Supply Chain Management in China

Feedback Report for Firms Participating in the University of Bath 2003/04 Survey on Supply Chain Management in China

UNIVERSITY OF BATH
SCHOOL OF MANAGEMENT

Markus Eberhardt
Julie McLaren
Andrew Millington
Barry Wilkinson

The research on which this report is based was generously funded by the UK's Engineering and Physical Science Research Council

EPSRC
Engineering and Physical Sciences Research Council

Contents

Section 1: Introduction and Organization of the Report

Introduction

Back in the 1980s most UK and US firms were learning lessons on supply chain management from the Japanese. JIT, TQC, and close and collaborative buyer-supplier relations were implemented. But it was not as easy as many thought. At the time John Parnaby was manufacturing director at Lucas Aerospace – one of the early movers in the UK in the application of JIT and partnership sourcing. It took him years, and he described his experience as a 'balls aching process'. So how much more difficult might the successful application of advanced supply chain management practices be in China – where problems of both development and transition could pose obstacles?

The whole aim of our research was to gain an understanding of the potential for, and the problems associated with, the establishment of successful sourcing and supply chain arrangements in this environment. Our objective was to provide firms with an understanding of the problems that might aid them in the formulation and implementation of successful supply chain strategies and practices in China.

When foreign firms establish manufacturing activities in foreign lands one of the key issues to attend to is the successful sourcing of components and raw materials. Building a supply base in a foreign country in an era when delivery and quality considerations are paramount is no easy task, and when the foreign country is a transitional and developing economy the difficulty of the task may be redoubled.

So what are the key problems of sourcing for a manufacturing venture in China? What measures are firms taking to overcome the problems they face? What policies and practices will lead to productive and successful buyer-supplier relationships?

This document reports on the findings of our research into the sourcing strategies and supply chain management practices of 49 UK-invested manufacturing enterprises and 26 US-invested enterprises in the People's Republic of China. The report, which is exclusive to those organizations participating in our research, documents supply chain policies and practices, pin-points the commonly occurring problems in successful sourcing and supply chain management, and discusses the responses of firms to those problems.

Our report does not pretend to offer simple universal solutions to supply chain management problems in China, but it will help you develop your understanding of the nature of the most commonly faced problems, and you should be in a better position to consider the practical measures you might take to deal with them. The report will enable you to:

- place your own supply chain management policies and practices against those of other participating firms
- compare the key problems faced by other firms with your own
- consider the responses of firms to key problems faced

In so doing, we hope you will be in a better position to develop your own supply chain management policies and practices in ways that lead to successful sourcing arrangements.

Organization of the Report

The report is organized into eight parts. The following brief description of content will enable the quick location of our commentaries in areas of specific concern to you.

Following from this introduction, *section 2* uses a two-by-two matrix in order to examine and explain the forces for and against component localization. The focus is on both the external and firm-specific forces that condition the choice to import or localize supplies. Some of these forces are discussed at greater length in later sections of the report.

Section 3 takes up the issue of supplier search, and discusses means and methods by which potential local suppliers can be best located in China. It will also provide some statistics on the actual performance and characteristics of present supply relationships (by supplier ownership).

Section 4 examines the specific issue of parent-subsidiary relationships, which can work for or against a localization policy, and which may be enabling or restricting with regard to subsidiary management sourcing preferences. Here we comment on practical and institutional measures that might be taken to improve (where desirable) localization prospects.

Supplier management is discussed in *section 5*. Here the key areas in which there are difficulties in managing suppliers are discussed. Problems include 'unprofessional behaviour', reluctance to take on small order volumes, and poor quality control, and in spite of significant investments in supplier development such problems continue. Our findings make it clear that human resource management issues were frequently a cause of major concern, and here we explore problems related to staffing, inter-organizational relationships, and illicit practices. A range of different measures that have been taken by firms to deal with these problems are elucidated.

Section 6 will be of concern to at least a large minority of firms. Here we consider customs clearance processes – a source or great frustration for many – and how some firms have successfully dealt with the problems of non-tariff barriers.

Finally, in *section 7*, we provide a brief summary of the most important findings of our research, with some pointers for future action.

The *appendix* provides a brief discussion of the methodology, followed by some descriptive statistics that outline the composition of the sample firms. These will provide an understanding of the size of participating firms, ownership arrangements, industry mix, and the percentage of imports *versus* locally sourced components.

Section 2: Forces For and Against Component Localisation

Any manager considering whether to source locally or from overseas needs to weigh up a range of factors. Our research enabled us to build a picture of the most important factors in need of consideration for China ventures.

Data analysis revealed a multiplicity of factors influencing the practicality, desirability or possibility of raw material and component localisation in China. Here, we provide an overview of the main factors, some of which are discussed in more detail in later sections of the report. We distinguish between internal and external forces, and between forces conducive to or impeding localisation. External forces refer to circumstantial and/or environmental influences on the China venture, while internal forces are the forces within the China venture and/or its parent firm. The key forces for and against localisation are summarised in table 1, and discussed below.
We feel that it is important to see all the different dimensions playing a role in the sourcing and localisation process in their entirety and to realise (or better remind oneself) that what is happening in practice at the plant-level in China is the result of multiple forces and decisions, some of which are under control of the local management, some of which are decided or shaped by others.

Table 1
Multiple forces in localisation

	For localisation	Against localisation
Internal	▪ Cost savings (price, lead-time, warehouse stock, cash-flow factors) ▪ Localisation policy and/or willingness to develop suppliers ▪ Positive attitude/support toward localisation on behalf of the parent, conducive parent/subsidiary business strategy ▪ Improved communication & increased convenience of interaction with suppliers ▪ Component design authority & testing facilities ▪ JV with Chinese partner	▪ Parent company authority over sourcing (global purchasing agreements, contractual sourcing for JVs, in-house sourcing, HQ mindset, no push for localisation/inertia) ▪ No design authority & testing facilities ▪ Length and cost of internal supplier approval procedures ▪ Purchasing staff issues: incompetence, lack of training, cultural issues, fear of corrupted staff
External	▪ Component is available to desired quality levels ▪ Customer prescription or conditions dictated by customer (e.g. JIT) ▪ Customs issues (incl. duties) make imports unattractive ▪ Keen local suppliers ▪ Trust in and long-term partnership with local supplier ▪ Government influence ▪ Improved local supplier search	▪ Lack of acceptable stable quality levels, linked to lack of QC and production mentality/culture ▪ Lack of component availability: lack of technology, or economies of scale ▪ External component approval authority, incl. customer approval ▪ Customer prescribe overseas source ▪ Supplier short-term business mentality ▪ Fear of IPR violations

Internal forces conducive to localisation

One of the main forces in the drive to localise supplies is the desire to achieve internal cost-savings within the China venture. The majority of respondents confirmed that sourcing locally can mean lower component prices, especially if components have a significant labour content.

Relative proximity of suppliers furthermore has direct cost-savings in the form of reduced inventories, and improved cash-flow due to potentially shorter lead-times and lower safety stock-levels than for items imported. Respondents however noted that some raw materials and highly specialised components were not necessarily cheaper if sourced locally.

The second main internal force for localisation is the influence of an explicit commitment to or policy for localisation by the venture, or more often its parent company. Almost half of our companies stated the existence of this 'mindset' and many among them felt that 'commitment from day one' was a key to successful localisation. In pursuit of localisation some companies stated a greater willingness to train and develop potential suppliers in China than in other locations, most notably 'back in the UK/US'. Whilst adhering to HQ localisation policy, some firms stressed the importance of 'leaving your baggage behind' and making the most of the 'greenfield development' situation in China: to try out new supply arrangements and attempt to persuade suppliers to make greater concessions than could be achieved in the West.

The third major advantage from localisation emerges from improved communication with suppliers and increased convenience of sourcing due to geographical proximity. Respondents stressed the importance of being able to visit their suppliers more regularly, especially during the component development stages, while also noting the convenience of reducing logistical planning requirements by sourcing locally.

The autonomy captured by the China venture with regard to component design and the availability of testing facilities to approve components sourced locally sometimes plays a vital role in the decision to use local suppliers. Design authority at the China venture allows close co-operation with supplier engineers during the component development stage and assures that this process is progressing swiftly and with the necessary flexibility. The ability to test samples from Chinese suppliers in location and subsequently to monitor the quality of supplies may empower the venture to start localisation of supplies. Both design authority and testing facilities are useful tools to further localisation, but naturally they do not automatically lead to increased localisation.

Finally, if the China venture was an equity JV with a Chinese partner, this proved to be a significant force for localisation due to the partner's potential experience with local suppliers. Nevertheless, average localisation rates achieved for the JVs we interviewed were not different from those of wholly foreign-owned enterprises.

External forces conducive to localisation

Two main factors emerge from the research as significant external forces for localisation in China: customer requirements and customs issues related to imports. Regarding the former, respondents stated that their customers expected 'cost road maps' offering alternative local component sub-suppliers for cost reduction. Further, customers dictating close proximity, short-lead times or JIT-deliveries from the China venture were said to create pressure on the latter to hand these requirements down to their own suppliers.

Forces related to customs issues for imported components can be broadly divided in two categories: duty/tariff payments and non-tariff-barriers (NTBs). We present these factors in more detail in a later section of this report.

A number of other external forces, though less frequently raised by our respondents, appear to support local sourcing. Some stated that their company had initially been subject to 'local content requirements' but that these guidelines no longer applied. The majority of companies felt no government influence, although some respondents stated that they preferred to 'align' themselves with the government's 'requirements', which included localised sourcing.
Some characteristics of domestic suppliers are deemed conducive to local sourcing. A number of respondents expressed that local suppliers were keen to co-operate with foreign-invested enterprises and were thus more willing to make concessions on delivery/payment terms etc. Some respondents also felt that Chinese suppliers were more willing to learn than suppliers elsewhere in the world.

Finally, two aspects related to convenient supplier search are also worth mentioning. Firstly, some industries can now make use of professional management consultancies to identify potential suppliers and gain support in the selection/auditing process. Secondly, a small number of respondents mentioned informal networks with customers and even competitors to provide support in the supplier search.

Internal forces impeding localisation

One of the main forces influencing localisation is the authority the parent company exerts over sourcing decisions and company strategy – directly in management decisions or indirectly through company-wide regulations. The application of this authority can have both practical and ideological reasons. An example of the former is the significant number of 'global purchasing agreements' firms are subjected to. Linked to this factor is the practice of contractual sourcing agreements for JVs and prescribed in-house sourcing for some of the China ventures. Contractual sourcing represents a specified contract where the JV in China is committed to buying certain components from the foreign partner. Prescribed in-house sourcing means the China venture sources specified items from the parent company as prescribed by headquarters. Respondents felt that in the majority of cases these two arrangements were sensible and justified, either from a quality assurance and commercial point of view, or because for many 'internally sourced' materials no local alternatives existed.

A number of respondents criticised the mindset of their HQ management with regard to sourcing in China, accusing them of failing to see the potential, 'dragging their feet' over granting the China venture more authority, or not providing the China venture with the necessary investment to excel in the localisation project.

Many respondents stated that the current internal supplier approval procedures would require a significant amount of time and resources, thus making the costs of any supplier changes (including introduction of localisation) somewhat prohibitive. Although every respondent confirmed that they had complete authority to approve suppliers for at least some components (e.g. packaging), in more than half of the firms interviewed the approval procedure for most materials is steered by an overseas MNC division, which also has final say in this regard.

A second internal force potentially preventing successful localisation is linked to the quality and actions of their own local purchasing staff and management. This is discussed in detail in a later section of the report.

Finally, a number of respondents commented that they or their parent company had not yet been particularly proactive in pursuing localisation. In most cases, however, this was the result of the relatively recent setting up of the China-venture, or informed judgement not to pursue localisation based on industry-internal information and parent firm business strategy.

External forces impeding localisation

The main reason given by companies for not sourcing from local suppliers is the lack of component availability. Some items, most notably some types of raw materials and specialised high-tech components, are simply not on offer in China since they are not being produced.

The most important obstacle to local sourcing, however, was the lack of acceptable quality levels, which more often than not was linked to the lack of appropriate quality controls (QC) in production. Furthermore, if suppliers were able to reach required quality levels, they often were not capable of maintaining a consistent level of quality over time, which again is linked to inadequate QC. (The underlying this factor are discussed below.) ISO certificates were overwhelmingly dismissed as 'meaningless' in the Chinese context, since suppliers could get their hands on these 'in some dark back alley'. As a result, many companies dealing with Chinese suppliers implicitly agreed with one respondent who felt he had to behave like a 'trained ninja', always checking on the supplier's activities, and always ready to expect a vicious blow from one of his suppliers in the form of a sub-standard or late delivery.

A third force potentially impeding localisation efforts is linked to external component approval authority. Some manufacturers face strict global product standards, which may mean that a change of component supplier will require the end product to be resubmitted to the responsible authorities such as TÜV or Lloyds for approval. Similarly, the customer requirement to approve all supplier changes (through product sample approval or plant audit), or prescribing overseas sources was presented as another strong force in sourcing. A number of respondents experienced Chinese customers' expectations of a small share of imported components in the final product: it was suggested that these customers felt that high quality was still inevitably linked to at least some foreign content, regardless of competitive local sources.

A significant number of respondents stated that their choice of supplier was significantly constrained by their low order volumes. While in most cases this represents an internal dilemma for the manufacturer, which it could face anywhere in the world, some respondents did specifically lament the short-term and domestic-market view of suppliers in China. They found it difficult to convince suppliers to take on small orders, especially if co-operative product development was necessary, regardless of the long-term potential of becoming a global lead supplier for the parent company of the China venture or the wider global industry in general.

Some firms felt it necessary to continue to import a number of components purely for strategic reasons, e.g. to maintain a dual-sourcing arrangement. While the majority of respondents rejected single-sourcing from suppliers in China, few of them had to adopt the above measures to ensure multiple supply sources.

Finally, some respondents expressed caution regarding the transfer of components to domestic suppliers due to fear of intellectual property rights (IPR) violations. Most firms have not had

any hard evidence of suppliers passing on component drawings or material formulas, but admitted that there was at least some suspicion in this regard.

Managerial Implications

Clearly there is no ‘right’ or ‘wrong’ level of localisation. Rather, a range of forces internal and external to the firm must be taken into account in determining optimum levels. The discussion of forces in this section will hopefully help participating firms in the analysis of their localisation decisions.

Section 3: Supplier Search and Supplier Performance

In most firms participating in the research we were able to carry out a second interview to establish the current sourcing practices with one, two or three supplier firms in China. We asked sourcing staff to give their views and perceptions of the relationship with specific suppliers, covering issues of performance, expectations, mutual investment etc. This has produced a total of 175 sourcing relationships between our sample firms ('buyers') and suppliers located in China (including both foreign-invested and indigenous supplier firms).

In the first part of this section we report on the findings from answers to questions about supplier search among the 175 supply relationships, together with the strategies and perceptions expressed by the senior managers. The second part will then focus on the characteristics of local suppliers in China.

Supplier Search

In our interviews with senior managers we asked respondents to evaluate the importance of a number of channels as to their usefulness to identify new suppliers. We applied a scale from 1 to 7 (1=very important, 7=not important) – the average scores are presented in Table 1.

Table 1
Supplier search: senior managers' perception of various search channels

Description	*Average Scores*
Personal connections	2.4
Internet	2.7
Trade fairs	3.2
Trade press	3.5
Adverts/invitations of interest by the supplier	3.9
Business Associations	5.0
Chinese Government Bodies	5.2
Logistics service providers	5.5
Management consultants	5.7

Senior managers in particular find two channels for supplier search very important: firstly, the network of personal connections (*guanxi*) that sourcing staff, but also other employees at the firm, possess. Many respondents would elaborate that they or their staff had considerable experience in the industry and were therefore able to dip into a wide network of contacts to quickly establish a potential supplier for a certain component. Some managers, mostly those from a western background, stressed how beneficial personal connections can be. For example:

> 'They talk about the old-boy-network in the UK, but in China it is phenomenal! Even young people have "connections"! They keep up connections with the people they went to university with, they stay in contact… So we get four or five bright, young people, people working in the factory, people working in the sourcing department, and most things that will come up, they'll say 'I had a classmate who went into that line of business' and we'll get something, we'll get a good lead.'

Personal connections are not just limited to Chinese people: many of the expat (UK, US) managers noted that they had established personal networks in China – these networks were with Chinese people and other expats, in some cases even involving senior managers from competitors.

There was however some difference in the evaluation of 'personal connections' between US and UK firms: the former attached lower importance to this search channel (average 2.9) compared to the latter (average 2.2) and chose the internet as the most useful tool to identify new suppliers (average 2.3 for US firms, 2.8 for UK firms). The internet is useful for a great deal of firms in our sample, but many of them decided to rate its importance somewhat lower, since in many industries the most price-competitive suppliers are often not present in cyberspace, they have to be found and fostered.

The two remaining channels with consistently high scores were trade fairs and trade publications, which in some industries (e.g. chemical) include price-lists for raw materials.

The above pattern of search channel importance is reflected in an analysis of the proportion of firms selecting 1 or 2 (=high importance) for this question: 58% of senior managers attach high importance to personal connections, 51% to the Internet, with 44% and 41% for trade fairs and trade press respectively. The next highest channel (adverts, invitations of interest by the supplier) is a distant fifth with merely 20% high scores.

Table 2
Supplier search: sourcing staff's explanation of how the specific supplier was found

Description	*Percentage*
Supplier is HQ- or customer-recommended/prescribed	21.7
Supplier identified through network	18.3
Supplier first approached us	14.9
Found supplier at a fair/ in the press/yellow pages	8.6
Found supplier through the Internet	6.3

Note: In the percentage share of total replies we do not count those (18%) for which the respondent did not know how the supplier was identified.

In our interview with members of the sample firms' sourcing staff, we also enquired how each of the 175 supply relations with local manufacturers came about. This gives rise to a somewhat different picture, presented in Table 2. Identification of suppliers through a network of connections (personal connections, current suppliers) accounts for a high 18% of all supply relationships investigated, but an important type of identification emerges which we did not include in our original set of channels: parent company or customer recommendation/ prescription, which accounts for around 22% of all current supply relationships. The vast majority (84%) of the supplier firms thus identified are foreign-invested – in most cases WOFEs with which the parent company/customer will have had previous supply relationships in countries other than China. Suppliers approaching our sample companies introducing themselves and their product (we referred to this as 'invitations of interest' in table 1) were found to account for a sizeable 15% of all supplier identification channels – it is interesting to note that 60% of the suppliers thus identified were private Chinese enterprises.

Clearly, our results confirm the importance of personal connections in an environment characterised by limited access to information about potential suppliers, caused in part by the sheer size of the country and also the failure of many suppliers to market themselves through ways typical in the West (supplier manuals, internet, direct marketing, fairs). This is however not the only way to identify suppliers in China: some supplier firms (and our analysis established that private Chinese firms are particularly strong in this regard) are approaching the companies in our sample directly to present their own firm and products. Furthermore, the non-Chinese form of personal connections (intra-parent company recommendation/ prescription or customer recommendation/prescription) proves even more decisive for supplier identification than the Chinese variety (*guanxi*).

Supplier Performance

We analysed the 175 sourcing relationships in our sample in relation to our sample firms' ('buyer') satisfaction on a number of indicators. Here we compare and contrast perceptions of supplier performance according to ownership type. These findings represent averages, which were then analysed for statistical significance, so that the short statements made for each ownership type are based on statistically sound comparison with all other types of suppliers.

- *State-owned suppliers (SOEs)*

Although their influence has been reduced over the last decade, state-owned enterprises still represent an important source for components in China: supplies from SOEs on average have a higher impact on the performance of the buyer-firm's end product than those from any other type of local supplier and component specs are relatively more complex – that is to say: supplies from SOEs are of relatively high importance.

It is difficult for our sample firms to identify alternatives to supplies currently sourced from SOEs, while the latter are on average least dependent on the buyer firm in comparison to all other types of suppliers.

Highly significant results were found with regard to performance of SOE suppliers: they were on average the worst performers, both in terms of component quality and delivery timeliness, a finding underlined by the highest rejection rates (7.5% of all components delivered) and rates for late delivery (13%). On top of this, the relationship with SOE suppliers was described as more difficult compared to other types of suppliers, and it emerged that SOEs cared least about the buyer firms and on the whole were the least satisfying supplier type.

Sourcing from SOE suppliers, however, has to continue until appropriate alternatives emerge. Although many senior managers spoke of some very good relationships with SOEs, it is not surprising that on the whole SOEs are still considered rather unsatisfactory in their performance and conduct, although sourcing from them will have to continue for the foreseeable future, due to lack of viable local alternatives.

- *Private Chinese Suppliers*

The judgement of current supply relationships with private Chinese firms is in stark contrast to that of SOEs. Components sourced from private Chinese enterprises were on average less important than those sourced from other types of suppliers. However, with regard to performance and relationship, private Chinese suppliers came out head and shoulders above the other types. We found that on average, buyer firms were *least* likely to invest into a relationship with a private supplier, although this type of supplier was *most* likely to make investments in the relationship themselves.

Private enterprises were perceived to be at the top of the performance league table, with the highest rating of 'customer' satisfaction by purchasing staff interviewed. Relationships with them displayed on average greatest depth, leading to more frequent exchange of information and higher likeliness of cooperation.

Private suppliers emerge as the always-willing, hard-working source of components, but it is important to bear a number of issues in mind: firstly, their capabilities are limited compared to

SOEs or foreign firms. Secondly, our results may be biased, in that the current private suppliers are the most capable ones, while in reality a buyer firm is faced with a great deal less keen and less co-operative private suppliers which are not selected or dropped as suppliers after a period of time. Thirdly, private supplier are also subject to most significant levels of control from buyer firms (stocks, quality processes etc.), hence the high performance scores may be the outcome of high involvement and commitment on part of the buyer firms' staff and management.

Among indigenous Chinese suppliers a clear distinction emerges between private and state-owned suppliers. Despite the above matters raised, it appears that private Chinese suppliers are more likely to be converted into successful partnership sourcing suppliers – they are more keen to learn and develop their capabilities, and due to a certain dependency on the buyer firm are often more willing to make concessions in price or delivery terms, or to make considerable investments in this specific buyer-supplier relationship.

- *Wholly foreign-owned suppliers (WOFEs)*

Surprisingly, wholly foreign-owned suppliers were perceived to be have the highest levels of dependency on buying firms. This could be linked to the fact that many of these WOFE suppliers are parts of MNCs which have partnerships with our sample firms' parent company all over the globe.

This aside, the performance of and ease of relationship with WOFE suppliers has created results which are usually situated in the middle of the scales – it seems that relationships are not close, performance is acceptable, and the relationship on the whole is satisfactory…

- *IJVs*

The relationship with IJV suppliers is often very far away from a 'partnership sourcing' arrangement: there is on average less investment made by IJV suppliers, information exchange and training efforts are rather limited and on the whole the buyer firm has lower control over production and management processes than for other ownership types. Interestingly, joint ventures display some of the negative characteristics stereotypically attached to SOE behaviour: they seem to care less about the buyer firms than WOFEs or Private Chinese companies, and are also least knowledgeable about their own products.

Despite some difficulties with IJV suppliers and the perception of their performance as not being significantly different from that of Private or WOFE suppliers, our analysis established that supplies sourced from IJV firms in China are least likely to be rejected on grounds of quality. The rate of 1.6% for IJVs compares favourably with the average of 4% for all supplier types, and in particular with the high of 7.5% for SOE suppliers.

In conclusion, IJV suppliers seem to represent 'finished suppliers', and as a result the relationship with them appears to be relatively 'hands-off'. It should be noted that to our surprise we found that although the components sourced from IJVs were of consistent quality, IJV supplier staff were perceived to be lacking deep knowledge about their own products.

Thus, to our surprise, we had to find that in terms of performance, ease of relationship and reliability, foreign-invested firms (IJVs, WOFEs) were found to be evaluated *between*, rather than *above*, the two types of indigenous suppliers. This is somewhat in contrast to the

statements by senior managers, and in many cases by the sourcing staff responding to our second questionnaire themselves, who suggested that they generally favoured foreign-invested enterprises as good quality suppliers. There are two issues worth noting here: firstly, this contrast could be the outcome of a stereotypic, but out-dated perception, where foreign-invested suppliers were equated to top quality and performance, while any type of Chinese enterprises were rated as inferior in comparison. Our research would thus suggest that while the stereotype persists, actual practical experience has somewhat changed.

Secondly, the relationship with both IJVs and WOFEs is characterised by a relative 'hands-off' approach on behalf of the buyer firm, where the supplier pretty much gets on with production and the buyer need not make any investments or even influence the supplier's production process. The high regard for Private Chinese suppliers might be the outcome of considerable investments and efforts exerted by both parties to develop partnership relations – pretty much a 'hands-on' approach…

Section 4: Parent-subsidiary relationships

The main purpose of this section is to make the China and corporate management aware of the impact the parent company may exert on the subsidiary's practices and strategies, to show the different areas where the link may stifle or even endanger progress and to offer some suggestions how to improve the situation.

The individual plants in our study are not acting in isolation, but are part of an international network of firms with a corporate headquarter acting as the nerve centre. We refer to the link between the centre and the China plant as the 'parent-subsidiary relationship', and this section discusses the benefits and obstacles within this relationship on developing and practicing successful sourcing arrangements in China. The data on which our deliberations are based are a mixture of measured perceptions and comments made by senior managers, and some 'practical evidence' from our investigation of existing supply relationships.

The vast majority of the China ventures we interviewed were carrying out a considerable share of their component and raw material sourcing from China, i.e. they were actively involved in and to a certain extent controlled the whole process from search for potential suppliers to day-to-day management of existing supply relationships.
We asked senior managers to evaluate the decision-making power carried by the China operation, i.e. not necessarily by one manager or office, but by representatives based in China as opposed to managers at regional or global headquarters. On average the respondents considered their China operation to carry considerable autonomy in making decisions related to sourcing. On a scale of 1 to 7, where 1 represents full autonomy and 7 no autonomy at all (in relation to the parent company), the following average scores were awarded:

- Supplier selection 2.2
- Price Negotiations with suppliers 2.5
- Supplier Monitoring & Training 2.2

All averages are well above 4, the score which would represent a balanced decision-making power between parent and the China operation. Prompting managers about their supplier approval, management and development practices revealed that their reply represents a balanced assessment, taking into account that they possessed full autonomy for the sourcing of certain components, while either making decisions in co-operation with HQ or submitting to HQ decisions for other components.

As mentioned in the 'forces of localisation' section above, our research nevertheless found a strong impact of parent company involvement in the sourcing decision-making process at our China ventures. We have grouped the factors into three different 'dimensions' and present them in the following:

- Practical dimensions
- Corporate policy dimensions
- Perceptions and mentalities

Practical dimensions are primarily concerned with the China venture's charter and capabilities. What is the China plant supposed to do, and what not, in the area of sourcing and supplier selection? But also, what are the practical tools conducive to the supplier approval and management process being a smooth affair?

Many companies have told us that 'component design authority' at the China venture is very useful and convenient during supplier search and development, in particular if components are designed in co-operation with local suppliers. This capability allows the China venture to make design alterations without consulting an engineering or R&D unit overseas, thus saving time and resources as well as providing the venture with greater flexibility and rapid response capability. Equally, the existence of functioning testing facilities or a laboratory in China is similarly useful to speed up supplier approval or carry out regular checks on supplier quality.
A third practical dimension relates to the competence of sourcing staff in China: adequately trained and experienced personnel can make all the difference in establishing and maintaining successful supply relationships. Working independently, producing reliable reports, and managing swiftly and efficiently, sourcing support staff not only reduce senior management workload, but foster professional management within the firm and in China in general. A later section if the report will discuss HR issues at length – here, for our analysis of the parent-subsidiary relationship, it is important to stress the support from and impact of corporate HQ on achieving the aim to hire and retain professional sourcing staff at the China venture: this can be in the form of a certain budget earmarked for external or internal training, dispatch of sourcing professional from HQ or other overseas subsidiaries to carry out staff development, invitations for senior sourcing staff to visit other plants within the parent firm, or just the recognition that current competencies at the China plant are not up to the desired standard, and that as a result sourcing performance may be not as expected or senior management in China may need to be much more involved in day-to-day management than would be expected in the West.
With regard to all of the above practical factors, it is important for the subsidiary management to assess the practices within their venture and to establish why the current status quo persists! Managers at headquarters should be open to make the same assessment from their point of view and to compare their findings with the China management. This exercise will not only clarify the practical dimensions of successful sourcing, but will also address the policy dimensions and points of friction derived from perception or stereotypes.

Policy dimensions refer to the sourcing strategy within the parent company in its impact on the China venture. We would argue that in many cases, despite all expertise and experience at global headquarters, the senior management based in China has potentially the best understanding of the sourcing requirements (quality) of the component, the capabilities of suppliers in China (performance, professionalism, trust and relationship), and the commercial terms and conditions achievable (price, service).

It is therefore important to assess the various policy dimensions which affect the sourcing process in China. Firstly, the parent company may not have a consistent localisation strategy, or if it has a strategy, this was set up by engineers and managers at head office, neglecting the difficulties faced and opportunities offered on the ground in China. It is important that a clear and consistent sourcing policy and localisation strategy is developed in cooperation between headquarters and staff at the China plant – targets are to be set for specified periods of time and regular reviews to check on progress and to analyse the reasons for failure to reach the target.

A second sourcing strategy dimension strongly influenced by HQ is the existence of global purchasing agreements or prescribed suppliers (also through AVLs – approved vendor lists). These agreements are usually of great advantage for the corporation as a whole, and often also for the China venture, since they may guarantee a good price from a reliable, usually overseas source (the link between 'consistent quality' and 'overseas supplies' was mentioned by almost

every senior manager, and in particular junior sourcing staff seemed to take this as a golden rule). When we collected information on supply relationships between our sample firms and local suppliers, almost a fifth of the actual relationships were initiated by the buyer's corporate headquarters. However, if global sourcing arrangements negotiated by HQ staff turn into a straight-jacket for the China venture, if excellent local sources are dismissed in favour of second-best imports merely because these are HQ-dictated, or if the local representative for the global supplier is difficult to manage and does not offer such a great deal after all, the China management should raise these matters of concern with corporate management to provide an alternative view 'from the field'.

Perceptions and mentalities are important factors in the sourcing process, since they have a strong impact on the practical and policy dimensions of local capabilities and plant charter as a whole. Our research confirmed that for a considerable number of firms' HQ managers' perceptions about China and its (sourcing) potentials were at times deviating strongly from reality and/or were not evaluated in light of the various problems experienced by the China venture (e.g. lack of capabilities, different supplier mentalities). Here are two quotes to show the range of these perceptions:

> 'The "CEO-syndrome": a senior manager from the UK gets off the plane, has one look at China, and thinks 'there MUST be a huge market for us here…' It's easy to be overwhelmed by the opportunities, but the challenge is not to go overboard in the process!'

> 'I have difficulties getting the UK headquarters to invest more money in my venture here in China, or even just to come and visit the plant! As far as I can see, the Asia division of our enterprise is making a lot of money for the group, but the UK management still see China as a weird and backward place.'

Regardless of whether the expectations are too high, or the opportunities are not realised, the misconceptions about China and its sourcing potential fostered by HQ managers is a source of considerable frustration to some of the China ventures in our sample.

It is conceivable that misconceptions easily translate into sub-optimal policies and strategies, for instance failure to invest in training, failure to shift more autonomy, or exaggerated localisation targets. In order to attack deep-seated misconceptions, it is important for both sides to communicate in a manner of openness and honesty, carrying out co-operative exercises to establish the expectations fostered and to develop a better mutual understanding. Most senior managers interviewed were confident that they themselves had a good rapport to corporate management, although many admitted that there were misconceptions/ misunderstandings on both sides about aims and targets. Some firms felt it would aid mutual understanding if sourcing staff fostered direct links to engineering, R&D or global sourcing staff at HQ – this particularly raised the levels of trust within HQ for the capabilities of staff at the China venture… or revealed the lack thereof, implying the need for staff development. In some companies, this link between China sourcing staff and HQ was developed through personal visits to the UK/US or by HQ staff to China. As a result, many respondents noted that their staff were now more willing to consult HQ with a particular problem (since they had been personally introduced), while in return HQ seemed to be more willing to put trust in the China operations sourcing activities.

From our above deliberations we derive a number of recommendations how senior management at subsidiary- and corporate level may want to progress to secure the most appropriate strategy and level of autonomy in sourcing decision-making at the China venture.

Recommendations for subsidiary management

- Investigate the China venture's practical capabilities (staff, equipment) and approach to issues such as supplier development; raise issues that need clarification with HQ and lobby for staff training and development, support in supplier development, design-authority and/or better technical facilities if this is deemed beneficial
- Investigate HQ guidelines and procedures regarding the sourcing process (why are they there? are they appropriate in China?); communicate findings to HQ and indicate issues that need clarification/further discussion; lobby for increased autonomy in sourcing decision-making if this is deemed beneficial
- Be aware that decision-making power at the China plant and trust of HQ managers has to be earned by success stories and good relationships between parent and subsidiary
- 'Leave your baggage at home': make the most of operating in an emerging and volatile supply environment, recognise the benefits not available elsewhere, but also the limitations of the supplier base and its business practices. Never submit to the phrases 'we don't do it like this elsewhere in the world' and 'we will never be able to achieve this here'.

Recommendations for corporate management

- Develop a specific localisation policy for the China venture, outlining which components are to be localised and which not, together with a justification for each decision – communicate this policy to the China venture and ask for their feedback; set expected targets, and introduce a review process to monitor progress.
- Investigate practical matters influencing localisation: does the China venture have the capabilities to localise components (e.g. testing facilities, manpower, expertise)? Do these practical dimensions have the same impact on progress as in the West, and if not: what are the obstacles? Show willingness and provide support for local supplier development, especially if there is a potential for sourcing from China for global operations. Allow for sub-optimum performance of the China venture during the learning process.
- Reassess the long-term parent firm strategy based on an investigation of the potentials of sourcing from China for global operations (low, medium, high) and determine investment in capabilities at the China venture accordingly.
- Be willing to accept recommendations from subsidiary management – if subsidiary management is not deemed knowledgeable enough, train or exchange them.
- Recognise whether the corporate management's view of China and its local supply environment is appropriately objective or maybe overly enthusiastic/pessimistic. Similarly, evaluate 'expert opinion' given to managers at HQ: have these experts visited China frequently or just a number of times? Do they speak from experience or hearsay? What was their exposure to manufacturing outside the 'industrialised countries' of the West?
- Allow subsidiary management to try out new things or strategies not viable in the 'Western' context and leave them enough time to establish some results. Doing things 'differently' does not have to mean doing them worse!

- Do not solely rely on one senior expatriate manager's judgement, since it may be jaded, but encourage functional managers at the China venture to report to (regional) HQ divisions as well as to their local line manager.
- Try to improve communication with the China venture management and thus the understanding of the Chinese sourcing environment: carry out conference calls or maintain frequent email contact, send expert sourcing engineers to visit China and report back to corporate management.

Section 5: Supplier Management

In this section we examine the intentions of firms with regard to relationships with suppliers, and report on the problems of establishing arrangements that make the desired relationships work.

Supplier Relationship Ambitions

Almost all firms expressed the need and desire to establish partnership sourcing arrangements with locally based suppliers. This was reflected in the long-term expectations expressed by interviewees, and concrete evidence of the pursuit of partnership arrangements was revealed in the willingness of firms to invest in relationships with suppliers.

Long Term Expectations

From a total of 175 supplier exemplars (an average of 2.33 per buyer firm) long-term relationship expectations were expressed by the buyer firm in the great majority of cases. On a scale of 1-7 (1 = strongly agree; 7 = strongly disagree) the mean scores in response to the questions related to future expectations were as follows:

We expect our relationship with this supplier to last a long time = 2.32
Both parties expect this relationship to last a long time = 2.54

A long-term relationship was expected with 144 suppliers (82.3%) of the total sample of suppliers. A short-term relationship was expected in 13 cases (only 7.4%) and in 18 cases (10.3%) the future of the relationship was uncertain. Where short-term or uncertain relationships were reported, the reasons given were almost invariably to do with perceived poor communication and lack of commitment to the relationship on the part of the supplier. Typical complaints were ‘lack of openness’, ‘lack of frankness’, ‘difficulty in answering questions when things go wrong’, ‘lack of commitment’, and ‘we don’t feel the supplier cares’. Notably, while problems of poor supplier quality and delivery performance and underdeveloped technical competencies were often expressed by interviewees, these were never *in themselves* the reason given for breaking a relationship. Rather, it was typically the supplier’s failure to communicate problems and act on them over a long period of time that took buying firms to breaking point.

Investments in Buyer-Supplier Relationships

In addition to asking questions about length-of-relationship expectations, we also asked questions about the extent of buyer and supplier investments in relationships. Here a large number of firms had made investments in the supplier in areas such as special production equipment to meet the specific needs of the buyer, the restructuring of production processes to meet buyer needs, and storage and transport facilities to meet buyer needs. Investments in one or more of these areas had been made by 66.1% of buyer firms. Further, evidence of joint cooperation in the development of production and delivery routines and in quality assurance was provided in the great majority of cases. This frequently involved buyers sending staff to

suppliers to deliver training programmes and to help with specific delivery and quality problems arising, particularly in the early months of a relationship, and often as part of a supplier auditing or ISO accreditation process. Suppliers similarly often made special investments to meet the needs of the buyer by carrying out product adjustments, investing in special production equipment, and restructuring production processes.

But while our evidence suggests long-term 'partnership' intentions among the sample firms, making partnerships work is not necessarily easy, and serious problems in establishing well-functioning relationships were widely reported. Analysis of the data suggested three broad (and over-lapping) categories of 'barrier' or 'obstacle' to partnership sourcing. These are: staffing and labour market problems; buyer-supplier relationship problems; and problems of corruption.

Staffing and Labour Market Problems

A recurring theme arising from interviews with senior managers was problems in the recruitment and retention of sourcing and purchasing staff with the desired credentials. Over a third of firms (39%) reported serious problems of staff recruitment and retention, and many more commented on the weaknesses of some of the staff they had recruited. Many firms expressed an in-principle preference to hire staff on the basis of potential rather than existing knowledge and capabilities – 'hire for attitudes, train for skills' as one manager put it. Many of the rest had become resigned to doing likewise because of difficulties in finding staff with the desired expertise and behavioural skills. Typically firms were willing to devote significant resources to staff development, even though they acknowledged the possibility, or even likelihood, that at least some well trained staff might be poached or leave voluntarily. Typical comments were: 'purchasing staff expect promotion twice a year and expect to become a general manager within four years of graduation'; 'everyone wants to be a general manager'; and 'they offer themselves to our competitors after a year or two's training'.

Training for sourcing and purchasing staff was provided in all but three firms studied. In many cases staffs were sent on external courses to develop knowledge and professional skills, and it was not uncommon for junior purchasing staffs to be sent to the parent firm or regional headquarters for both on- and off-the-job training for several months or more.

Problems of recruitment and retention of good quality purchasing staff in China is not a surprise, since scarcity of managerial and professional talent in the PRC has been widely reported in recent years. In part the problem is a legacy of the command economy where industrial enterprises were assigned a production quota at a pre-determined price. Purchasing skills (as with corporate planning, marketing and finance skills) were virtually superfluous. Consequently such skills have been in serious shortage since 'open door' and 'marketization'. The Chinese government has attempted to redress such problems by providing management seminars and specialized training courses, and facilitating the establishment of MBA and other management development programmes, but supply continues to fall short of demand. Other studies have found that the response by foreign firms has been to hire on the basis of potential then provide on- and off-the-job training, and use local executive MBA and other management development programmes, together with overseas study and assignments, in order to develop skills and socialize employees into the corporate culture. Often expert expatriates will work temporarily for local units until Chinese staffs are sufficiently developed to take over. Our own research findings are consistent with these, unambiguously confirming

that such problems apply equally to purchasing and sourcing areas as to other managerial and professional areas.

Staffing problems are not, however, limited to the attraction and retention of scarce skills. In addition to noting labour market problems, in interviews managers frequently reported that purchasing staff 'mentalities' and behaviours were inadequate or inappropriate. Interviewees noted problematic behaviours such as 'reluctance to give opinions', 'don't look ahead', 'lack initiative', and 'don't question things'. The most frequently used phrase regarding staff mentalities was 'lack of analytical skills', a phrase which appeared to capture the essence of a generally perceived problem. One senior manager summed up as follows: 'They're very good at what they do, but (in managerial positions) these pre-programmed people don't show initiative and don't look ahead. It took me two years to teach my Chinese staff to question things'.

Other studies have suggested that such 'mentality' problems may lie in the Chinese education system, which is characterized by lectures with little participation, and learning by rote. This may fit with the commentaries of the senior managers we interviewed; only a small number related the problem to Chinese culture *per se*, and most of whom expressed the view that the analytical skills lacking could be developed over time.

Buyer-Supplier Relationship Problems

At the start of new relationships buyer firms expected suppliers, in the short- to medium-term, to face difficulties in achieving exacting quality and delivery standards, and were happy to invest in training supplier staffs to develop the capabilities to meet those standards. A typical comment was:

> To make sure the plating supplier will meet our standards, we send at least five of our people to the supplier factory every single day to take care of different aspects such as quality, delivery, technical aspects. As an exchange, the QC people from the supplier are normally invited to our plant and to look through all the problems they have here.

But in spite of extensive training of supplier staffs by buying firms, many reported serious problems. Typical comments were:

> Many suppliers don't seem to see a problem in high rejection rates – they are happy to produce lots and lots if only a fraction can meet requirements, and then have staff to sort out the ones to be scrapped. (Firm X) even suggested for this to be done at our site with our staff paid by them!

> Quality is not perceived to be best achieved at source, but the supplier instead produces a product and then sorts out the good from the bad in post-production quality checks.

> Supplies wouldn't show up and upon enquiry we would find out that the supplier had changed the schedule due to some problem which was almost definitely not the true reason without letting us know of the change.

Most of the frustration expressed by buying firms appeared to be a consequence of the lack of reliable information provided by the supplier. Many interviewees expressed frustration at not being provided with truthful and full information on the root of the problem, and therefore experienced difficulties in being able to establish the corrective action that needed to be taken. A typical comment was:

> Even now, with trusted suppliers: misinformation! They tell you what you want to hear! Don't believe them! You threaten them, tell them not to do it again, put a check in place to make sure that it doesn't happen again … but you are always, ALWAYS watching out.

Occasionally, mis-communication and misinformation problems were related by interviewees to the buyer's own purchasing staff, who were believed to have difficulties in probing due to considerations of 'face'. For instance: 'my purchasing staff are not too keen on pushing the supplier to give truthful answers, they feel it's not polite to dig into problems'. More commonly, supplier staffs were blamed, and this was typically related to a 'Chinese mentality' where 'a lot of people don't like to say they can't do things – people promise everything and do nothing'. This mentality was also frequently related to 'face' by our interviewees, though one manager suggested supplier personnel might simply be afraid of the (material) consequences if they revealed the real problems. (He related this attitude to the previous communist system in China, where 'three people are assigned to watch one person', and went on to say that 'unfortunately, through hiding the problem, they create even more serious consequences.)

Whatever psychological and social processes really do explain miscommunications, it seems that more work may need to be done by many buying firms to convince supplier staffs that revealing *real* problems may be of *mutual benefit* rather than an *opportunity to penalize* them. In the meantime the evidence is quite unambiguous in demonstrating that in most cases building relationships of trust between foreign buyer and local supplier is typically a long and difficult process. Training may have a key role in this process within the purchasing firm and equally importantly within the supplier firm. The evidence strongly points to a need for training investments in firms to address not just technical competencies, but also 'mindsets' and patterns of behaviour and interaction.

Corruption

The third barrier to successful partnership sourcing derived is *corruption*. In our interviews we asked senior managers to discuss any problems they had experienced with 'under-table deals', 'backdoor practices', and 'red envelopes' (popular expressions for corruption in China) in supplier relationships. This was because we knew that China, as with many other developing and transitional economies, has a popularly perceived reputation for illegal economic transactions, because *guanxi* relations in China are often associated by China experts (not necessarily correctly) with bribery, and because buyer-supplier relations is obviously an area which may provide opportunities for illicit activities.

While some interviewees felt that bribery in China was now reducing in incidence, almost all expressed the view that 'red envelopes' were still commonplace in China today, and believed that their purchasing staff would be likely to occasionally if not frequently encounter offers of bribes. Responses revealed that 27 out of the 75 firms participating in the study – 36% - had

direct experience of purchasing staff accepting bribes from supplier firms, and another 13 (17.3%) of firms suspected that such illicit activity may be going on. Of those that had not experienced or suspected bribery, 17 had taken pre-emptive action to make 'under table deals' difficult.
(Measures taken in attempts to reduce the incidence of 'under-table deals' are discussed in the next section.)

Interviewees had lots to say when asked about under-table dealings. A typical response was:

> I actually wondered when you would get round to that question because it's a hot topic for purchasing or sourcing in China.

The same manager went on to say:

> I don't think that (X, a materials manager) doesn't have under-table deals, but I don't have any knowledge that he does … but the last sourcing officer was sacked four or five months ago because we suspected this and found some proof. And then we discovered that the previous purchasing manager had made some big deals and had financed his education in Australia through us.

While many firms were well aware that under table deals were going on, exposing and proving their existence was commonly reported as extremely difficult. For instance one firm found out that a buyer was about to get married to the salesperson of a supplier. The account was moved to another buyer because it was felt such a buyer-supplier relationship was inappropriate. It was later discovered that the firm was paying well over the odds for the goods. This looked 'very dodgy', but solid evidence of corruption was not found. Similarly, a senior manager found that 'one part was terribly expensive, I raised this issue for two months, but nobody wanted to touch it. In the end I just said we will change this by the end of the week.'

Because some of the literature on *guanxi* suggests that obligations within personal networks in China take precedence over professional relationships, and because the negative perception of *guanxi* is associated with corruption, we asked interviewees (both senior managers and purchasing staff) about relationships with supplier staffs outside of the workplace. If strong relationships existed, then it could be hypothesized that *guanxi* offers avenues for corruption. But while some managers interviewed did equate *guanxi* with corruption, we found very little evidence of close *personal* relationships between the staffs of buyer and supplier firms. In spite of extensive evidence of partnership buyer-supplier relations, in only around a quarter of cases was socializing outside the workplace reported, and this was quite limited. There was no reporting of close personal relationships between buyer and supplier staffs that went beyond the workplace, and there were no suggestions that close personal relationships were being established. Of course, we cannot conclude that none of the cases of corruption known or suspected by buyer firms did not arise out of *guanxi* relationships (the case of the engaged couple above should put us on guard here) but we have no substantial evidence that the corruption found in buyer-supplier relations in China is of a different nature to that which might be found in other countries.

Overcoming the Barriers to Partnership Sourcing

Having laid down the barriers and obstacles to partnership sourcing in China as uncovered in our research, we now turn attention to the ways in which firms have attempted to overcome those barriers or at least limit the negative impacts of the problems faced.

Beginning with problems in *staffing and labour markets*, the problem of recruiting and retaining local staff of high quality is one which firms have to live with, because the external labour market is not within their control or direct influence. Most firms recruited for potential then invested in learning. Training and development investments (together with paying a competitive salary) were often considered a good retention strategy, though such investments were almost inevitable regardless because of the desire to establish partnership relations with suppliers with a view to developing JIT/TQC capabilities. The alternatives of using expatriates (very expensive) or locating sourcing activities elsewhere (does not fit with partnership sourcing) were occasionally mooted but used only to a very limited extent.

Staffing problems might eventually ease as China invests further in higher education and more graduates become available, but it will take some time before professional and managerial labour markets approach a state of equilibrium. For the moment skilled purchasing professionals are operating in a sellers market.

The response to problems in *buyer-supplier relationship* problems is two-fold. Regarding the competencies and capabilities of local suppliers, investments in training and development of supplier staffs continues apace. It is generally recognized among firms that developing suppliers to a state where delivery and quality capabilities reach the levels of excellence ideally desired is a long-term process, and the great majority of firms studied are willing to continue making the necessary investments. Long-term partnership relationships are desired and expected, and it appears from our evidence that local supplier firms have to perform very poorly over a period time, and repeatedly fail to act on advice from buyers, before they are dropped. The lack of easy availability of foreign-owned suppliers and the expense of importing may reinforce the desire of UK and US MNCs to ‘go local’. Regarding supplier misinformation and miscommunication, manufacturers face serious problems, and have responded by trying to convince suppliers that revealing problems and taking corrective action, rather than living with problems or hiding them, is the best way forward. Poor communication remains, however, a serious problem in many cases, and it seems from our evidence that many Chinese suppliers are not yet convinced that a central tenet of partnership sourcing – sharing problems and working together on their resolution – really will be of mutual benefit.

Responses to proven or suspected *corruption* in buyer-supplier relationships are targeted at both buyer purchasing staffs and at suppliers’ staffs. Purchasing staffs are typically told the consequences of corruption will be dismissal (one manager said ‘My people know I will kill them if any under-table deals are going on, so now they hand the money over they got from suppliers’). Their activities have also been subject to closer monitoring (one firm set up a special secure email system for suppliers to report on any requests for bribes from purchasing staffs). Other popular measures to discourage acceptance of bribes include: purchasing staff job rotation (to prevent the development of ‘cosy relations’); team rather than individual assessments of potential suppliers; ensuring the person negotiating the contract cannot sign the contract, and that the authorizer cannot authorize the purchasing request; and systematically checking prices of components and materials against other potential suppliers.

In addition, staff integrity and professional behaviour standards are often paid attention in training and development activities, and sometimes employment contracts include a clause on honesty and openness. One firm reminds its purchasing of the need to avoid corruption with a sign in the sourcing office that reads: 'no gifts will be given, no offers will be made!' This is targeted equally at buyer staff and the supplier staff who frequently visit the office.

Many interviewees commented that suppliers are decreasingly likely to offer bribes because of the 'clean' reputation of UK and US multinationals. This is because most firms have made it very clear that 'red envelopes' mean contract termination.

In spite of all these measures, corruption in buyer-supplier relations does continue to pre-occupy the senior managers of many UK and US MNCs in China, and there is clearly a long way to go before the problem is brought under control. In the meantime, preventive measures mean higher transaction costs. However, this is one area which is – to a degree at least – under the control of the buying firm. In this area buyer actions are likely to make a difference.

Section 6: Customs Clearance Processes

While the main focus of our research has been on relationships with local suppliers, there is often a need to import certain components and raw materials, due for instance to lack of availability of local suppliers, the existence of global purchasing agreements for some inputs, intellectual property issues, or simply because of parent company policy. But importing components or materials can be problematic, and here the main problem raised in our interviews with firms was customs - specifically non-tariff barriers.

We do not wish to exaggerate the extent of the problem overall, but it is a significant problem for many. Senior managers were asked to indicate the extent of agreement (1 = strongly agree; 7 = strongly disagree) with the following three statements:

Imports are subject to lengthy delays
Imports are subject to stringent technical standards and/or product approval procedures
Administrative costs and import documentation severely impede imports

In response to the statements, 24 out of 75 firms (32%) scored a high 1 or 2 out of 7 on at least one of the questions.

Overall, then, difficulties with customs are not high on the list of problems and issues facing UK and US firms. However, for two sectors customs problems may be acute. These are chemicals and pharmaceuticals, and engineering. Firms from both of these sectors scored particularly highly. Six out of 11 chemical and pharmaceuticals firms in our sample (55%) gave 1 or 2 scores, and seven out of 16 engineering firms (44%) gave 1 or 2 scores. Given the small number of firms in individual sectors we cannot be certain that there is a real relationship between sector and customs clearance problems, but the results are strongly suggestive that this is the case.

Non-tariff barriers to imports of components and raw materials commonly identified included:

> *The length of time it takes to process in-coming goods*: many respondents compared the speed of Chinese customs clearance unfavourably with customs in other countries. One manager commented that: ‘Customs takes time. We calculate two weeks before we get our stuff out. It could be faster, but we are in China …’
>
> *Unforeseen delays in customs processing*: due to the over-zealous and overly-bureaucratic attitudes of some customs officials, or because of different customs offices adopting different practices.
>
> *High administrative costs – especially test fees*: one respondent commented that ‘if you pay the normal fee you will never get your certificate of analysis’.
>
> *The lack of ‘customer focus’ on the part of customs officials*: one manager commented on a ‘you have to rely on me’ attitude. Another said ‘They (customs) don’t believe anything, they always think we are cheating or lying to them’. However, many respondents commented on the ‘extremely professional’ attitudes and behaviours of officials.

Apparently 'random taxation' on imported goods: a few respondents reported different levels of tax depending on the port of entry

Two additional customs issues arising were *problems and delays in gaining import licenses*, and *frequent changes in regulations*. We also asked firms whether there had been any changes since China's entry into the WTO. Here responses varied from no change to much better – which suggests that on average customs clearance problems have to some degree become less prevalent.

Our evidence documents a wide variety of experiences with the customs clearance process. Experiences vary from a very high degree of satisfaction with the process, through moderate satisfaction with some problematic areas, to outright frustration. There are suggestions in our evidence that variations in experiences may be explained in part by variations in the customs clearance process at different ports of entry, and a strong suggestion that some sectors (notably pharmaceuticals and chemicals, and engineering) may face tougher requirements than others. Unfortunately, further research would be necessary in order for us to comment further, with confidence, on these variations.

However, in commenting on the responses of firms to customs clearance problems, we can point to policies and practices that firms might wish to consider in making improvements to their ability to import components and raw materials without unnecessary delays.

Dealing with Customs Problems

In response to problems with customs (and occasionally as a matter of policy on establishment of the China venture) some firms use expert agents for customs clearance. A good agent can improve the process, though not all customs offices allow the use of agents, and this option can prove expensive. Nonetheless, some firms reported the use of agents as a cost-effective solution.

Simply planning for a longer time period for customs clearance is another option adopted by some firms, though this may be considered admitting defeat!

There were three more pro-active responses among some firms in our survey. One was to educate the overseas supplier in the importance of understanding the complexity of customs procedures, and in the precision of documentation required by customs. One manager commented that 'every time they send anything to us from Europe we have them talk to our customs relations guy and check with him what paperwork is needed, and sometimes they even fax him sample versions of the documentation in order to make sure these are filled in correctly'. This process helps ensure strict compliance with bureaucratic requirements, and reduces the likelihood of customs officers uncovering anomalies that can lead to lengthy and unforeseen delays.

A second pro-active response was to put greater effort into supply localization. 16.4% of firms mentioned tariff and/or non-tariff barriers as a reason for local sourcing. Clearly this response is dependent on consideration by individual firms, with regard to individual components, of the transaction costs associated with local *versus* overseas supplies, and will not *necessarily* reduce overall costs or improve overall performance.

A third pro-active response documented was to put greater effort into developing relationships with customs officials. This was through presenting small gifts (e.g. a bottle of *baijiu*, or moon cakes during the mid-Autumn festival) or meals and entertainment for customs officials, or just ensuring company representatives were polite, well-mannered and responsive to customs staff. A few firms have also invited customs officials to their plants so that they can gain some understanding of the production process and the importance of the component or raw material being imported. However, some customs offices have begun to deploy rotation systems for customs officials in order to obviate the possibility of 'too cosy' relationships: if adopted across China then relationship development will be severely restricted. Of course, firms also need to be careful not to 'overstep the mark' in their relationships with officials from the point of view of either the company or the Chinese authorities. No firms in our study gave us any reason to believe they were developing relationships that might go against the policies or expectations of either the company or the Chinese authorities.

None of these responses to problems with customs clearance provide a panacea. All of them may be worthy of consideration.

Section 7: Conclusions

China is a difficult sourcing environment – this is, in short and to many of you rather unsurprisingly - one of the outcomes of our research. The majority of the companies we interviewed felt that they are faced with a range of significant problems in identifying and maintaining local component and raw material supply relationships in China. As we noted in our introduction, the aim of a project such as the one carried out by the University of Bath has to be to establish the current situation across a representative sample of firms, to report on the incidence and nature of problems, and to report on a number of measures applied by certain firms interviewed to reach desirable outcomes – be they stable supply, increased localisation, or more authority in the decision-making process to name just a few examples.

We do not pretend to offer quick-fix solutions or strategies which guarantee your success. Instead, our report is meant to give you an idea of what foreign-invested companies are experiencing across the board in China; and to allow you to analyse at what stage your own firm is compared with a large number of other firms. We would encourage you to use this report to benchmark your own firm against others. In part the report is meant to reassure you, to provoke reactions like 'we are not alone with this problem', 'everybody else is struggling with this as well', or 'finally I can show my bosses at HQ that their expectations are too high… or too low!'. At the same time, it is meant to challenge you to consider some of the ideas practiced by other companies, including those in other industrial divisions: all manufacturers speak the same language, there are just different dialects or varied vocabulary!

We have presented a wide range of issues and findings, and readers of this report may wish to focus on specific issues of particular concern to themselves. But this conclusion is an opportunity for us to pin-point what we see as the 'big issues' facing firms. These are as follows:

- The sourcing practices and strategies at the China venture are subject to internal as well as external forces. Respondents confirmed that unsatisfactory progress in the localisation effort or maintaining successful sourcing relationships are just as dependent on competent staff and adequate organisational arrangements (including parent firm support and localisation strategy) as on good and trustworthy suppliers. The forces for success (or failure) in localisation are internal as well as external to the firm.
- With regard to supplier search, it was established that China ventures had to adopt a typically Chinese way of identifying potential suppliers, by making use of personal connections of sourcing and other staff at the venture. Equally, senior managers themselves (regardless of whether or not they were Chinese) have frequently developed a network of contacts with industry insiders, current suppliers, or even competitors that allows them to overcome the information barrier still present in a large number of industries, and to get a number of potential supplier contacts established swiftly. The internet is becoming a more and more important tool in searching for and approaching local suppliers, although respondents lamented the often exaggerated capabilities by local Chinese firms advertised on their websites.
- We were surprised to find that the firms in our sample did adopt certain common characteristics of supplier management and relationships

distinguishable by the supplier's ownership. Private Chinese enterprises, although still limited in their technological capabilities, emerged as the most rewarding suppliers, meriting the development commitments made by our sample firms with high investments, and generating high levels of satisfaction with performance. However, close control and a long-term strategy, not to mention a somewhat longer period until supply links run smoothly and sustainably, are the price to pay for establishing a close link with this type of supplier successfully. At the other end of the scale, State-owned enterprises were still considered the worst option, but their selection was often inevitable due to lack of viable alternatives. While joint-ventures and wholly foreign-owned companies were often described to us as the most desirable suppliers, we found that they actually fared less well in the evaluation of performance, openness, relationship etc. than private Chinese suppliers. This is food for thought: at the very least, our findings on supplier performance should raise questions about stereotypical views of the capabilities of suppliers of different ownership as expressed by our respondents.

- Many respondents felt that their corporate headquarters' understanding of China and its sourcing realities were somewhat at odds with the true situation as perceived by them. We identified a number of areas (charter, capabilities, autonomy, staff capabilities) which are often directly influenced by HQ decisions, but where frequently little or no analysis or feedback is requested from the China venture. We would therefore encourage both subsidiary and corporate management to carry out a number of exercises to assure that both sides pull in the same direction: to cooperatively develop a sustainable sourcing strategy, to recognise and tackle the current internal barriers to improved sourcing, to clarify responsibilities and processes in the supplier search and selection process, to be accountable and justify or explain decisions, to develop a culture of mutual respect, openness and exchange. It won't do for subsidiary or corporate management to just roll their eyes over the opposite side's decisions or lack of knowledge – the challenge is to foster a better understanding and remedy this undesirable situation.
- While our sample firms expressed a strong desire to enter long-term partnership sourcing arrangements with local suppliers in China, and some also carried out considerable development efforts with local suppliers, there is nevertheless no doubting that our sample firms experience great difficulties in establishing and maintaining successful supply relationships, and therefore act with more caution when entering any new links. We were frequently told that supplier mentalities did affect the level of monitoring and control our firms needed to implement. Consistent quality of supplies represent the greatest challenge, since the quality control and process control capabilities of Chinese firms are often under-developed both from a conceptual and a practical point of view. There is no quick fix solution to this problem, but our evidence strongly suggests that investments in relationships and continuous development activities are likely to bear fruit in the long-run.
- Another challenge for firms is to hire and retain competent sourcing staff in an environment where sourcing professionals are still highly sought after and where opportunities to further one's career in the short-term by switching companies arise very frequently. Hiring based on potential, committing to continuous staff training and development (linked to contractual

commitments), fostering a good work environment and offering clear career paths (and developing succession plans) are some measures companies have adopted to limit their exposure to this problem. For the moment staffing problems simply cannot be resolved with a magic wand. The Chinese professional labour market is not under the control of individual firms. However, the measures that might minimise problems have clearly been laid out.

- Another issue present in the buyer-supplier relationship in China is the potential for under-table deals. While most firms recognise that the business environment in China still allows for such illicit action, they have adopted some simple means to limit their impact or occurrence: separation between sourcing and purchasing functions, team evaluation of suppliers, staff rotation, and increased involvement by the senior manager (although the increased work-load is certainly not desirable) can be enacted immediately while staff training and good practice can lead the way to a sustainable business culture of professionalism and integrity.
- While not a big issue for all firms in our sample, problematic customs clearance procedures that impact on the import of components and equipment are a big enough head-ache for a considerable minority to merit discussion in this report. Knowledge of all the necessary documentation in its appropriate form is probably the single biggest factor for success. Other popular measures include engaging expert agents to handle customs clearance, and developing relations with customs officials in an attempt to develop credibility and trust.

Finally, in this report we have presented a range of findings, and have outlined our opinions, as well as the opinions of managers, on potential ways forward in the search for successful supply chain relationships. We would like to thank you for your participation in the project, and sincerely wish you all the best in your pursuit of best practice sourcing and supply chain management in China.

Shanghai, April 2004

Markus Eberhardt
Barry Wilkinson
Julie McLaren
Andrew Millington

School of Management
University of Bath
Claverton Down
Bath, Avon BA2 7AY
England

Tel. +44 1225 386742
Fax +44 1225 386473

Appendix: Methodology of the Research and Sample Statistics

Methodology

In the following we would like to introduce you to our methodology – how we selected companies, how we interviewed them, and what kind of information was gathered.

This research is based on face-to-face interviews with managers in 49 UK-invested and 26 US-invested manufacturing operations in the PRC between January and December 2003. During our second period of fieldwork in China during April 2004 we carried out further interviews which confirmed the findings collected in the 75 companies on which this report is based. All of the manufacturers are based in the Eastern Seaboard provinces of China, with the vast majority located in the Yangtze Delta (Shanghai, Suzhou, Wuxi), the Beijing/Tianjin area and Guangdong province, thus representing the economically most advanced regions of China. Selecting the companies who were invited to participate was based on the following strategy: we first constructed a database of all the UK firms we could identify in the region and subsequently approached them to participate in the research. Through frequent contact during our fieldwork period, we could then carry out interviews in around 50% of the firms we identified. We then tried to match the UK firms with US manufacturing operations operating in the same industrial division to provide a means of comparison.

In all cases there was an interview with a senior manager, typically the general manager, managing director or plant director. In a few very large firms, the supply chain director or manager was interviewed. The interviews followed a questionnaire which focused on aspects of sourcing strategy and practice, in particular enquiring about problems in finding, approving and managing component and raw material suppliers in China. In addition, this first interview was followed up by interviews with purchasing managers or supervisors, who were asked to provide a detailed account of relationships with one or more specific suppliers in China. This second interview was based mainly on closed questions, where the respondent replied to a given statement by choosing whether they tended more to agree or disagree (usually on a scale of 1 to 7). The intention was to provide us with an insight the current practices in our 75 firms which could be studied by statistical analysis.
In all interviews respondents focused on raw materials and components that are directly fed into the company's manufacturing process, avoiding items such as stationery or office equipment.

The findings we present in this report are thus based on two extensive databases: information from the senior managers, which we analysed closely in order to establish common experiences and policies, and to pick out representative statements and stories; and statistical data on some of the company's current supply relationships, which we analysed in order to establish means, the 'common answer' in our sample, and to find information about certain sub-groups within the data.

Sample Statistics

This section is intended to provide an introduction to the general characteristics of the firms which participated in the research, and to report on the extent of localisation within these enterprises.

We interviewed a total of 75 UK and US-invested manufacturing ventures – 49 UK firms and 26 US firms. 32 of these ventures were joint-ventures (IJVs) between the foreign and a Chinese partner, the remaining 43 were wholly foreign-owned operations (WOFEs). Within the IJVs, the ownership share of the foreign partner ranged from 40% to 97%, with an average of 74%. Based on statements made by senior managers in these firms this majority share usually translates into considerable or even total control over day-to-day management and long-term strategic decisions.

Table 1
Size of the MNC parent companies

	UK firms	US firms	Total sample
Annual turnover: categories	*Percent*	*Percent*	*Percent*
less than £100m	19	10	16
£101m to 200m	12	19	14
£201m to 1bn	14	29	19
£1bn to 3bn	12	24	16
£3bn to 5bn	23	5	17
more than £5bn	21	14	19
Total	100	100	100

We evaluated the size of participating firms using two measures: annual turnover of the parent firm and number of workshop operators at the plant. The former measure indicates the sizes and to a certain extent the global spread of the multinational parent firm – one could argue that smaller turnovers (along the categories we adopted) would suggest a smaller number of subsidiaries, potentially less experience in emerging markets such as China and most importantly less infrastructure and support from headquarters' R&D, engineering and/or global sourcing divisions. Table 1 presents the categories we adopted to divide the sample of firms by parent company turnover. The distinction between US and UK firms shows that the former are more concentrated in the medium- to large-sized categories, while UK firms have a significantly greater share of small and very large parent firms respectively. In terms of the total sample, it can be seen that our firms are quite evenly spread between all categories.

A second measure, evaluating the number of workshop operators in each subsidiary plant, was adopted to get an impression of the firm's direct production activities in China. Operations ranged from a small workshop with two employees to giant plants where in excess of 3,000 operators worked in several shifts assembling products. Although we recognise that some very capital-intensive plants will have highly automated production with a small number of operators and technicians, we nevertheless prefer this measure to the total number of employees at the venture: a considerable number of firms were not merely engaged in direct production but also trading of parent firm materials and products imported into China, or sourcing for global operations of the parent firm outside China – for our analysis of *sourcing for production in China* we therefore prefer the workshop operator figure. As Table 2 shows, once again the spread of the total sample between the various categories is fairly even with this time less marked differences between UK and US firms.

Table 2
Number of production workers

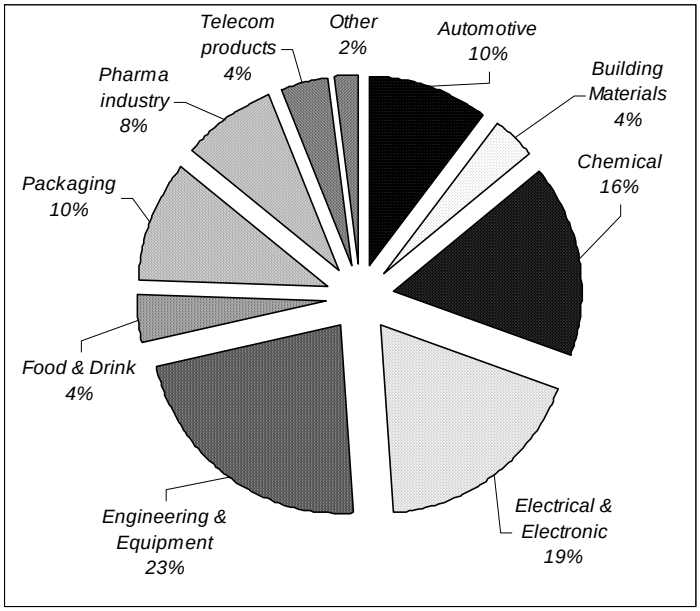
	UK firms	US firms	Total sample
Workshop labour: categories	*Percent*	*Percent*	*Percent*
less than or equal to 25	20	28	23
26 to 100	22	28	24
101 to 200	34	24	30
more than 200	24	20	23
Total	100	100	100

The industrial division of operation has a strong impact on the sourcing practices and experiences of manufacturing companies in China. Table 3 presents the descriptive statistics for division of industry, which is graphically represented in the figure below. As outlined in the methodology section, we first established a representative sample of UK manufacturing operations and then tried to find matching US ventures. Naturally, this was not always possible if US firms in the specific division were non-existent or rejected participating in the research – nevertheless, the proportions for most industrial divisions between US and UK ventures are comparable if usually not identical. It is revealed that in the total sample, three categories are represented particularly strongly – these are chemical companies, electrical and electronics manufacturers, and engineering and equipment producers. Together they account for more than half of the 75 firms we interviewed last year. Another relatively large group of firms were operating in the automotive sector, all of them first or second-tier suppliers to car, truck and engine OEMs in China and for some companies also overseas.

Table 3
Industrial Division of the sample firms

	UK firms	**US firms**	**Total sample**
Industry of operation	*Percent*	*Percent*	*Percent*
Automotive-related	10	15	12
Building Materials	4	0	3
Chemical	16	12	15
Electrical & Electronic	18	19	19
Engineering & Equipment	22	27	24
Food & Drink	4	4	4
Packaging	10	8	9
Pharmaceuticals	8	12	9
Telecommunication	4	0	3
Other	2	4	3
Total	100	100	100

China has often been described as a workshop for the world, first as an export-platform for cheap, low-quality goods, and more recently, as transforming itself into the world's most important global manufacturing base of the future. Our sample of companies reflects the current transition which still bears characteristics of labour-intensive export growth as well as some indication that 'you've got to be present in China!' Nevertheless, while trying to achieve the same quality standards as in Europe or the US, the majority of companies focus on China as the main destination for their products: on average 66% of products are going to customers manufacturing in China. However, one has to bear in mind that some of these customers will subsequently export a large share of their products to overseas markets (e.g. electronics manufacturing services). It is also interesting to note that only 20% of firms we interviewed produce for consumer markets, while 80% supply industrial customers.



The length of operation in China is also an important indicator for our analysis. We asked for two dates: the year the first manufacturing operation was established by the parent firm in China, and the year the present factory was established. While the latter usually represents the time when a certain product was introduced for production in China, or when the China operation was expanded in scale or sophistication, the former can give us ideas

about the potential experience the individual parent firm has in sourcing materials from suppliers in China, or more generally, their operating experience in China. On average, parent firms had operations in China for 6.8 years, while the plants participating in the survey had been established on average 4.9 years ago.

Despite all the differences in industrial division, parent size, plant size etc., it is surely of great interest to the participating firms to get an impression of the extent of component localisation within our sample. We asked the senior manager in each firm to provide us with a figure of the share of components and raw materials sourced from outside China – from this we produced categories of the extent of localisation, which are presented in Table 4.

Table 4
Extent of local sourcing: categories and averages

	UK firms		**US firms**		**Total sample**	
Local sourcing categories	*Percent*	*Ranges*	*Percent*	*Ranges*	*Percent*	*Ranges*
less than 10%	7	24	19	27	12	25
10 to 20%	17		8		13	
21 to 40%	10	22	19	31	13	25
41 to 60%	12		12		12	
61 to 80%	19	55	12	42	16	50
81 to 100%	36		31		34	
Average local sourcing	59%		49%		55%	

Great efforts have been made by the companies surveyed to find suppliers in China and as a result the average rate of localisation across all industries is at 55%. Exactly half of all the companies we interviewed are buying more than 61% of supplies from Chinese sources, a third are even buying more than 81% in China – at the other end of the scale, a quarter are buying less than 20% locally and are thus highly reliant on imports. All of these figures refer to the monetary value of components/raw materials, not to their number or volume.
The average local sourcing share for UK firms is slightly higher than that for US firms – there are proportionally more US firms with very high import shares (localisation less than 10%) and while 55% of UK firms source more than 61% in China, the corresponding figure for US firms is merely 42%.
From our data it appears that likely reasons for lower average localisation rates among the US sample are a higher incidence of 'in-house' sourcing policies and HQ prescriptions regarding non-local supplies for some components.

The capabilities of suppliers in China differ across industries. This helps explain why firms in the mechanical engineering, food & drink and chemical industries had higher rates of locally purchased materials than those in other industries. However this does not imply that sourcing for these firms is simple or less troublesome than for other manufacturers.

We could not establish a link between increased local sourcing and China market focus or length of operation. It is sometimes argued that for firms with products primarily destined for the Chinese market the incentive to source locally is higher – but our analysis did not reveal any pattern in this regard. Equally, the length of operation in China did not automatically translate into a higher extent of local sourcing. While it is conceivable that firms learn over time and increase their local content (this notion was expressed by a large number of senior managers), this does not mean that relatively recent entrants into China will have necessarily

low localisation rates: the learning curve can be extremely steep, with for instance one electronics company localising 99% of their components in the space of 3 years, while certain mechanical engineering firms are only just beginning to look at localisation on a greater scale having operated in China for considerably longer.

It is important to note that while expressing the desirability of locally sourced components, almost every respondent followed this by a comment about the requirement to be firm in regard to the quality of locally sourced components: ‘we won’t compromise on quality!’