firms are predominantly doing OEM business but would like to make a positive move into OBM as well. OBM is seen as offering a number of financial and, interestingly, psychological benefits for the brand owner.

The advantages of the OEM model in terms of facilitation of foreign market entry, volume sales achieved with limited expenditure and, often, assistance with technology and quality enhancement are clear. But so are the risks of OEM and, conversely, the benefits of OBM and there does seem to be a natural progression towards OBM. Nevertheless, the OEM-OBM choice for any particular firm seems to be influenced by a number of factors. These are discussed below and summarised in the decision model in Figure 1, adapted from Wilson (2005, p.15).

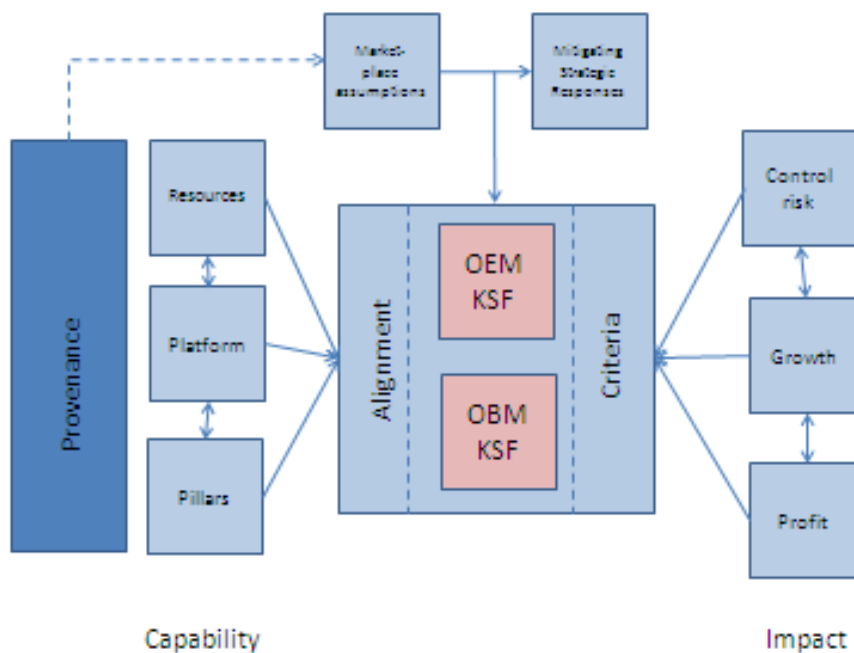


Figure 1. Factors influencing the OEM-OBM decision

Provenance in this context refers to the origins and early experiences and values of the firm. Thus, Firm 2 was founded on OEM and sees its success as evidence for its ability to build a differentiated and profitable B2B brand within the competitive market for outsourced sports clothing. Platform here is largely a combination of vision and mission which help define the future domain, direction and ambitions of the firm. Thus the personality and values of the founder of Firm 1 have strongly influenced its growth ambitions and the prestige perceived to emanate from consumer brand ownership. Firm 4, by contrast and notwithstanding a planned limited foray into OBM, has publicly articulated its mission “to be one of Asia’s top OEM service providers”. Pillars are the underpinning distinguishing capabilities and competences within the firm which lead to its competitive advantage and/or superior customer value. Firm 4, for example, focuses on advanced process engineering amongst its pillars which also allow it to provide its customers with feasibility studies of proposed new designs. People in Wilson’s original model are replaced with overall Resources. Cost is a major issue in moving from OEM to OBM and inhibited Firm 5 but Firm 7 possessed sufficient resources to overcome this constraint.

According to Leinward and Mainardi (2010), who refer to the concept as the “coherence premium”, successful performance requires a firm to align its “internal capabilities with the right external market position”. In the case of the OEM-OBM decision, this means matching the above internal firm factors with the key success factors required of the two alternative business models. For OBM these would include product innovation, brand building skills and market, customer and channel expertise. For OEM, they would include lean operations, for example.

However, the research also suggested that, in addition to this core alignment process, several firms were concerned about the influence of a variety of other factors. These have been labelled “market-place assumptions” and sometimes result from a firm’s prior experiences. For example, Firm 3 was discouraged from OBM because it feared conflict with current customers, because it assumed its lack of understanding of Western culture would prevent it from designing suitable products and because it assumed that any successful brand it managed to build would suffer from counterfeits.

Equally, firms have a certain amount of choice about alternative strategic responses which may moderate, mitigate or eliminate the impact of these assumptions. As examples, the fear of conflict with existing FBO customers assumed to result from moving from OEM to OBM can possibly be avoided by using “RCSTP” strategies which refer to marketing to different geographical Regions, selecting different product Categories, and using different Segmentation, Targeting and Positioning strategies. Firm 4’s foray into OBM, for example, will be based on choosing geographical territories and product categories in which its current customers do not compete. Firm 1 has engaged European staff to bring Western cultural understanding into its design capability while Firm 6 has engaged in joint NPD research in its attempt to bridge this assumed gap. As a final example, Firm 1 has considered the licensing or acquisition of foreign brand names as a strategy for coping with the assumed negative attitudes towards Chinese brands.

Having considered the above influences, perhaps the ultimate criteria for choosing between OEM and OBM will be the short and longer term impacts on growth, cash flow-profit and control-risk. Different firms see the two options in a different light. Thus Firms 1 and 5 see growth coming from building consumer brands while Firms 2 and 7 see much opportunity within the OEM market. Likewise, for some firms, OBM offers more control over their destiny through a reduction in the risk of price-based customer defection while others see more control arising from the careful management of OEM business without the risk of brand building failure, greater stockholding and debtor expenses. In terms of

shareholder returns, some firms see OBM as offering higher profits through better margins while others see OEM as providing improved cash flow with the opportunity for improved or, at least, adequate margins.

While in the short and medium term, the reality is that a capabilities-driven strategy provides coherence, in the longer term, firm internal factors such as resources and competences change, as does the external competitive and collaborative and environmental context, such that the OEM-OBM decision or the OEMplusOBM decision will need to be continuously monitored and perhaps revised.

References

- China Daily (2008), “Producers should move from OEM to OBM”, Available at: www.chinadaily.com.cn/chinagate/doc/2004-06/08/content_337548.html (Accessed April 12 2010)
- Child, J. and Rodrigues, S.B. (2005), “The Internationalization of Chinese Firms: A Case for Theoretical Extension”, *Management and Organization Review*, vol. 1, no.3, pp.381-410
- Clarke, G. and Wilson, I. (2009), *International Marketing*, McGraw-Hill, London, England
- Easterby-Smith, M., Thorpe, R. and Lowe, A. (2002), *Management Research: An Introduction*, Sage, London, England
- Fan, Y. (2006), “The globalisation of Chinese brands”, *Marketing Intelligence and Planning*, vol. 24, no.4, pp.365-379
- Gereffi, G. and Memedovic (2003), “The Global Apparel Value Chain: What Prospects for Upgrading by Developing Countries”, United Nations Industrial Development Organization
- Goldstein, A., Bonaglia, F. and Mathews, J. (2006), “Accelerated Internationalization by Emerging Multinationals: The Case of White Goods”, Working Paper, OECD Development Centre, Paris, January 16 2006, Available at: www.oecd.org/dataoecd/59/8/36317032.pdf (Accessed 18 February 2010)
- HKTDC (2003), Hong Kong Trade Development Council website, Available at <http://www.hktdc.com> (Accessed 21 March 2010)
- Hobday, M., Cawson, A. and Ran Kim, S. (1998), “The Pacific Asian Electronics Industries: Technology Governance and Implications for Europe”, Working Paper No.24, Sussex European Institute, Available at: <http://www.sussex.ac.uk/sei/documents/wp24.pdf> (Accessed March 10 2010)
- Lee, K. and Kim, M. (2004), “The Rise of China and the Korean Firms: Looking for New Divisions of Labour”, Korea and the World Economy III Conference, July 3-4 2004, Seoul, Available at: <https://faculty.washington.edu/karyiu/confer/seoul04/papers/lee-kim.pdf> (Accessed February 10 2010)
- Leinwand, P. and Mainardi, C. (2010), “The Coherence Premium”, *Harvard Business Review*, June
- Porter, M.E. (1988), “Michael Porter on Competitive Strategy”, Harvard Business School Video Series
- Pressey, A.D. and Mathews, B.P. (2003), “Jumped, pushed or forgotten? Approaches to dissolution”, *Journal of Marketing Management*, vol. 19, no.1/2 pp.131-155
- Van Grunsven, L. and Smakman, F. (2005), “Industrial restructuring and early industry pathways in the Asian first-generation NICs: the Singapore garment industry”, *Environment and Planning A*, vol.37, no.4 pp.657-680
- Wreden, N. (2005), “From OEM to OBM: crossing the chasm”, Available at: www.fusionbrand.com/pdf/from_oem_to_obm_crossing_the_chasm.pdf
- Wilson, I. (2005), “The Bentley Brand”, *Marketing Review*, vol.5, no.3
- Wilson, I. (2006), “International Marketing Content, Process, Issues and Emphases”, International Marketing SIG Conference, Staffordshire University, November 29 2006 Available at <http://www.academyofmarketing.org/academypdfs/AM%20IM%20SIG%20workshop%20proceedings%20291106.doc> (Accessed February 3 2010)
- Yang, Y. (2006), “The Taiwanese Notebook Computer Production Network in China: Implication for Upgrading of the Chinese Electronics Industry”, Personal Computing Industry Center, University of California Irvine, USA, February 2006, Available at: <http://pcic.merage.uci.edu/papers/2006/TaiwaneseNotebook.pdf> (Accessed April 29 2010)
- Yang, Y-R, and Hsia, C-J, (2007), “Spatial clustering and organizational dynamics of transborder production networks: a case study of Taiwanese information technology companies in the Greater Suzhou Area”, *China, Environment and Planning A*, vol. 39, pp.1346-1363
- Yeung, H. W-C. (2007), “From Followers to Market Leaders: Asian Electronics Firms in the Global Economy”, *Asia Pacific Viewpoint*, Vol.48, no.1, pp.1-25