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Vierteljahrshefte zur Wirtschaftsforschung

#### **Provided in Cooperation with:**

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Suggested Citation: Shaw, Vivienne; Wong, Veronica (1995): Strategies for Success in the British Machine Tool Market: A Comparative Study of German, British, American and Japanese Competitors, Vierteljahrshefte zur Wirtschaftsforschung, ISSN 0340-1707, Duncker & Humblot, Berlin, Vol. 64, Iss. 1, pp. 103-113

This Version is available at: https://hdl.handle.net/10419/141084

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### Strategies for Success in the British Machine Tool Market

# A Comparative Study of German, British, American and Japanese Competitors

by Vivienne Shaw\* and Veronica Wong\*

#### Introduction

This paper reports the results of an in-depth study of a matched sample of German, British, American and Japanese companies competing in the British machine tool market. In recent years the machine tool market has undergone a number of significant changes and international competitors in the market have performed with differing degrees of success. The aims of this research, therefore, are: i) to compare the strategies and head-quarter-subsidiary relationships of German, British, American and Japanese companies competing in the British market, ii) to determine the common strategies and organisational approaches that are particularly associated with success, iii) to examine the extent to which these strategies are relevant to the continually changing environment of the 1990s.

There is a vast literature discussing the comparative decline of British and American manufacturing industries¹ and the relatively successful achievements of the German and Japanese economies². Researchers have stressed the socio-cultural differences which engender a stronger competitive drive in Germany and Japan³ higher levels of manufacturing skills and productivity⁴ and the supportive financial systems in these two countries which permit a longer term business orientation⁵.

Although many of these studies provide valuable insight into the successful strategies and management practices used by some of Britain's major competitors the lessons that they offer need to be re-examined in the light of recent trends and changes in the European and global business environment. The burden of unification coupled with high labour costs and increasing taxes has opened up a debate, both within Germany and Europe as a whole, about Germany's international competitiveness<sup>6</sup>. Japanese companies too have been experiencing difficulties. A strong currency and falling company profits are threatening Japan's international competitiveness<sup>7</sup>.

The parameters for doing business in Europe are changing. The enlargement of the European Union is leading to a growing tendency for companies to think in European terms. Having a base in Europe is, therefore, becoming even more important for American and Japanese companies in order to be able to benefit from these major changes<sup>8</sup>. However, Europe is increasingly being perceived as an expensive investment location because of high social costs<sup>9</sup>. Britain's refusal to sign up to the social chapter of the Maastricht Treaty provides a cost advantage

which should help her to continue to attract high levels of foreign direct investment. A study of successful marketing strategies of competitors within the British market is, therefore, even more interesting not only for indigenous manufacturers but also for those companies considering investing in this important European market. Furthermore, a study of the British market is particularly useful because of the high level of investment activity there by American, German and Japanese companies. Figures show that, within the European Union, Britain has consistently attracted higher levels of foreign direct investment than her partners. In the last decade she attracted more than 40% of all non-EU investment in Europe<sup>10</sup>. Whilst Britain has been the preferred European investment location for American and Japanese companies for some time, the level of inward investment from German companies has also been increasing, such that in 1993 Germany was responsible for 33% of all foreign direct investment in Britain, beating Japan<sup>11</sup>. As Table 1 shows, America, Germany and Japan accounted for more than 65% of all inward investment in Britain in 1992-1993 and were the three largest sources of investments in the country. Currently there are more than 3,500 American, 1000 German and 200 Japanese companies operating in Britain<sup>12</sup>.

Cross-national comparative studies of successful marketing strategies and organisations have been undertaken by many researchers<sup>13</sup>. These studies have concentrated on American, British and Japanese companies. By

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<sup>&</sup>lt;sup>1</sup> Hayes and Abernathy (1980), pp. 66 ff., Barnett (1986), Wiener (1981).

<sup>&</sup>lt;sup>2</sup> Limprecht, Hayes (1982), pp. 137 ff., Soskice (1991), Kotler et al. (1985).

<sup>&</sup>lt;sup>3</sup> Lawrence (1980), Hamel, Prahalad (1989), pp. 16 ff.

<sup>&</sup>lt;sup>4</sup> Wheelwright, Sasser (1988), Prais (1981).

<sup>&</sup>lt;sup>5</sup> van Wolferen (1989), Dyson (1986).

<sup>&</sup>lt;sup>6</sup> Hoffmann (1992), Sinn, Sinn (1992), Soskice (1991), Shaw (1994), pp. 33 ff.

<sup>&</sup>lt;sup>7</sup> The Economist (1993a), pp. 14, The Economist (1993b), p. 18.

<sup>8</sup> Cassell (1993a), p. I.

<sup>&</sup>lt;sup>9</sup> Cassell (1993a), p. I.

<sup>10</sup> Cassell (1993a), p. I.

<sup>&</sup>lt;sup>11</sup> Evans (1993), p. 12.

<sup>12</sup> Cassell (1993b), p. II.

<sup>&</sup>lt;sup>13</sup> Doyle u.a. (1992), pp. 419 ff., Douglas, Rhee (1989), pp. 437 ff.

Table 1
Investment Decisions and Employment
by Foreign-owned Companies in Britain 1992–1993<sup>1)</sup>

	No. Projects	% Total	Jobs Created	% Total
America	126	41.6	23070	41.0
Germany	51	16.8	16032	28.5
Japan	21	6.9	2036	3.6
1) Invest in Britain Bureau (1993).				

comparison very few researchers have studied German companies. Those that have tended to concentrate on the marketing strategies being pursued in the domestic market<sup>14</sup>.

The lack of comparative research into international marketing is partly explained by the difficulty of making generalisations. Marketing policies are usually tailored to customer needs, competition and distribution systems in individual markets. One consequence of this is that marketing decisions tend to be decentralised with local companies having a high degree of autonomy. In this study all of the Japanese manufacturers, 90% of the German and 80% of the American companies had sole responsibility for marketing decision-making. Studying the marketing activities of successful international competitors in Britain is interesting because the features which characterise successful players are more likely to be open to emulation. This is particularly the case in this research in which the majority of the subsidiaries were managed by British nationals who did not differ in age or background.

#### The Changing Nature of the Machine Tool Market

The machine tool industry was selected for this research because it is a strategically important industry and is considered to be a good reflection of the health of manufacturing in general in individual countries<sup>15</sup>. Over the last century this industry has experienced a significant shift in the dominance of individual countries in the production and export of machine tools (see Sciberras and Payne<sup>16</sup> for an historical overview of the industry). From positions of

Table 2 World Production and Exports of Machine Tools 1992<sup>1)</sup>

	% Share Production	% Share Exports		
Japan	25.0	21.0		
Germany	22.7	27.8		
America	9.2	5.9		
Britain	3.0	3.5		
<sup>1)</sup> American Machinist (1993), pp. 32ff.				

strength the British and American industries have declined dramatically whilst the German and Japanese manufacturers have steadily climbed and today are ranked number one in the world in export and production terms respectively (Table 2).

Japan, Germany and America are currently the world's largest producers of machine tools. In addition, they are the three major sources of imported machine tools in Britain accounting for over 72% of all machine tool imports (Table 3). It is, therefore, particularly interesting to study these countries alongside British manufacturers as between them they account for over 80% of the British market for machine tools.

Table 3
Major Sources of Machine Tool Imports into Britain<sup>1)</sup>

	Imports £ millions	% Total Imports
Japan	139.2	33.8
Germany	117.3	28.5
America	41.2	10.0
<sup>1)</sup> MTTA (1993).		

The machine tool industry is a mature industry with many well-established companies. The rate of technological advancement has though in recent years raised market entry barriers because high levels of investment in both plant and machinery and research and development are essential for long term success<sup>17</sup>. Profit margins have in turn been squeezed which has resulted in many well-known British companies facing increasing difficulties and in some cases closure<sup>18</sup>. Even many German companies which were highly regarded in both their domestic and international markets have been involved in highly publicised strategic alliances and mergers<sup>19</sup>. Japanese manufacturers, whilst still posing a major threat in European markets, have suffered their lowest order levels for many years<sup>20</sup>. Meanwhile there has been a spark of optimism in the American machine tool industry as some companies stage a revival21.

With the emergence of plastics, ceramics and composite materials the need to machine metal is reducing and further improvements in casting technology further reduces

<sup>&</sup>lt;sup>14</sup> Simon (1992), pp. 115 ff., Meissner (1986), pp. 21 ff.

<sup>15</sup> Ashburn (1993), pp. 32 ff.

<sup>16</sup> Sciberras, Payne (1985).

<sup>17</sup> Ashburn (1993), pp. 32 ff.

<sup>18</sup> Baxter (1994), p. 37.

 $<sup>^{\</sup>rm 19}$  Parkes (1994), p. XII, Waller (1994), p. 20, Dempsey (1994), p. 25.

<sup>&</sup>lt;sup>20</sup> Thomson (1993), p. 4.

<sup>&</sup>lt;sup>21</sup> Baxter (1993), p. 37.

the need for machine tools<sup>22</sup>. Coupled with the recession of the early 1990s the competitive nature of the machine tool market in Britain is becoming even more fierce, hence the need for a better understanding of how to compete effectively within this market.

A study of the British machine tool industry can provide useful insights into competition in the wider European context. This is because the British industry is more internationalised with a higher degree of integration than most of her European partners<sup>23</sup>. Although the machine tool industry as a whole is currently not perceived to be global or even pan-European, the trend is towards increasing internationalisation. Furthermore, Britain appears to be leading the rest of Europe out of recession such that the lessons to be learned from the successful manufacturers in this country can be translated into the wider European context.

#### Successful Marketing Strategies

There is much incidental evidence from case studies and business comment that marketing has been a significant factor in the success of Japanese companies24 and that the failure of British and American companies to embrace marketing has been a significant factor in their decline<sup>25</sup>. In a broad-based study of British, American and Japanese companies in the British market Doyle et al.26 found that the Japanese competitors were more aggressive in their marketing objectives and were more market-focused than their British and American counterparts. Anecdotal evidence, meanwhile, suggests that the success of German manufacturers is dependent more on quality products than marketing strategies<sup>27</sup>, however, in a study of successful medium-sized German companies, it was observed that successful German organisations "manage to integrate market and technology as equally important driving forces". This suggests that successful German companies also display a higher level of marketing orientation.

During the 1980s there was an intense debate in America, about the costs of management's preoccupation with short-term profits at the expense of long term strategy<sup>28</sup>. Similarly, in Britain, 'short-termism' has been singled out as a key reason why some of Britain's largest companies are losing market share to their international rivals<sup>29</sup>. Many factors have encouraged this orientation in Britain and America, including managerial remuneration and reward systems which are invariably linked to short term measures of accounting profit and high managerial mobility rates<sup>30</sup>. By contrast, German and Japanese companies have been found to support longer term market share growth, often at the expense of short-term profits<sup>31</sup>.

#### Methodology

Data for the study were obtained from in-depth personal interviews with a matched sample of 10 American, 11 German, 10 Japanese and 12 British machine tool manufacturers operating in the British market. The reason for this

approach is that studying the overseas operations instead of the home country operations gives a better insight into international competition. Limiting the study to Britain is also a way of holding constant any differences in marketing strategies or organisation that are peculiar to particular markets.

The companies were approached by letter and telephone with confidentiality of response guaranteed as an inducement to participate. A semi-structured question-naire was used to obtain both quantitative and valuable qualitative data on marketing strategies and headquarter-subsidiary relationships. This approach allowed the researchers to check for bias and misunderstanding whilst ensuring that the data collected would be consistent and comparable across companies.

#### Measuring Success

Measures of market and financial performance were used to classify the success of the companies studied. Respondents were asked to rate their own performance, on a five point scale, relative to their competitors and the industry average. In addition, respondents were asked to rate the performance of their key competitors resulting in a peer group evaluation of performance. These were combined to give a single success score for each participating company. This approach results in an overall success rating for each individual company in relation to the machine tool industry as a whole and not just relative to the other companies in the sample.

Information was gathered on sales and market share growth, together with data on profitability, measured over a five year period. Previous research has shown that these are the three most common measures of success employed by managers<sup>32</sup>. Self-reported and peer group measures were used because of the difficulties of obtaining the required data from published sources, although data were cross checked where ever possible. A number of researchers have, however, found that these approaches

<sup>&</sup>lt;sup>22</sup> Sciberras, Payne (1985), Atkins (1990).

<sup>&</sup>lt;sup>23</sup> Atkins (1990).

<sup>&</sup>lt;sup>24</sup> Kotler et al. (1985), Doyle et al. (1992), pp. 419 ff.

<sup>&</sup>lt;sup>25</sup> Doyle (1987), pp. 121 ff., Baker et al. (1988), pp. 70 ff., Hayes, Abernathy (1980), pp. 67 ff.

<sup>&</sup>lt;sup>26</sup> Doyle et al. (1992), pp. 419 ff.

<sup>&</sup>lt;sup>27</sup> Limprecht, Hayes (1982), pp. 137 ff., Simon (1992), pp. 115 ff.

 $<sup>^{28}</sup>$  Hayes, Abernathy (1980), pp. 67 ff., Hamel, Prahalad (1989), pp. 16 ff.

<sup>&</sup>lt;sup>29</sup> CBI (1988), Goold, Campbell (1988).

<sup>30</sup> Marsh (1990), Harvard Business Review (1988).

<sup>&</sup>lt;sup>31</sup> Limprecht, Hayes (1982), pp. 137 ff., Quinn (1988), pp. 422 ff., Simon (1992), pp. 115 ff.

 $<sup>^{32}</sup>$  Burke (1984), pp. 345 ff., Buckley et al. (1988), pp. 175 ff., Kotabe (1990), pp. 19 ff.

are consistent with published data on performance<sup>33</sup> and internal company information<sup>34</sup>.

To obtain the relative performance of the machine tool manufacturers the unweighted average of each company's self-assessment was computed for the three performance variables — profitability, sales and market share growth. Companies with an average score greater than 3.5 were classified as 'successful'. Of the successful companies eight were Japanese, eight were German, five were British and two were American. This represented 53% of the sample.

#### The Findings

This section presents the findings of the research and analyzes the key differences and similarities between the international competitors in the British machine tool market. In considering the impact of marketing on the performance of these international competitors this study uses the marketing strategy framework adopted by Doyle et al.<sup>35</sup>.

#### Strategic Objectives and Focus

All the sample companies recognised the importance of both market share and financial objectives, but the emphasis on each of these objectives differed markedly. The Japanese and German subsidiaries placed greater priority on marketing objectives with the Japanese being particularly ambitious in their market share goals with all of the sample manufacturers having rapid growth or "long term market domination" as their main marketing objectives. Over half of the German machine tool manufacturers also emphasised marketing rather than financial objectives. As one manager of a German subsidiary pointed out "We are prepared to forego short-term profits if we can be successful in the long-term". Furthermore some of the German mangers recognised the Japanese desire for dominance in the British machine tool market and acknowledged that "We must go for market share in order to stay with the Japanese."

Meanwhile nearly 85% of the American and British samples placed a much higher priority on short-term profitability as their key company goal. Budgets rather than marketing plans provided the focus for top management. In the recessions of the 1980s, American and British companies had generally sought to restore profitability by retrenchment; costs were cut, product development was held back and investment was postponed. By the early 1990s this had produced a predictable, but unappreciated paradox. Productivity and profitability were indeed restored to reasonable levels through rationalisation, but the focus on short term profit had eroded both market share and ultimately long term competitiveness. It is not surprising, therefore, that a high proportion of these companies should be less successful by comparison with their German and Japanese competitors.

This emphasis on short term objectives was further reflected in the concerns held by so many of the British and American companies with regard to survival. Many felt that "We have survived therefore we must be successful". It is difficult not to have some sympathy with this view given the severity of the recent recession and the fact that many companies in the machine tool industry and manufacturing in general have gone out of business. They did acknowledge, however, that future survival was on "knife-edge" and was, therefore, not guaranteed. Survival as a company objective was unimportant to the more successful German and Japanese companies as they were all confident of their continued existence as they all took great pains to point out "We are here for the long term". This was also reflected in the attitudes of the German and Japanese headquarters to financial objectives. Profitability, whilst closely monitored by the parent was not the overriding measure of performance in the British market unlike in the American parent organisations.

The difference in focus between the participating companies appeared to be the result of differences in attitudes to profitability. 90% of the German and all of the Japanese executives said that they saw profit performance in the long term being assured by a focus on gaining market share, which in turn would be achieved through the continuous development of new products and processes. By developing long term relationships with their customers the successful German and Japanese manufacturers are able to target their investment most effectively to satisfy customer needs.

Meanwhile over 80% of the American and British companies, believed that falling profits could only be solved by focusing on cost reductions and improved productivity. The advantage of this focus on productivity is that it leads to quick profit enhancement. The problem, however, is that it can often lead to a longer run erosion of market position. Furthermore, cost reduction means a reduced investment in new product development and market support. Maintained for any length of time, such policies inevitably lead to declining market share and further pressure on profits. In the machine tool industry, this trend is clearly in evidence.

#### **Customer Targets**

In the cases of most of the German and Japanese machine tool producers, the British operation had been specifically set up to serve the particular needs of particular markets. As a result the largest and most profitable segments of the machine tool market in Britain are now

<sup>&</sup>lt;sup>33</sup> Venkatraman, Ramanujam (1986), pp. 801 ff., Anderson, Zeithaml (1984), pp. 5 ff.

<sup>&</sup>lt;sup>34</sup> Dess, Robinson (1984), pp. 96 ff.

<sup>35</sup> Doyle et al. (1992), pp. 419 ff.

dominated by German and Japanese competitors<sup>36</sup>. Most of the American sample claimed to be niche producers satisfying the needs of specialist sectors. Meanwhile, several of the British respondents openly admitted that "We do not segment our markets and have no intention of doing so." There was further evidence of a similar approach in all of the less successful companies as one Managing Director said "If the customer wants a machine tool he has our brochure and can just pick up the phone and order from us." This suggests that some manufacturers do not understand the basic needs of their potential customers. As customers and machine tool applications become more sophisticated the relationship between manufacturer and customer will become more important. This is a fact already recognised by all of the managers in the successful companies who note that "We are here for the long term, therefore we have to create long term customer relation-

Many of the underperforming British machine tool manufacturers give particular cause for concern. Years of under-investment have made many of the British machine tool manufacturers technologically weak and thus uncompetitive. One Managing Director actually admitted that "our products are technically obsolete". As a result they are increasingly positioned at the basic, cheaper end of the market producing conventional machine tools where price is the major determinant of customer choice. The emerging competition from cheap, imported machine tools from the Far East is likely to pose a further threat to the British industry.

#### Competitor Targets

Respondents in the sample companies were asked to say who they saw as their major competitors. 70% of Japanese companies saw other Japanese manufacturers as their major rivals. Surprisingly, neither German nor Japanese companies saw each other as competitors, suggesting they compete in different sectors of the industry. The British companies did not compete head-on with the high-tech American companies, but saw German and Japanese and other British manufacturers as their major rivals.

Within the British machine tool industry there appears to be no single, dominant, competitive nation, although over 40% of both the successful and less successful companies said that Japanese manufacturers represented and would continue to be the biggest threat to them. Far fewer companies (less than 7%) considered the Americans to represent a significant threat. This is no doubt a reflection of the observation that only 20% of the American manufacturers considered themselves to be successful in the British market. This result demonstrates that British buyers do not show any real allegiance to manufacturers from one nation, thereby leaving the field open to all prospective machine tool suppliers who can best satisfy customer requirements.

Without exception all of the successful companies were very knowledgeable about their competitors and recognised that the competitive environment was changing, as one respondent noted "We are market leaders in our field in Europe, but more competition is coming, the gap is narrowing, and we have to respond to this." In some cases in the less successful companies, however, the respondents were unable to even provide the names of their key competitors suggesting that they only have a limited understanding of their competitors.

There was an interesting difference between the two groups of companies with regard to the strategies that they thought their competitors were pursuing which is largely a reflection of their strategic focus. 62.5% of the successful companies held the view that their competitors were pursuing strategies based on product differentiation, whilst 55.6% of the less successful manufactures believed their competitors to be pursuing strategies based on low price. One possible explanation is that the less successful companies were found to be selling predominantly conventional machine tools — a market which has seen competition intensify in recent years with the emergence of low cost machine tools from Taiwan and Korea.

#### Competitive Advantage

A company's success depends upon its ability to match the needs of target customers more effectively than competitors. Studies<sup>37</sup> have shown the primary importance of quality in determining both market share and profit performance. In an industry which has traditionally been product-led, quality, not surprisingly, was a major concern to all of the successful competitors, reflected in statements such as "Our quality wins us orders where we are not competitive on price." Although many of the less successful companies also claimed to pursue a competitive advantage based on quality, the qualitative data provides some insight into the potential sustainability of the competitive advantage.

The successful companies demonstrated a higher commitment to R&D and by investing in new products are able to sustain their competitive advantage better than the less successful companies. This commitment to new product development becomes even more apparent when it is considered that in most of the successful companies "most of our turnover comes from products that did not exist five years ago." The poorer performing competitors, on the other hand, displayed a tendency to rely on their past reputation for long lasting products, as one manager proudly announced "Many of our products are still operating after 30 years — this shows how good our products must be." But in later discussions it becomes clear that managers of less successful companies relied too much on

<sup>36</sup> The Economist (1991), pp. 131 ff.

<sup>37</sup> Buzzell, Gale (1987), Jacobson, Aaker (1987), pp. 31 ff.

past successes. They consequently focused on outdated machine tools at the expense of growth opportunities presented by new products and technology in emerging markets. This is a clear failure on the part of these companies to understand the changing nature of the machine tool market of the 1990s.

#### Marketing Mix

Earlier discussion focused on the observation that less successful companies have been less active in developing new products. The changing nature of the machine tool market means that these companies will inevitably be left behind in the longer term. In Britain sales of CNC machine tools as a percentage of all machine tools sold has been increasing steadily and it is those companies which have developed this technology that are reaping the rewards.

The literature on successful organisations suggests that top performing companies do not compete on the basis of price but that they pursue a premium pricing policy in line with their product differentiation<sup>38</sup>. Whilst the successful German manufacturers in this research clearly pursued a premium pricing strategy, it is of concern to them that their Japanese rivals are able to manufacture quality machine tools at a more competitive price (Table 4).

The most striking characteristic of the British companies was their lower prices (Table 4). Given the increasing competition in machine tools from the emerging industrialised countries, it is hard to believe that British machine tool manufacturers can maintain competitiveness simply on the basis of lower prices.

No differences in distribution or promotional activities were found between the samples.

#### Organisation

In addition to examining the marketing strategy of the competitors, the study also sought to understand how companies managed their British subsidiaries. We looked at whether there were real organisational differences between American, Japanese and German subsidiaries operating overseas. Finally we sought lessons that could be learned from the practices of the more successful organisations.

Whilst the senior managers of all the subsidiaries were found to differ little in age, education or experience, at the chief executive level there were differences. All the German companies employed a British Managing Director, while

Table 4 Pricing Strategy Relative to the Competition

	Germany	Britain	America	Japan
Much lower prices	9%	83%	30%	50%

half the Americans employed an American citizen and 60% of the Japanese subsidiaries had a Japanese head.

In contrasting the commitment of the overseas manufacturers to the British market the Japanese parent organisations were found to maintain very close links with their British subsidiaries. The main reason for this is that most Japanese managers consider Britain to be a springboard into the European community market and viewed a successful British operation as a means of overcoming potential trade hostilities and restrictive quotas. The German subsidiaries, meanwhile, enjoyed probably the highest degree of autonomy yet at the same time considered themselves to be well integrated into their parent organisation.

By contrast, few of the American companies appeared to be really committed to success in Britain as one American respondent admitted, "The parent company lacks an understanding of the need to be aggressive in Europe. They do not understand the UK at all." Another American manager justified it by saying "The USA is the largest market. Competitors, including the Japanese, will have to succeed in the US if they are to achieve dominance".

The most interesting difference between competitors was in their degree of product standardisation (Table 5). German machine tools were found to be highly standardised with products being designed primarily for the home market. Several respondents observed that "What is good enough for Germany, is good enough for the rest of the world". Managers in the German subsidiaries argued that this approach was adopted because "German customers are amongst the most sophisticated in the world". Whilst Japanese manufacturers also displayed a high degree of product standardisation many did recognise the need to adapt features to satisfy local market needs. The American producers' product offering was the least standardised of all the manufacturers, which is no doubt a reflection of the niche markets they claim to be serving.

Table 5

Degree of Product Standarisation

	Germany	America	Japan
Products are standardised for world markets	100%	30%	60%

Successful competitors in the British machine tool market displayed a high degree of planning orientation with twice as many of them drawing up five year plans than their less successful counterparts (Table 6). Furthermore, over 55% of the poorer performers did not develop long term plans at all. The main reasons given by these companies

<sup>&</sup>lt;sup>38</sup> Doyle et al. (1992), pp. 419 ff., Hall (1980), pp. 75 ff., Simon (1992), pp. 115 ff.

#### Importance of Plannning

	Less Successful	Successful
5 year plans	22.0%	52.0%

for not planning was that "The markets are too uncertain, therefore it is not possible to plan" and "Planning is a waste of valuable time." Given the importance of survival as a key company objective to so many of these companies it is perhaps not surprising that they are less actively involved in long term planning, as many respondents noted "One year is long term to us." By contrast the successful companies frequently talked about the importance of planning but planning was not, however, seen to be a constraining factor because, as one successful German manager pointed out "Whilst keeping to our plans is important it must not restrict our flexibility."

In keeping with the close links between the parent organisation and their British subsidiary the Japanese were found to maintain an intense daily, continual contact with their subsidiaries (Table 7). This meant that head-quarters and subsidiary managers shared detailed upto-date information about their products and international markets, which facilitated fast response to emerging threats or opportunities. By contrast, American and German headquarters adopted a more informal approach with reporting procedures being less frequent allowing more scope for local decision-making. The Germans, somewhat surprisingly, appeared to be fairly lax about performance control, reinforcing the earlier finding on complete autonomy for their British subsidiaries.

The performance criteria scrutinised by the parent organisations appeared to differ between the three overseas samples operating in the British machine tool market. Although profitability was important to many of the German and Japanese subsidiaries there was less pressure on them from their parents, as one respondent pointed out "It is our aim to cover our running costs. If we make a profit as well then we are happy." In keeping with their focus on maximising short term profitability the managers of the American and other less successful companies claimed that the main performance criteria scrutinised by their parent organisation was profitability (Table 8), as several respondents pointed out "There is always pressure on us to make a profit." It is interesting that, in terms of performance measurement, the British com-

Table 7 Reporting System

	German	American	Japanese
Daily continual basis	10%	0	70%

Table 8

### Performance Criteria Scrutinised by Parent Organisation

	German	American	Japanese
Profitability	30%	70%	0

panies were more like their American competitors as over 66% of them used profitability to assess their performance.

In organisational terms the American subsidiaries were generally found to employ more complex, matrix structures. Strategies were often developed at European or international level with the problem that overall responsibility for performance in the British market was sometimes obscured. This complex structure also meant that in some instances American managers lacked detailed market knowledge making it difficult to respond rapidly to emerging problems and opportunities. By contrast, the Japanese employed simple structures giving their British subsidiaries clear responsibilities. The major rationale for this simplicity was that "the parent company in Japan is set up this way — every business is a profit centre." All the British firms and four out of five of the German subsidiaries were organised around conventional, functional lines.

#### Conclusions

Given the changing nature of the European market for machine tools the performance of international competitors in the British market provides a useful insight into strategies for success in a market which is becoming increasingly internationalised. Machine tool manufacturers can take the lessons learned from the British situation, in which the market has, in relative terms, seen a much higher degree of internationalisation than the rest of Europe, and apply them to the wider European context. The results of this study suggest a number of ways forward to enable machine tool manufacturers to carry their successes in the British market to the broader European market.

The findings stress the need for a higher degree of marketing orientation. The British machine tool industry, while regarded as a mature industry in the 1980s, has presented new growth opportunities to the more astute Japanese and German competitors. Manufacturers from these two countries took advantage of the increasing customer demand for high quality, CNC machine tools and flexible systems. However, since the majority of companies were managed by British nationals, strategies for success are open to emulation and the study shows that success is not necessarily nationality specific.

It would appear that the European market is still largely fragmented and that, as a result, a regiocentric or pan-European strategy is as yet still not wholly feasible in many sectors of the machine tool market. This in turn highlights the need for companies to have a good knowledge of their customers. Successful manufacturers in Britain have demonstrated the need to understand customer requirements and how best to meet these vis-à-vis competitors' offerings. Clear segmentation, targeting and positioning strategies will continue to be crucial throughout the 1990s in the face of growing competition from lower cost Taiwanese and Korean manufacturers.

Successful marketing strategies must reflect a sound understanding of, and show greater sensitivity, to the competitive nature of the marketplace. The successful machine tool manufacturers in Britain were more knowledgeable about their current rivals and emerging threats from low cost Eastern suppliers. They were more able to sustain margins by taking advantage of customer and product-related advantages rather than competing on price. The more successful competitors also reflected a greater appreciation of the need for product differentiation to help them compete in their entrenched marketplace. Furthermore, they are not complacent about their product strengths and see new product development as an important activity which must be supported if future rewards are to be reaped.

From an organisational point of view there are also lessons to be learned by non-domestic competitors. In order to be successful a high level of commitment by the parent organisation to the individual markets is needed. It is most important, however, that this is a long term commit-

ment to establish a foothold in new market segments and build market share over time, rather than just seeing the European market as a means of improving short term profitability.

The successful competitors were planning organisations. They paid more attention than their less successful counterparts to sales and market share performance rather than short term profitability. Headquarter-subsidiary relationships were also stronger in the case of the more successful companies. Although all of the subsidiaries studied claimed to enjoy a high degree of autonomy in running their British operation, those that were more successful acknowledged that they were also well integrated with the parent company's overall strategies. Furthermore, the results suggest that success has less to do with the degree of formality of organisation structure and communications, planning and reporting systems, but more with the level of commitment given by the parent organisation to its subsidiary, the intensity of communications and degree of integration of efforts between headquarters and subsidiary.

Competition in Britain and wider European machine tool market is expected to intensify during the 1990s. The key requirements for success — customer and marketing orientation, long term focus and a highly committed organisation — are reinforced in this study. Companies that hope to remain competitive in this industry would do well to take these lessons and apply them.

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#### **Summary**

## Strategies for Success in the British Machine Tool Market

This paper explores the marketing and organisational characteristics of a sample of German, British, American, and Japanese companies operating in the British machine tool market. The aim is to compare the strategies and organisational features of successful and less successful international competitors and to identify useful lessons for managers seeking to improve their company's performance in the changing European machine tool market. The need for customer focus, marketing orientation, and committed organisations is reinforced in this study.

#### Zusammenfassung

## Erfolgsstrategien im britischen Werkzeugmaschinenbau

Dieser Beitrag beschreibt organisatorische und Marketing-Merkmale von Unternehmen des Maschinenbaus im internationalen Vergleich. Ziel ist es, die Strategien erfolgreicher und weniger erfolgreicher internationaler Wettbewerber zu vergleichen und hieraus nützliche Schlußfolgerungen zu ziehen. Dabei steht der europäische Markt im Vordergrund des Interessses. Die Ergebnisse der Untersuchung unterstreichen die Notwendigkeit einer ausgeprägten Kunden- und Marketingorientierung sowie einer die Mitarbeiter motivierenden Organisationsform.