

**AN EXAMINATION OF THE POST- SECOND WORLD WAR RELATIVE
DECLINE OF UK MANUFACTURING 1945-1975, VIEWED THROUGH THE
LENS OF THE BIRMINGHAM SMALL ARMS COMPANY LTD**

by

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ABSTRACT

This is a study of the decline and collapse, in 1973, of the Birmingham Small Arms Company Ltd, primarily a motorcycle manufacturing company and pre-WW2 world market-leader. The study also integrates and extends several earlier investigations into the collapse that concentrated on events in the Motorcycle Division, rather than on the BSA Group, its directors and its overall strategy.

The collapse of BSA was due to failures of strategy, direction and management by directors, who were not up to running one of Britain's major industrial companies after it was exposed to global competition. While the charge, by Boston Consulting and others, that the directors sacrificed growth for short term profits was not proven, their failure to recognise the importance of motorcycle market share and their policy of segment retreat in response to Japanese competition, played a large part in the decline of the company. Their ill-fated diversification policy harmed the motorcycle business, but capital could have been raised in the 1950s to re-equip its manufacturing facilities, had the directors had the confidence to do so.

The study also examined whether the 'cultural critique' of Barnett C, Wiener M.J. et al provides a valid alternative explanation for the collapse. While the hypothesis has some plausibility, too many variables and unresolved supplementary questions arise for this to contribute effectively to a rigorous account of the causes of the demise of the firm.

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ABBREVIATIONS

ADC	Aide-de-Camp
AEU	Amalgamated Engineering Union
AMC	Associated Motorcycle Group
AGM	Annual General Meeting
AH	Alfred Herbert Ltd
BIM	British Institute of Management
BMCCIA	British Cycle & Motorcycle Industries Association
BSA	Birmingham Small Arms Co Ltd
BSAGN	BSA Group News
BSAT	Tools Division of BSA
CBE	Companion of the Order of the British Empire
CEGB	Central Electricity Generating Board
CEO	Chief Executive Officer
CPRS	Central Policy Review Staff
CPS	Centre for Policy Studies
CUP	Cambridge University Press
DG	Directorate General of the European Commission (followed by a roman numeral, e.g. <u>III</u> indicating which Directorate, e.g. Industry, Environment, R&D etc)
DTI	Department of Trade and Industry
EITB	Engineering Industry Training Board
FBI	Federation of British Industry
FSA	Financial Services Authority
GEC	General Electric Co. Ltd

GNP	Gross National Product
GRC	Group Research Centre
HMC	Headmaster's Conference
HMG	Her Majesty's Government
HMSO	Her Majesty's Stationary Office
HNC	Higher National Certificate
IEA	International Association for the Evaluation of Educational Achievement
ICI	Imperial Chemical Industries Ltd
IEE	Institution of Electrical Engineers
IMechE	Institution of Mechanical Engineers
IMI	Imperial Metals Industries Ltd
MBH	Manganese Bronze Holdings Ltd
MD	Managing Director
MSC	Manpower Services Commission
NEDC	National Economic Development Council
OJT	On-the-Job Training
OECD	Organisation for Economic Co-operation & Development
ONC	Ordinary National Certificate
OUP	Oxford University Press.
SSEB	South of Scotland Electricity Board
TUC	Trades Union Congress
TWI	Training Within Industry

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CHAPTER 1

INTRODUCTION

It is suggested by Dintenfass (1992) that different explanations for the relative decline of UK manufacturing industry should be tested at the level of the firm. 'In place of generalisations about British attitudes and British institutions, we shall require close empirical inquiries into actual British enterprises and their decision makers' (Dintenfass 1992, 71).

Critical business histories have provided case histories of industrial sectors and the histories of individual enterprises can be used to counterpoint the more general propositions and explanations of the UK's relative industrial decline.

Coates (1994) states that the voluminous literature on this subject share general themes. The first is that economic under-performance has almost always been approached from the perspective of a particular academic discipline. All the major social sciences have addressed the issue of industrial decline, but do so with little formal recognition of the existence and content of parallel debates, for example the economic explanations summarised by Smith K. (1984) and the 'cultural critique' of Wiener (1981) and Barnett, (2001). Secondly, the varying disciplines tend to adopt different time scales in the specification of problems and solutions. For instance, the appropriate time period within which explanations are to be found is the 1990s, for others it is the post 1945 period as a whole and some go back as far as 1875 (Wiener, (1981): Rubenstein (1993). Individual causal factors are handled differently within the various explanations, for instance the stress placed on the role of the trade unions in the progressive relative decline differs between Barnett (2001) – considerable – and Wiener (1981) – none. A multi-causal explanation is generally put forward (giving a role to capital, labour, culture and the state)

and they each differ in the significance of the relationships between them and on which is the critical variable.

This thesis examines the post WW2 fortunes of BSA, from economic, cultural, social and political perspectives. There are various explanations as to why BSA collapsed (BGC, 1975; Ryerson 1980; Hopwood 1981, Smith,1983), each written from a different standpoint.

The context in which this post WW2 relative decline took place is a world economy with, up to 1979, two main phases of development. The first ran from around 1950, when the problems of post-war industrial reconstruction were beginning to be solved, to 1973 when the OPEC oil price led to period of slower growth (Smith K. 1984, 29). In both of these phases Britain's rates of economic and productivity growth were slower than those of comparable advanced economies as is shown in Tables 1.1 and 1.2 below.

Table 1.1 Growth of Output (Average Percentage Per Annum)

Country	1950-1973	1973-79
Canada	5.2	3.2
France	5.1	3.0
Germany	6.0	2.4
Italy	5.5	2.6
Japan	9.7	4.1
Netherlands	4.8	2.4
UK	3.0	1.3
USA	3.7	2.7
Average	5.3	2.7

Source. Maddison A. 'Phases of Capitalist Development'. 1982. Table 3.1, p 88

Table 1.2. Rates of Productivity Growth (%) 1950-79
(Annual Average Compound Growth Rates of GDP per Man-Hour)

Country	1950-1973	1973-79
Canada	3.0	1.0
France	5.1	3.5
Germany	6.0	4.2
Italy	5.8	2.5

Japan	8.0	3.9
Netherlands	4.4	3.3
UK	3.1	2.1
USA	2.6	1.4
USA	4.8	2.7

Source. Maddison A. 'Phases of Capitalist Development. 1982. Table 5.1, p 181

In the 1960s and 70s the relative decline of UK manufacturing accelerated. Together, EU and non-EU manufacturers increased their share of the British market for industrial products from 11% in 1961 to 28% in 1975 (Alford,1988, 42).

The collapse of BSA provides a valuable framework within which to focus an examination of UK manufacturing during the later three decades of the one hundred and eleven years (1861-1972) life of the firm. The headquarters and major manufacturing operations of BSA remained throughout on one site, Small Heath, Birmingham. BSA moved from being a world market leader in the motorcycle sector to nothing within thirty-five years. BSA was one of Britain's top US dollar earners (Chairman's Statement to AGM, 1966) and of greater national importance than its turnover would suggest. It was a company that generated great commitment and passion:

‘You probably won't realise what a revered marque Triumph (a BSA motorcycle) is. There are more glamorous bikes but none has quite so perfect a balance of tradition, style and street cred...’ (The Times, 25th May 2004).

The collapse in 1973 was one of the most significant corporate failures in British industrial history and had a major impact on the economy of Birmingham and the West Midlands (Smith 1983). In the following years, the circumstances leading up to the demise of the company were subject to analysis and comment, often within the context of the whole British motorcycle industry. Many issues raised by the collapse remain the subject of debate both within business history circles and the motorcycling fraternity for instance,

related v unrelated diversification strategies (4.2.1), delayed integration of BSA and Triumph (4.2.2) and failure to invest in new motorcycle manufacturing facilities (4.2.8). From its inception BSA was a mechanical engineering company, whose historic businesses were guns, pedal cycles and motorcycles. From 1866 onwards the guns and small arms business was a 'feast- to- famine' operation. The company was subject to unfair competition, in that its main competitor (Royal Ordnance, Enfield) was owned by its principle customer, the War Office (Ryerson 1980, 30). By 1960, however, BSA Guns Ltd had become a civilian business and made modest profits out of air rifles, sporting rifles and shotguns.

From 1908 BSA manufactured pedal cycles until the business was sold to Raleigh in 1960. The company entered the motorcycle business in 1895 after attaching a small engine to one of their pedal cycles. This became an international growth business and the company's position was consolidated by the purchase of Ariel Motors in 1944 and the Triumph Engineering Company in 1951. In the mid 1950s BSA became a world market leader in the design manufacture of motorcycles (Smith 1983).

Post 1945 BSA pursued a diversification programme, building on their acquisition of the Daimler Motor Co. Ltd in 1910 and Jessop-Saville Ltd, alloy steel manufacturers, in 1919. The companies acquired were in nine industrial sectors, latterly reduced to six and the influence this programme had on the company's motorcycle business is investigated in Chapter 5.5.

In the 1960s, as well as the motorcycle division (building BSA, Triumph and Ariel machines) the BSA Group had other subsidiaries manufacturing car bodies, foundry products, metal components, guns and heating systems (*Chapter 3*). In 1967 it had a turnover of £35.5m and earned pre-tax profits of £3.29m (BSA 1967 Annual Accounts).

The company had 8,000 employees in 1966; two thirds of whom worked at Small Heath.

The motorcycle division was the largest in the Group; it contributed between 50% and 70% of the total profit (depending upon the number and size of the non-motor cycle subsidiaries and their financial performance in any given financial year).

Following the signing of the Anglo-Japanese Trade Agreement in 1962, which gave Japan virtually open access to the UK motorcycle market, BSA came under great pressure in its home territory from their motorcycle manufactures, who offered attractive machines at very competitive prices. The response of the company was to progressively retreat from the lower end (small and then medium sized machines), of the market to concentrate on its high capacity models (the Triumph 500cc and 750cc machines) where its competitive strengths seemed to lie. In an initially successful effort to replace the sales and profits lost in the UK, BSA substantially increased its sales in the US, becoming one of the UK's largest US dollar earners.

Between 1968 and 1972 the company suffered either low profits or heavy losses due to costly production and quality problems in its motorcycle division. This was coupled with the need to write off £6.9m on the sale, in 1971, of its holding in Alfred Herbert Ltd into which it had placed its profitable Tools Division five years earlier. BSA ultimately collapsed in 1973, following a bear raid on its shares. This happened just as negotiations with the Department of Industry were about to begin - BSA were seeking a cash injection into the company to enable it to survive and lead a rationalisation of the whole of the British motorcycle industry (*Chapter 4.2.9*). After BSA's collapse in July 1973, however, the profitable, non-motorcycle subsidiaries were bought by Manganese Bronze Ltd. The motorcycle business, that by then had returned to a trading profit, was absorbed into the new Government assisted company of Norton-Villiers-Triumph Ltd (NVT). It was an

attempt to rebuild a profitable British motorcycle industry capable of competing successfully in rapidly changing world markets (BGC, 1975; Fairclough 1986).

Nevertheless, NVT collapsed in October 1975.

The existing explanations for the collapse of the company (BGC, 1975; Ryerson, 1980; Hopwood, 1981; Smith, 1983; Koerner, 1995) concentrate on management, policy and product issues in its motorcycle division rather than on the company as a whole. They conclude that the demise was due to a combination of errors in product policy, under-investment, changing social aspirations, poor management and communications, an inadequate understanding of marketing and production engineering and unhelpful Government policy in relation to the motorcycle industry.

These explanations pay insufficient attention, however, to the role played by the BSA main board in the collapse. Furthermore, they often fail to make a distinction between the holding company, Birmingham Small Arms Co. Ltd (in today's terms a PLC) and the subsidiary companies of the group (of which the motorcycle business was the largest) and between the main board directors and the directors/senior managers of the subsidiaries. These relationships, and the differing roles played by the key players in the unfolding drama, were crucial to the eventual outcome. For a wider examination of these issues, in particular the competitive and institutional advantages of holding companies and the relationship between a holding company and its subsidiaries, see Fitzgerald, R, (2000).

No claims were made, however, that militant trade unionism was a significant factor in the 1973 debacle, even though the shop stewards at the Triumph factory at Meriden did cause considerable disruption by unofficial action in the late 60s and early 70s.

A further reason for revisiting BSA was to investigate an issue that has not been previously examined, i.e. whether what happened to the company was inevitable, given the culture and class structure within which it operated and the education and training of its directors and employees. (*Chapters 6 and 7*). This is an important question for, in the emotionally charged aftermath of the debacle and with the benefit of hindsight, there was a demand by the stakeholders for personal blame to be apportioned to individual main board and subsidiary company directors.

Much has been made of the influence of Government policy on the fortunes of the British motorcycle industry of which BSA was by far the largest part, notably by Koerner (1995) who concluded that Government policy was not as detrimental as the industry claimed, in contradiction to the earlier arguments of Bruce-Gardyne (1978). Another possible contribution towards the collapse was the attitude of the City of London to manufacturing in the UK and the availability of funds for investment. The general charge, repeatedly made by senior industrialists and many economic historians (Owen, 1999, 391), is that the financial expertise of the City was not geared to domestic manufacturers such as BSA, but to raising funds for overseas investments. The separation between industry and finance was reinforced, in their view, by the class distinctions in British society. The leaders of the City, educated at the major public schools, despised, so it is alleged, the world of the factory and had little in common with the self made industrialists of the industrial Midlands and the North. This issue was highlighted by Dudley Docker (Deputy Chairman of BSA) in a speech as early as 1907 (Kynaston, 1995) but the charge recently has been partly refuted by Owen (1999, 396-406). It has also been examined by Fairclough (1986, 183-186).

In reviewing the events leading to the collapse of BSA five key issues emerged:

- Were the Directors of BSA negligent in their direction and management of the company or did they merely make errors of judgement?
- Did BSA put short-term profitability before the long term investment required to secure the company's future?
- Why, in the 1950's, did BSA not invest heavily in its motorcycle business, to protect its market share.
- Did the company's diversification programme help or harm its motorcycle business?
- Does the 'cultural critique' of Wiener (1981) and Barnett (1995; 2001), notably their assertion that there was a fundamental anti-business, anti-manufacturing culture in the public schools, provide an explanation for the collapse of the company?

Answering these questions required research into the nature of the BSA Group and its many different non-motorcycle businesses and the way in which it was directed, managed and handled issues of corporate governance during the period 1945-73, particularly its dividends/reserves/capital investment policies, diversification and motorcycle model policies. This required consideration of how the group board operated and discharged its fiduciary and statutory duties and what was its organisational philosophy. Crucial to this is how strategy and policy were agreed and promulgated and how the subsidiaries were monitored and controlled. Within the motorcycle division it was necessary to determine how key market and model policies were agreed and implemented and to consider the reliability of its costing and financial control systems. It was also necessary to determine the influence of BSA's diversification policy on the core motorcycle business and consider whether the shareholders might have been better off had the directors, after 1945, concentrated exclusively on the company's international motorcycle business.

Noting that: ‘economists fight shy of developing explanations of managerial inefficiency based on studies of education and training and the social attitudes which determine the choice of occupation’ (Peacock, 1980, 32), a further requirement was to test the validity of the cultural critique against the collapse of the company and its motorcycle division. The cultural critique has its critics, notably Rubenstein (1993), particularly concerning the position of the public schools at the centre of the proposition. As BSA was led throughout its life by men educated at public schools, this case study provided an opportunity to make a contribution to this on-going debate.

Detailed matters considered include the structure and methods of working of the main board, the selection and role of the non-executive directors and the dichotomy between the post WW2 opportunistic diversification policy and the investment needs of the motorcycle division. The way in which the board handled ten major issues, which had a significant influence on the group and the motorcycle division in the years leading up to the collapse were examined in detail. Six issues of corporate governance were also studied; they too influenced the final outcome. As an essential background to these studies, the post-1945 financial performance of the group was analysed; this also provided the necessary information to enable the motorcycles verses diversification issue to be examined in depth. As one of the main arguments of the cultural critique is that the English education system in the twentieth century made a significant contribution to British industrial decline, the education and training of BSA's managers, supervisors, craftsmen and operators was examined (*Chapter 6*) and compared with that of their contemporaries in the Japanese motorcycle companies that competed so effectively with BSA.

This was followed by a review of the culture of the English public schools and how it influenced career choice of the generation from which the post- 1945 directors of BSA

were drawn (*Chapter 7*). The review was backed up by a research study on the basis of career choice of a sample of sixty high achieving public schoolboys, who were contemporaries of the Directors and Senior Managers of BSA, from which conclusions were drawn about the relative quality of those who entered manufacturing industry, post WW2.

The British motorcycle industry, geographically located mostly in the midst of the much larger motor car industry, was undoubtedly influenced by the attitudes and practices of the latter. Church, (1995), provides a useful wider perspective to events at BSA. He concludes that the failure of the British motor industry to transform itself into an internationally competitive enterprise may be explained by three interacting factors. First, there were government policies in which political considerations constrained business decision-making and assisted the multinationals' strength in the domestic market. Second there was a system of industrial relations that was rooted neither in law nor in trade union power. Third, and fundamentally, there were historically rooted weaknesses in corporate structures and management that, for many years, obscured the need for systematic planning and organisation change (Church, 1995, 124). While the first two of these issues also had some influence on the motorcycle industry, it is the third that is most relevant to the collapse of BSA.

CHAPTER 2

LITERATURE ON INDUSTRIAL DECLINE, CORPORATE GOVERNANCE AND THE COLLAPSE OF BSA

2.1 Introduction

This chapter reviews the literature on the relative decline of the UK economy and in particular the manufacturing sector, during the period 1875 to 1975, and latterly the literature on the post WW2 decline and collapse of BSA and the literature on corporate governance.

There are several approaches to, and differences of opinion about, the causes of the relative decline of the British economy since 1870 which have led to a voluminous literature.

‘Decline is a complex and many sided phenomenon on which it is as well to be precise in definition and limited in concern. UK decline is generally treated as a question of economic under performance, one that stretches out to encompass three distinguishable but related features of twentieth century industrial life: the dwindling competitiveness in world markets of UK-based manufacturing industry; the diminished capacity of many of those industries for technological and organisational dynamism and innovation and the resulting loss of manufacturing employment of a ‘negative’ kind (that is, one which results not from the superiority of the manufacturing sector’s productivity performance but from its progressive loss of market share). All this has been treated as a problem because of a recognition of the special place that manufacturing occupied in the wealth-creating process and because of the adverse fall out on living standards, job security and public services) associated with a weakening manufacturing sector’ (Coates, 1994, 249)

The wider debate about ‘decline’ is encapsulated in the following: Chandler (1977, 1990); Tomlinson (1996); Pemberton (2004) and Rollings and Rings (2000). This survey, however, aims to give a balanced account of the arguments as they relate to manufacturing.

2.2 Industrial Decline

Smith K. (1984, 187-188) places the explanations given in the literature into three groups. The first argues that British managers and industrialists failed. They lacked enterprise, they lacked the technological skills of foreign managers, and they did not invest enough. This approach is known by economists as the ‘entrepreneurial failure’ thesis; it pins the

blame on British capitalists. The second proposition argues that Britain's trade unions and working practices were the cause. Britain's industry was over manned, was strike prone and the trade unions were too rigid in their opposition to the changes in work practices which technological change involves. The third thesis looks not at particular people but at an economic process. This thesis is not necessarily separate from the previous two, in that poor management and bad industrial relations are frequently cited as the cause of low investment. But in either version inadequate investment was seen to be the immediate cause of Britain's problems.

Each of these theses is open to criticism. The charges against the late 19th century entrepreneurs are that they neglected to take up technological improvements which would have raised productivity and maintained a higher rate of growth, that they failed to employ enough trained engineers and that they were not adventurous in marketing. While it is not difficult to find examples in support of this criticism, its implications are rarely spelt out. Smith asks two questions: 'What does it actually mean for the British economy to have 'failed' in the late 19C?' and 'What would entrepreneurs have to do, or not to do, to be responsible for this?' (Smith K.1983, 189).

His answer to his first question is that Britain could be said to have failed if it had unused resources (especially labour) which could have been used to produce extra output. Britain did not suffer, however, in the last quarter of the 19th century, from the unemployment that plagued it in the 20th century and resources do not appear to have been under utilised.

His answer to the second question is that entrepreneurs would bear the responsibility for failure if they had not adopted productivity-improving opportunities. This leaves the secondary question of whether such opportunities existed at that time (e.g. BSA was established in 1861 by a group of craftsmen/gunsmiths to utilise new American gun barrel

production machinery (Ryerson 1980, 14). Smith K. surmises, however, that many of these so-called opportunities may not have been profitable and notes that entrepreneurs do not invest if they cannot make short-term profits. On the basis of these, not wholly convincing, arguments, Smith, K. (190-191) acquits British entrepreneurs of the late 19th century of blame for Britain's future industrial problems.

Any challenge to the trade unions thesis needs more than just a reference to the available evidence, for in many ways it is ambiguous. International comparisons have to be made but the statistics used to make such comparisons are often not consistent. For example, in the 1970s Britain was apparently no more strike prone in that, from one perspective, it lost considerably less days per thousand workers than Canada, Italy and the US. On the other hand strikes in Britain were more random, more often unofficial and lost more output (Smith K.1984, 192). Any analysis of alleged 'over manning' comes up against similar statistical and interpretative difficulties (for instance the use of contract workers by some companies). Strikes and over manning do not affect rates of growth unless they are consistently worse than the company's competitors. Also, over manning did not necessarily make production more costly or less profitable if it was accompanied by relatively low wages (as it was in Britain, compared with Western Europe).

Post 1945, Britain's manufacturing output, relative to its major competitors, grew slowly because its capacity to produce goods grew slowly. Rate of investment is a key factor in the study of relative economic decline and Smith K (1984,195-197) gives assets per head and investment data to illustrate this.

Kaldor (1966) contended that fast rates of economic growth are associated with the fast rate of growth of the 'secondary' sector of the economy – mainly the manufacturing sector – and that this is an attribute of an intermediate stage of economic development: it is

characteristic of the transition from ‘immaturity’ to ‘maturity’. The trouble with the British economy is that it had reached (1966) a high stage of ‘maturity’ earlier than the others, with the result that it had exhausted the potential for fast growth before it had attained particularly high levels of productivity or real income per head (maturity denotes a state of affairs where real income per head has reached broadly the same level in the different sectors of the economy).

If the basic hypothesis is correct, all countries will experience a slowdown in their growth rate as their agricultural labour reserves become exhausted. It is the existence of an elastic supply curve of labour to the secondary and tertiary sectors which is a pre-condition of a fast rate of growth.

Dintenfass (1992) offers an alternative account of the reasons for the relative decline of British manufacturing industry arising from his belief that our understanding of Britain’s relative economic failure remains incomplete and unsatisfactory. He does not claim any new insights.

After reviewing the historical/statistical record he examines:

- Industry’s use of the available tools and techniques.
- Education, training and skills of the workforce, its supervisors and its management.
- The bias of capital.
- Marketing and selling of industrial products.

He then summarises ‘the cultural critique’ (pp 21 below), but comments that Britain’s relative decline since 1870 cannot be reduced to the inevitable corollary of a uniquely British distaste for industry. Attitudes to manufacturing have been far from an unambiguous contempt, as the career and marriage choices of the landed and professional classes and the social behaviour of industrialists show. Preferences that might have

mitigated against growth, have been no more evident in Britain than in Germany.

Furthermore, the allegedly anti-industrial policies of successive British Governments have appealed as much to manufacturers as to bankers and traders. That is not to say that social, cultural, and political factors have not been part of the 'British disease'; it is just that their part has been more subtle and complicated than the invocation of an anti-industrial spirit allows.

Dintenfass (1992) concludes that the decline of industrial Britain cannot be attributed to an inadequate resource base (but who has ever made this claim?). Britain's failure has been an inability to produce and distribute an array of goods and industrial services, similar to that supplied by other industrial economies, with an efficiency comparable to theirs. Why so many British businessmen have preferred inherited tools and techniques to new ones, informal, practical training to systematic instruction and established commercial practices to innovative marketing strategies, is far from clear. Certainly British businesses have not been at a disadvantage in the mobilisation of capital. The power of British workers to control production processes has always been limited. The macroeconomic policies operated by successive British governments generally have been those for which manufacturers have lobbied. Nor has British culture been especially inhospitable to industry and trade. If business as such has not been greatly esteemed, profits made in manufacturing have been readily translatable into status and social standing.

While the above comments are persuasive, they are also, in part, oversimplified generalisations. To claim that the power of British workers to control production processes 'has always been limited' may have been true in an absolute sense but even that limited power in the 1960s was sufficient to bring some manufacturing-organisations to their knees, as illustrated by the Meriden factory of BSA/ Triumph. The omission of the

influence of the educational establishment on the standards of education and training of the industrial work force is a serious lapse, for undoubtedly this was a contributory factor in the decline. Furthermore the availability of capital to industry and the willingness of industry to productively invest it, are complex issues, illustrated by decisions made by BSA in the 1950s’.

Elbaum and Lazonick, (1986), collated six essays on aspects of the relative decline of the British economy, supplemented by five industry case studies: cotton, steel, shipbuilding and motor vehicles. The general essays cover technical education and industry in the 19th century, industrial research, the City and industrial decline, inter-war responses to regional decline and the State and economic decline. Together they show that inherited institutional constraints impeded British firms from developing the market control and managerial co-ordination essential to modern mass production. Reinforcing the rigidities of Britain’s productive systems was a failure to transform managerial and technical education, industrial finance and state policy.

Best and Humphries (1986) in their essay, ‘The City and Industrial Decline’, suggest that the role of finance in British industrial development remains unresolved. They examine the allegations that the flow of capital into overseas investment in the late Victorian era starved home industries that could have been used to stave off relative retardation. Short-term objectives are also cited, as is further overseas investments, post WW2.

The authors argue that, from the late 19th century through the inter-war period, merchant bankers and investment managers failed to become involved in the restructuring of industry so as to influence the profitability of enterprise and the demand for long-term capital. They believe that the consequent lack of integration between finance and industry adversely affected the volume and allocation of British industrial investment and the long-

term competitive performance of industry compared with its international rivals. They do not argue that the financial sector failed at the margin because of risk aversion, lack of information, uncertainty or inherent bias but that the full contribution that finance could have made to the restructuring of British industry was not forthcoming, as it was in the other developed countries.

A different approach was taken by Coates (1994). He examined the role played by both labour and capital in economic under performance and also that of the state and society. He concluded that the key to economic under performance in Britain seems to lie in the structural location which early industrialisation established and the strong internal social forces created by that location. Economic performance in the UK is inadequate now because of processes set in train by Britain's role as the supreme power in the 19th century. That role drew British financial institutions into an international set of trading and investment relations and later sent large-scale UK industrial capital off in the same direction. It sustained Britain's pretensions to world power and placed sterling as a critical reserve currency. It provided UK manufacturing industry with easy imperial export markets and later, via the state's military spending, with protected domestic markets for certain kinds of military production. It even softened the impact of early industrialisation on the working standards of key groups of skilled workers and provided the historical experience, in which all sections of British society could become wedded to an imperial sense of their own nationhood and to the beneficial effects of free trade and limited state involvement. An imperial state, internationalised capital, a moderate labour movement and a liberal imperialist culture fused together in the brief period of British international and political domination, then sat their like a nightmare on the brain of the living, to block rapid and effective responses by any section of British society to the transformation and

replacement of that international domination, first in the 1890s and then after 1945 (Coates, 1994, 274-5).

A more recent analysis of these issues is in Owen (1999, 459). He asserts that:

‘The financial system did not let British industry down, Britain’s financial system is not perfect, but the same is true of other countries; it should be struck off the list of factors contributing to British industrial decline’.

Owen also has a view on British industrial management and on the validity of the cultural critique:

‘ There is no doubt that some British companies were badly managed in the 1950s and 60s and that there was a significant improvement in the 1980s and 90s. Part of the improvement may have been due to the meritorious approach adopted by large industrial companies to Board-level appointments. The wider availability of management education may also have been helpful. But a more important factor was the increasing intensity of competition, which made it harder for badly managed companies to survive. To the extent that there were management weaknesses after WW2, they stemmed not so much from nepotism, or the class system, or from the failure to invest in management training, as from soft markets. The war and the seller’s market which followed, bred a certain complacency in the boardrooms of some large British companies and an undemanding approach to management recruitment’ (Owen 1999, 422).

Owen might well have had BSA in mind as he drafted the latter part of the above paragraph. BSA so nearly survived (*Chapter 4.2.9 of this thesis*) as the new, harder edged, 1971 Board had returned the Group to profitability at the time of the ‘bear-raid’ that precipitated the ultimate collapse.

Kilpatrick et al, (1980) concentrates on a perceived gap in the literature, i.e. work place conflict over the organisation of production and the need to recognise that the resolution of this conflict significantly influences overall productivity. The authors argue that the role of collective bargaining and the strength of job-based worker organisation were factors that influenced decline. The highly decentralised structure of bargaining, which existed in the

UK tended to inhibit long-term planning and co-ordinated decision making, worked against quick changes in the organisation of work and restrained productivity growth.

Edgerton (1995) asserts that the place of science and technology is widely seen as critical to the understanding of the British decline. Post-1875 Britain is often characterised by its lack of enthusiasm for science and by the low social status of the practitioners of technology. He examines these assumptions and points out the different intellectual traditions from which they arise. He argues that British innovation and technical training were much stronger than is generally believed and that from 1875 to 1975 Britain's innovative record was comparable to that of Germany. Maybe, but it was in developing innovations into products that sold profitably that Britain lagged behind its competitors. While his conclusion on Britain's relative innovation record is well referenced, his assertion that Britain's technical training was stronger than is generally believed is not supported by Chapter 6 of this thesis.

Warwick (1985, 99, 126) raises three issues. Firstly, whether the economic decline of Britain can be treated essentially as a post WW2 phenomenon or do its origins more properly lie in events that occurred much earlier? Secondly, did the economy begin its decline because of a withering away of industrial spirit or some kindred cultural or attitudinal deficiencies in late Victorian Britain? Thirdly, are the sources of decline traceable to the persistence of a mercantile ethos and social structure unsuited to modern capitalism or is the root cause a fundamental change in the nature of British society during the 19th century that rendered it quite unlike the aggressive, open and mercantile society of the 18th century.

Warwick recognises that it is the second issue which has been given the most scholarly attention but concludes that it is the third which holds the key to the entire matter. He

argues that the nature of British society experienced a fundamental change in the 19th century. He considers that that this change was not simply the familiar transformation from a traditional, rural society into a modern, industrial one but rather the erection of a type of society, the territorial imperium, with its associated hierarchical status system. By the late 19th century the signs of this change were abundant. Economically, the turning away from entrepreneurial activity, the reliance on safe overseas investments and the preference for small family firms rather than dynamic expanding enterprises: socially the connection between social status and remoteness from 'trade', the importance of class distinctions, the prestige associated with public (especially imperial) service, the remaking of the gentlemanly ideal, the revival of Catholic and high Anglican religious thought: politically, the domination of democracy through the myth of government by those born to rule. The Empire was at the root of this profound change. (Warwick, 1985, 126-27).

The distinction between Warwick's thesis and Barnett (1995, pp 7-10, 124), is a narrow one. The latter also examines the influence of the Empire on British 19th and early 20th century society and argues that the key to understanding the reason for Britain's relative decline lies in the effects of British culture upon Britain's entrepreneurs. He believes that British culture, in its various manifestations and institutions, was anti-industrial and anti-business and that the chief mechanism for the intergenerational transmission of anti-business values is the British educational system, especially the great public schools and older universities, where the sons of successful businessmen were educated. The traditional aim was to produce 'English Gentlemen', well rounded amateurs who were ill-equipped for the rough and tumble of business life and who regarded business life and the pursuit of profit as vulgar and distasteful activities, unsuitable for the well-bred. Many gentlemanly products of the public schools joined the landed gentry, either by land purchase or

marriage into older established families; most of the others spent their lives as the backbone of the governing class of the Empire and the military.

Wiener (1981) brought a sociological approach to the relative decline of UK industry, which has come to be known as the 'cultural critique'. Much of the detailed evidence in support of his hypothesis is provided by Barnett (1972, 1986, 1995, 2001) and Sampson (1962, 1965, 1971). One of the objectives of this thesis is to test the validity of the 'cultural critique' against the decline and collapse of BSA.

Wiener (1981, 126-54) claims that British culture was anti-business and anti-industrial in other important ways. It was pervasively anti-urban, both in the views presented by its central cultural figures and its governing elite, who looked backward to the pre-industrial landed aristocracy and the landed gentry as the ideal, and to rural life as inherently better than urban life. Although Britain was the first country to industrialise, it was among the last to retain institutions like the House of Lords and an established Church, whilst its legal system and educational institutions were serious obstacles to rapid economic growth. Its class structure was, and remains, unusually rigid and wasteful of human resources. Unlike America and modern Japan, British culture was anti-capitalist, regarding free market economics as unfair, its chief beneficiaries the factory owners and plutocrats of the age of laissez-faire and its chief victims the working class.

Barnett initially established how economic factors influenced Britain's performance in WW2 and the subsequent dismantling of the British Empire and later went on to show how the key economic decisions made by the Attlee Government (1945-51) influenced Britain's post war history. In his first book (Barnett, 1972) he argues that between the world wars the British Empire, far from being an asset to Britain, was a political and military liability. He traces the diplomatic, strategic and financial dilemmas from the 1920's to the nemesis

of 1941-42, when a bankrupt Britain became a pensioner of the US. He argues that the cause of this debacle lay in the nature of the British governing elite and accuses this elite, the liberal product of a late Victorian upbringing, of seeing international relations too much in terms of romantic ideals and moral purpose but too little in terms of power and strategic calculation. Barnett contends that this same romantic idealism was also responsible for the anti-technical bias of general education and the neglect of vocational training from the mid-Victorian age to the outbreak of WW2.

Barnett (1986) shows that Britain's wartime industrial performance (1939-45), far from marking a supreme achievement of national genius and effort, was in reality characterised by incompetent management, obstructive trade unions, restrictive practices, wildcat strikes, old fashioned plant, chronic shortages of skilled personnel and weaknesses in the application of new technology. He also examines Government planning for the post-war era and analyses the conflict of priority between modernising the out-of-date industrial machine and fulfilling the people's yearning for a 'New Jerusalem'. More detailed examinations of this conflict are to be found in Annan (1990) and Dell (2000).

Barnett (1995) seeks to explain how and why it was that between the ending of WW2 in 1945 and the outbreak of the Korean War Britain let slip a unique and irrecoverable opportunity to remake herself as an industrial country, while her rivals were still crippled by defeat and occupation. He ranges from technology to national myth, from the influence of religion to foreign policy, from grand strategy to social welfare, from cultural values of the governing elite/intelligentsia to industrial productivity and from economic policy to the character of the nation itself. Barnett also demonstrates how the double demands on scant resources served to starve investment in modernising British industry and infrastructure.

Barnett (2001) starts with the proposition that the fundamental factor in the total strategy of a nation lies in industrial and commercial performance, for this determines power and wealth alike. This performance is governed by a nation's character: its skills, energy, ambition, discipline, adaptability and enterprise. He argues that the British people, a decade after WW2, were deficient in every one of these qualities. There was a shortage of skills owing to a defective education and training system. The British lacked adaptability and ambition in comparison with the Americans and lacked energy, discipline and enterprise in comparison with the West Germans. Britain's industrial, social, educational and bureaucratic structures alike were disjointed, desperately slow in decision and action and deeply resistant to change. Barnett argues that the Civil Service, industrial management and the trade unions still remained in the 1950s, Victorian in character, ethos and even operating methods; Victorian too in their mutual suspicions and antipathies. The intelligentsia and the educational establishment still lay under the spell of high-minded 19th century cultural values, with the result that academic proficiency continued to be prized above practical ability, the humanities above science and pure science above technology.

Sampson (1962, 1965, 1971) poses the question: who runs Britain? He analyses the differences between amateurs and professionals, the dominance of Oxbridge and the leading public schools and the gap between prestige and power. He conveys the character of Britain's key institutions (e.g. the Judiciary, the Senior Civil Service, the City, the Armed Services, the CBI and TUC, Eton and Winchester, Oxbridge, the Anglican Church etc.) in terms of their style and particularly their language – what might be termed the linguistics of power. While Sampson did not study economic decline per se, his perceptive descriptions of the culture of the institutions that presided over the decline, and of the education of their key members, are an essential component of the cultural critique.

The Cultural Critique

Perhaps the best summary of the cultural critique is in McKendrick (1986):

‘inherited assumptions, educational imprinting, subtle social indicators of preferred occupations, and accepted modes of social ascent, still profoundly affect the adoption of distinctive national attitudes to work and leisure, to risk taking and the search for security, to money and how to acquire it. Our national culture both reflects and arguably determines these values’

While the Wiener/ Barnett thesis has had considerable support over the last twenty years, it has also been subject to criticism e.g. ‘an extreme stereotype and unqualified image of the business community, grounded in selectivity and tending towards caricature’ (Kirby, 1991, 28).

An alternative explanation has been offered for Britain’s relative economic decline by Rubenstein (1993). Having summarised the Wiener/Barnett thesis he highlights the central historical contentions therein:

- Britain was both the earliest country to industrialise and was a primarily industrial and manufacturing economy.
- Britain’s industrial decline is the most salient feature of its economic evolution since 1850
- The most important reason for this decline is Britain’s pervasively anti-industrial and anti-business culture, reinforced by the education typically offered to the middle classes.
- The end product of this is a society rooted in the past, pre-modern and anti-modern in most respects, and ill-equipped to deal with the modern world.

Rubenstein (1993, 24) then asserts that:

‘It is as well that we have enumerated these central contentions as specifically as possible, for the aim of this book is to demonstrate that each of them, however familiar, is wrong – and not merely wrong but arguably the very opposite of the truth.’

He then considers four aspects of the argument:

- The economy and the cultural critique.
- British culture and economic performance.
- Education, the ‘gentleman’ and British entrepreneurship.
- Elites and the evolution of the British economy.

Rubenstein argues that the fundamental assumption made by advocates of the cultural critique is wrong, namely that Britain was an industrial nation whose industrial and manufacturing lead vanished through qualitative decline after 1870. His view is that Britain’s was never an industrial and manufacturing economy; rather it was always, even at the height of the industrial revolution, essentially a commercial, financial and service based economy whose comparative advantage always lay with commerce and finance. Britain’s apparent industrial decline was simply a working out of this process which became increasingly evident from about 1890 and which was coincident with a continuing rise in the average standard of living in Britain. Rather than a decline, it was a continuous transfer of resources and entrepreneurial energies into other forms of business life. Rubenstein’s argument, however, is flawed in that it takes manufacturing and the service industries to be alternatives as the basis of growth in the UK economy. He does not consider the possibility that, with the head start in manufacturing that came from the industrial revolution, Britain could have developed into a world class manufacturer in parallel with the development of its commercial and financial expertise and other service industries.

He cites evidence that Britain's economy has always been a commercial/financial one, which became more oriented towards commerce and finance from the late nineteenth century onwards: from the distribution of the middle classes in terms of numbers, geography and incomes, from the occupational distribution of the employed population as a whole and from the success of the City of London and other commercial and financial businesses vis-à-vis manufacturing industry.

Rubenstein also highlights what he terms the most objectionable feature of the cultural critique – and indeed – of much other criticism of Britain's economic performance during the past generation, i.e. its obsession with manufacturing and the implicit assumption that only manufacturing counts as a legitimate business activity. Manufacturing is seen as being virile; services in contrast being seen as effete and non-productive, although they now generate a greater proportion of the national income (Rubenstein, 1993, 43-44).

Rubenstein (1993, 45-101), in contradistinction to Wiener (1981), also argues that Britain's high culture was the least hostile to entrepreneurs and business life of any in Europe and perhaps in the world. Its intellectuals were the least alienated of those of any leading society; and British culture was becoming more rational from 1850 supporting pro-business values rather than being antipathetic to them.

Rubenstein (1993, 104-139), also criticises Wiener's description of the public schools and the haemorrhage of talent alleged to have occurred when the sons of successful Victorian industrial entrepreneurs were transformed into effete 'gentlemen', who left business life entirely or, if remaining, showed technical and business incompetence. In doing so he asks four rhetorical questions he believes can be empirically tested:

- Was public school education common enough, in the late nineteenth century, to instil a 'spirit of anti-industrialism' into the middle classes as a whole?

- Was it common enough to affect the sons of industrialists and manufacturers (as opposed to other types of businessmen)?
- Was there in fact a ‘haemorrhage of talent’ whereby the sons of businessmen made their careers outside industry?
- Can anything be said with certainty of the entrepreneurial abilities of those educated at public schools who remained in business life?

To answer these questions and assess the validity of Wiener’s view of the public schools, Rubinstein introduces data from a large research project concerned with the Victorian middle class. He made a yet unpublished study of random samples of entrants to eight major public schools, 1840-1900, with the aim of determining the occupation, career pattern, and probate value of each person in the study, and of the father of each person. It is regrettable, however, that the list of schools omits Oundle where, at the turn of the century, science and technology were given the same status as the classics and every boy was required to spend one week per term under instruction in well equipped engineering workshops (Walker 1955, 512-13).

Rubinstein (1993) drew several conclusions from this investigation:

- Unless the public schools attracted the sons of the country’s businessmen in grossly disproportionate numbers, it would have been impossible for them to have had the profoundly deleterious effects attributed to them by the proponents of the cultural critique.
- Public school entrants, in their own later careers, regularly followed in their fathers’ footsteps: the sons of professional men normally took up a professional career, the sons of businessmen, in the majority of cases, themselves became businessmen. The intergenerational shift from business to the professions was very small.

- Far from leading Britain into an economic dead end, the public schools appear, in so far as they have had much influence at all, to have guided its leavers into the most economically, most dynamic areas of the economy.
- There is little direct evidence that the public schools did engender an anti-business and anti-entrepreneurial mood. Few businessmen fathers would have educated their sons at a school preaching an ideology so much at variance with their own. Even if the prevalent ethos of the public school was clearly and demonstrably anti-business, it does not follow that the resultant products would decline to enter business life or would be inferior businessmen.

(The research programme reported in Chapter 7 of this thesis, although on a smaller scale and studying boys who left a wider selection of public schools in the period 1940-60, also examined the validity and effect of their alleged anti-business, anti-profit culture.)

Collins (1990) brought together four papers under the heading 'British Culture and Economic Decline':

- 'British Culture verses British Industry' by Robbins K.
- 'Entrepreneurship and British Economic Decline' by Payne P.
- 'The German Experience and the Myth of British Cultural Exceptionalism' by James H.
- 'American Enterprise and the American Comparison' by Robbins B.

Robbins (1990) argues that the problem confronting those interested in explaining the reasons for Britain's relative economic decline is to determine the appropriate framework of reference. Wiener brought his interest in early twentieth century English intellectual and cultural history. On the other hand Barnett was a military historian, who admired German organisation and technical efficiency. Robbins believes their early interests and mindsets are revealed in their writing on industrial decline and that the important evidence is not

what has been so painstakingly quoted in support but that which is not said. Barnett, in particular, is accused of not being willing to consider evidence which appears to contradict his hypothesis.

Robbins introduces two new ideas into the debate, the significance of chronology and the importance of scale. Neither Barnett nor Wiener give much help in determining precisely when the switch from dynamism (of the industrial revolution) to the alleged decline took place, nor do they attempt to explain how the dynamism came about. Robbins asks whether culture at the initial stage was particularly conducive to the pioneering spirit or could it have occurred in a cultural context, which was as hostile to industry as it allegedly became subsequently? Robbins criticises Wiener for his failure to define 'industrial spirit', although he concedes that this is difficult to do. Wiener is more forthcoming, however, on the gentrification of the industrialist but Robbins warns against assuming that its attractiveness was universal, noting that many successful businessmen chose to live prosperous lives without becoming country squires with sons at Eton or Winchester. Robbins notes that both Barnett and Wiener interchange 'British' and 'English' without being aware that there might be other cultures in Britain besides that of the English which need to be taken into account, for example that of Glasgow and the industrial West of Scotland. The most serious criticism he makes, later to be made by Rubenstein (1993), is to challenge whether the haemorrhage of talent out of industry, supposing it did take place, was in itself harmful. Looked at from the standpoint of the community at large, the release of such talent may have been beneficial and the failure to maintain dynasties is not, in itself, a source of regret.

Robbins (1990) believes that it is in the sphere of education that the 'anti-industrial' bias of British culture has been most firmly identified. Nevertheless he criticises the cultural

critique for concentrating on the leading Public Schools and Oxbridge, and agrees with Sanderson (1998) that insufficient attention in the debate has been given to the role of English civic universities. As early as 1914 only a minority of university students were at Oxford or Cambridge, with the remainder at London University or the new Civic universities of the Midlands and the North.

Robbins quotes Sanderson, (1998):

‘between 1880 and 1914 the symbiotic relationship of civic university technology departments and industrial firms was closer than ever before or since and suggests that it was not anti-industrial attitudes that were a matter of concern but that industry showed insufficient interest in applying the developments of the science departments’.

Robbins’ conclusion is tentative. He accepts that the cultural critique is an element in the relative economic decline of the UK but believes that the thesis needs to be explored further and also treated with reservation, if presented as the major cause of that experience. Acceptance of the cultural critique leads to an over simple conclusion: i.e. if you want to reverse the decline of British industry, you have got to change the culture. This, however, is a difficult goal and one that would be strongly opposed by many within the existing culture who would suffer in the process. On the other hand cultural adaptation may be less important than is often claimed. This balanced view is persuasive, for simple explanations of complex social systems, adapting to continuous change over long periods of time, rarely tell the whole story (Robbins, 1990, 21).

Payne (1990,31), who claims that that the evidence in support of the cultural critique is ‘partial and inadequate’, examines ‘entrepreneurship’, one of the factors involved in Britain’s relative economic decline, and several cultural and institutional influences bearing upon it.

Criticism of the British entrepreneur is not a new phenomenon; it goes back to the closing decades of the nineteenth century when Britain's economic domination, especially in manufacturing, was seen to be passing to the US and Germany. Payne's conclusions, whilst not original, are a useful contribution to the debate. He notes that until the 1960s attitudes were such that there was no pressure for the creation and expansion of social institutions for the development of professional managerial personnel (but what about ICI's internal training programmes which went back to Brunner Mond in the late 19th century and were based on the German practice of developing high grade science graduates into professional managers?). He concludes that the poor education and skills of the British labour force inhibited innovation which, in turn, has contributed to the relatively low level of investment which, more than any other factor, has retarded British economic growth.

Payne argues that the move into services provides positive evidence of entrepreneurial vigour in the closing decades of the nineteenth century and that this movement, which has continued ever since, is of the utmost importance. Yet it was not until the twentieth century that this trend could have become detrimental to aggregate growth. He then makes a proposition which cannot be verified, i.e. that since 1900, higher rates of economic growth might have been achieved by manufacturing more advanced technological products.

British industry, however, with its inferior education and training systems found, with a few notable exceptions (e.g. gas turbine aero engines), such products difficult to develop.

James (1990) reviews German culture and superior (1946-90) economic growth but points out that it is misleading to attribute relatively small differences in growth rates to cultural factors. He argues that the cultural attitudes that induce growth were always, and still are, common European properties. The differences can be better-accounted for in strictly

economic terms i.e. different sizes of market, or endowments of capital, labour, and land, or different government policies. To use the cultural critique is to take an instrument that can generate explanations for large-scale phenomena (such as the emergence of industrialisation in Europe), but is less readily applicable to smaller differences in performance. The accounts of Barnett and Wiener run the danger of using explanatory sledgehammers to crack rather modest nuts. This still requires the economic factors James prefers as the basis for the explanation for the relative decline of the British economy, to be rigorously analysed.

Collins B. (1990,129) follows the same path as James did for Germany but before doing so critically comments on the cultural critique:

‘Cultural explanations of British decline have raised far more doubts than they have gained academic endorsement. Historians find them vague; economists dismiss them. Searching through the record of the twentieth century or so leads to three possible avenues of more fruitful enquiry: changes in factor endowment, policy choices and institutional constraints’.

Collins argues that the relationship between cultural values and economic performance is unlikely to be precise or well defined. Yet his examination of the American system of enterprise shows that cultural characteristics, understood in the broadest social and political sense of culture, shape institutional arrangements, which themselves may promote entrepreneurial activity. He asserts that in the emergence of professional management, in the dissemination and celebration of business values, in the judicial maintenance of competition and in the resistance to trade unionism and anti-market socialism the US has either led the way or followed a different path to that led by Britain. American popular culture and institutional arrangements are shaped by the pursuit of business opportunities and profit. Whilst ‘the business of America is business’ this is self-evidently not true in Britain (Collins B, 1990,186).

There is general agreement between the four authors that the cultural critique is a useful contribution to the debate about the reasons for the relative economic decline of UK manufacturing industry. They reject, however, their mono causal stance and perceived overstatement and offer several other more significant explanations.

Gunn (1988, 26) criticises the authors of the cultural critique for the opaqueness of their central categories, the insularity of their reference points and for a certain naivety in their choice of cultural change. He restates Rubenstein's comment (1988, 55): 'if U.K. culture is anti-capitalist then every cultural system in the world is anti-capitalist and anti-business, at least to the extent of producing literary and philosophical arguments against dominant liberal values'. How is it, Gunn asks, that American and German culture failed to be affected in the same way as in the UK?

Williams et al (1983, 17) recognise that long-standing and pervasive national attitudes and institutions and especially the educational system are identified as the cause of the 'British disease'. They comment, however, that:

'while these social attitudes and institutions may be important we doubt that they should be invoked in this way to explain industrial decline. Such explanations make an unjustifiable leap to an underlying cause. They are unsatisfactory because they offer a speculative identification of a quasi-idealist sort'.

The magnitude of the literature of industrial decline means that the above is only a summary of the important issues. In spite of all the research work that has been done the feelings of incompleteness and dissatisfaction, mentioned by Dintenfass (1992, 71), remain, 'and it is possible that an all embracing explanation of the reasons for the decline of UK manufacturing industry may be not be within our grasp'. His recommendation, that the academic emphasis should switch to close empirical studies of actual British enterprises and their decision makers, such as this thesis, at least charts a way forward.

2.3 Decline and Collapse of BSA

The collapse of BSA led to widespread concern and a body of literature describing what happened and why. Before reading this case specific literature it is helpful to keep in mind A.D. Chandler's analysis of how capitalism developed and functions and the way in which administrative structure and managerial co-ordination replaced Adam Smith's 'invisible hand' (market forces) as the core developmental and structuring impetus of modern business.(Chandler, 1977). It is also useful to be aware of his hypothesis that in the wake of increased industrial scale three successful models of capitalism emerged, 'personal' (notably in the UK), 'competitive' (in the USA). and 'co-operative' (very much the preserve of Germany) (Chandler, 1990). His belief that the persistence of personal capitalism in the UK was a major cause of the relative decline of UK manufacturing industry in the first sixty years or so of the 20C is highly relevant to events in post WW2 BSA.

The academic and consultants studies are:

'Strategy Alternatives for the British Motorcycle Industry' (BGC, 1975).

Although this report is mainly concerned with the aftermath of the collapse of BSA and the formation of Norton,Villiers,Triumph Ltd, it includes a rigorous analysis of the historical shortcomings of the UK motorcycle industry.

'The History of the British Motorcycle Industry, 1945-75' (Smith B., 1983).

Claimed to be only an interim study, this paper examines why, in 1955, British motorcycles led the world and by 1975 manufacture had virtually ceased. It includes statistical and financial information about the industry world-wide.

'The Political Economy of Producer Co-operatives. A Study of Triumph Motorcycles (Meriden) and Britain's Industrial Decline' (Fairclough, 1986).

Although ostensibly dealing with sociological and political aspects of the Meriden Co-operative, this thesis includes a history of the events leading up to the collapse of BSA, written from the perspective of Triumph and the Meriden factory and its workforce.

‘ Trade Unionism and Collective Bargaining at two British Motorcycle Factories: a study of BSA/Small Heath and Triumph/Meriden, 1951-75’ (Koerner,1990).

Koerner concludes that that the nature of the workforces at the two BSA motorcycle factories was influenced by their respective corporate structure, product, sales strategy and location. The post-collapse outcome at each factory i.e. the large-scale redundancies that were relatively unopposed at Small Heath compared to the factory takeover at Meriden, came about as a result of these factors. The dissertation includes useful statistical information on disputes and strikes at both sites.

‘ The British Motorcycle Industry: 1935-75’ (Koerner, 1995)

Koerner believes that the collapse cannot be understood without considering the history of the industry from 1935 onwards. He rejects the view that Government policy opposite the industry was a major factor in the debacle and asserts that the key factor was its inability to develop a successful lightweight economy model. Koerner concludes that the decline of the industry was the manifestation of a series of constraints, created by the management, which had been in existence long before the appearance of the Japanese competitors.

Although all but one of the above texts deal with the British motorcycle industry as a whole, rather than just BSA, the company was such a large part of the industry (consistently above 50% post WW2) that in most cases conclusions relating to the industry are equally valid for BSA. Apart from most of Fairclough’s thesis on the Meriden Co-operative, which is based on political theory, the above reports/theses approach the

collapse of the motorcycle industry from a technical/managerial, rather than an economic/sociological, standpoint.

There are also four popular books that merit review, which deal with BSA and Triumph and their management and which were written primarily for the motorcycling fraternity.

‘The Giants of Small Heath (Ryerson, 1980).

Written by a technical journalist who had known the senior management of BSA’s motorcycle companies for many years and was very knowledgeable about the design and performance of the company’s bikes and those of their competitors. Ryerson’s judgements, however, may lack objectivity because of his proximity to the events and his close relationships with several BSA Directors.

‘Whatever Happened to the British Motorcycle Industry’ (Hopwood, 1981).

Bert Hopwood was probably the best motorcycle design engineer in the UK (Ryerson, 1981, p.142). He was Deputy Managing Director of BSA’s motorcycle division, resigned in protest early in 1970, but was recalled in 1971 following reconstruction of the company under Lord Shawcross, to join the new Group Board with oversight over all motorcycle engineering activities. His book appears to be historically accurate but understandably written to put the author in the best possible light. Apart from my interview with Alistair Cave (2003), it is the only available primary source of high level inside information and analysis.

Steve Wilson, the author of the six volume ‘British Motorcycles since 1950’, who wrote the preface to the 1998 re-issue, reported that ‘when Hopwood’s book first appeared, there were mutterings amongst ex-colleagues along the lines of he thinks he knows it all but time has confirmed that he actually did’.

He also wrote: ‘Shilton (1982), who severely criticised Hopwood’s conclusions, seemed to me biased in favour of Triumph and a bit petulant’. When challenged on this comment Wilson replied: ‘I knew Bert Hopwood well; it was impossible not to admire him for his tenacity and clear thinking. Shilton I never met: by all accounts a delightful senior NCO-type but an unreliable witness and a bit big headed. Ex- colleagues referred to his book as ‘A Million Miles Ego’ (Wilson, S. Personal Communication, May 2005).

‘A Million Miles Ago’ (Shilton, 1982)

This is a partisan book written by Triumph’s International Sales Manager until his resignation in 1968. It is thus a primary source, but one that has to be treated with caution, because of his veneration of Edward Turner (Triumph’s MD) and loathing of BSA.

Triumph: ‘The Complete Story’ (Davies, 1991).

Ivor Davies was Press and Publicity Manager for Triumph for thirty years. His book is a straightforward technical and sporting history, which hardly mentions BSA!

The major academic/professional studies on BSA are now considered in more detail

‘Strategy Alternatives for the British Motorcycle Industry’ (BGC, 1975).

This report was written for the Secretary of State for Industry by the Boston Consulting Group (BGC), following the establishment of Norton, Villiers, Triumph Ltd as a subsidiary of Manganese Bronze (Holdings) Ltd. In developing the strategy, BGC first sought to understand the factors responsible for the decline of the industry.

Market Share Loss and Profitability.

BGC claimed that the loss of market share by the British industry over the period 1960-75 resulted from a concern for short-term profitability. During the 1960s, in any model in which the industry was confronted with Japanese competition, the British manufacturers found it difficult to make profits at a competitive price. Their response was to progressively withdraw from manufacturing smaller and then medium sized bikes. By the late 1960s, the British industry was active only in the large (over 500cc) bike market, where the Japanese were not then represented. The reason for the decline thereafter was that, during the 1970s, the Japanese entered the large bike segment of the market. As in every other segment, where the British manufacturers had previously faced Japanese competition, profitability declined. Abandoning big bikes would have meant ceasing to produce motorcycles altogether, so the British persevered; but losses mounted.

In 1969, four of the eight models in the range 450cc-749cc on sale in the US were British (mostly BSA) and the British industry held a 49% market share. By 1973, only two of the ten available models were British and the British market share had fallen to 9%. A similar pattern held for the key 750cc class. The new, competitively priced models that the Japanese introduced, all gained spectacular market growth in the segment. While the British volume remained at roughly 30,000 units p.a., the Japanese volume in the large bikes (above 450cc) in the US increased from 27,000 to 218,000 between 1969 and 1973. BGC believed that the industry, and BSA in particular, failed to recognise the relationship between market position and profitability. It was the loss of market share by the British industry which caused the low profitability. It may have appeared to the industry's managers that the reverse was true.

Profitability and Relative Costs

In size classes where they competed, the Japanese dictated price levels during the period 1958-73. This was also true in super-bikes after they established their strong position in this segment after 1969. The Japanese firms were profitable while the British manufacturers priced at a premium relative to the Japanese. The conclusion was inescapable: the profit pressure experienced by British manufactures did not result from price realisations that were lower than those of their competitors, but from a cost position which was not competitive with that of the Japanese manufacturers.

BGC thus sought to understand what determined the cost position of a competitor in the motorcycle business and to explain the sources of the cost superiority enjoyed by the Japanese firms.

Key Factors Influencing Relative Costs

There are two variables that determine costs in the production and selling of motorcycles: technology and scale. The manufacturer with the highest model volumes can benefit from production methods which embody advanced technology and which rely on scale effects for their cost superiority. Sustained technological advantages, however, require a commitment to ensure technological leadership. The Honda Group maintained a dedicated subsidiary that developed and manufactured advanced machine tools for Honda Motorcycles. Relatively low volume manufacturers, like BSA, used ageing general purpose equipment which they obtained from outside machinery suppliers, thereby foregoing the opportunity to develop proprietary technology.

After the arrival of the Japanese firms in the UK market and the British manufacturer's overseas markets, the home industry experienced decreasing production volumes relative

to the Japanese, as UK volume stagnated or fell back in the face of sustained volume growth by its Japanese competitors. The poor commercial performance of the 1960s was a result of their failure to respond effectively to the strategic implications of the economic relationship between volume and costs.

The costs and value added of motorcycle manufacture were analysed by BGC and divided by them into three major elements of roughly equal magnitude:

- Purchased materials and components
- Production
- Selling and distribution.

Purchased Materials and Components: Unit costs depend upon the cost competitiveness of the component suppliers and also on the prices the customer's buying power can command.

Because BSA purchased in relatively small volumes, their component suppliers could not use the lowest cost production methods, which require high volumes. Furthermore, the motorcycle industry was a minor customer of the major auto industry component suppliers. The result was poor service compared with that enjoyed by larger customers, a reluctance by the suppliers to invest in advanced production methods to service the motorcycle industry and long product lead times. The large volumes of the Japanese firms had precisely the opposite effect.

Production: The factory value added consisted of engine part machining, cycle parts manufacture and the assembly of engines and finished bikes. Unit costs were a function of accumulated production experience, current volume and growth. Volume and scale

determined the ability to use high volume, capital intensive, methods to increase productivity; the extent to which the most up-to-date technology can be used and the degree to which production facilities could be specialised and focused.

The performance of the British motorcycle industry in each of these areas was disappointing. Mergers, acquisitions, factory closures and redundancies limited the opportunity for the industry to reduce costs smoothly over time. Low and stagnant production volumes meant that the British manufacturers had neither the volume nor the growth to justify the introduction of new production technology and modern high volume equipment.

British motorcycle factories contained mostly old, general purpose, labour intensive equipment; neither capable of low cost, high volume production nor ideal for producing parts to the close tolerances required for a reliable final product. (At BSA's Wolverhampton factory, as many as 60% of the machine tools were over twenty years old). Overall, the net fixed investment per worker, was £1,300 in the UK industry compared to £5,000 at Honda.

There were also significant differences between the British and Japanese approaches to the management of the motorcycle design function. In a Japanese motorcycle company the design department provides a service to production and marketing. Designs are subject to cost and commercial evaluations and must be suitable for low cost, high volume, production. In BSA the focus was on pure design engineering considerations rather than on creating products which were intrinsically low cost to produce. BGC were unable to find a single British motorcycle suitable for low cost manufacture. It is instructive that

BSA's Director of Engineering, in his memoir (Hopwood 1981), made no mention of design for production, as opposed to performance and reliability.

An additional advantage, which the Japanese companies obtained from their high volumes, were large R & D facilities at low cost. In 1970, Honda, Yamaha and Suzuki had fewer R & D employees as a proportion of sales than the British industry, which employed only about 100 in the research and development function, mostly within BSA.

Selling and Distribution. Unit costs are further reduced if sales per model are high and are reduced yet again if the average volume per dealer is high. The Japanese producers could have taken increased profits from the reduced unit costs arising from their superior scale and volume at the overall, per model and per dealer sales levels. They chose, however, not to do so. Instead, in the British and US markets, they decided to spend more on marketing, thus providing a superior marketing service at the same unit cost as their smaller competitors, such as BSA. They also established larger distributors offering a better service to dealers and bigger dealers that offered better sales and repair services to retail customers.

BCG also highlighted the disparity in productivity by a comparison of value added per employee, a key factor in overall productivity. While the figures quoted relate to 1974/75, i.e. almost two years after the collapse of BSA and the formation of NVT Ltd, they are unlikely to be significantly different from the position in the late 1960s, when Small Heath was still manufacturing complete motorcycles. In 1974/75 the value added per man in the British motorcycle industry was nominally £5000. Adjusted for losses at the factory level, a more realistic figure might have been £4,200. In the same year Honda had a value added figure at the motorcycle company level of almost £18,000 per man per year, a ratio of over 4:1.

The cost advantage of the Japanese firms was based on higher productivity arising from this increased investment. It did not arise from lower labour costs. Japanese labour costs had exceeded those in British factories and had risen more rapidly.

The overall conclusion of BCG was:

‘the cause of this disaster.....arose from a concern for short term profitability. Management gave priority to dividend payments over capital investment for the sake of company share value’ (B.C.G. 1975, xiv). The Boston analysis is consistent with the literature on Japanese world superiority in industrial product design and manufacturing productivity in the period 1955 to 1990. (Inoue, 1991; Ohtani and Duke, 1997; Lorriman, 1994).

It is surprising that, in their analysis of the Japanese strategy, which was so dependent on high sales volume, BCG did not consider the origin of this volume. The Japanese population was over twice that of the UK and there was a key difference between the British and Japanese approach to the motorcycle market. BSA and the other British manufacturers sold bikes to people who were genuinely interested in motorcycles. The Japanese created new demand by offering a well-designed, cheap and reliable form of urban transport to people who had no interest in motorcycles as such.

The analytical tools used by BGC, however, were available to BSA twenty years or more before the company's collapse. Had the methodology been used by BSA in the late 1950's, before the Japanese onslaught began, the outcome might have been different. Cutler et al (1978, 150-52) used a section in BGC (1975, 34-35), to illustrate a point, concerning the time period taken by accountants when judging profitability. They argued that the time period taken for this calculation plays a central role in explaining the inferior performance of British motorcycle producers and helps to account for the cumulative and rapid decline experienced by the industry.

BCG (p. 34) stated: 'The fundamental feature in this (British) philosophy was its emphasis on model by model profit levels, from which the negative strategy of 'segment retreat' follows'.

This emphasis led to four beliefs:

- Products should be withdrawn whenever the accounting system shows they are unprofitable.

BSA's accounting system was based on existing methods of production and distribution and not on cost levels that could be achieved with new systems and different volumes.

Under competitive pressure it led to a focus on high cost, high margin business, regardless of volume and market share.

- Prices should be set at the levels necessary to achieve profitability and should be raised higher if possible.
- The cost of an effective marketing system was only acceptable in markets in which BSA was already established and profitable.

New markets were only to be opened up to the extent that their development would not mean front end expenditure investment in establishing sales and distribution systems ahead of sales.

- Plans and objectives were to be primarily oriented towards earning a profit on the existing business and facilities of the company, rather than on the development of a long term position of strength in the industry.

The time-period underpinning these beliefs was that taken for the company's accounts, i.e. one year. This led to the selection of a product range governed by annual profitability,

which also governed decisions concerning production and distribution methods. Potential economies that might have been achieved by higher overall volume, were lost. The use of this one year period as the basis of business decisions involved a cumulative weakening *vis-à-vis* those competitors that aimed for high market shares. Inefficient production methods and distribution systems led to more models becoming unprofitable and their withdrawal from production. This created a larger market for the Japanese motorcycle companies who were able to capitalise on further scale economies in both production and distribution. The cumulative gap forced BSA into requiring higher price premiums over their Japanese competitors. The process of decline continued such that the Japanese were able effectively to compete with BSA even in their previously most profitable models (Cutler et al, 152).

‘The History of the British Motorcycle Industry: 1945-75’ (Smith, B., 1983)

Smith B. considered whether the British industry and individual companies should have reasonably been expected, in the 1960s, to have met the combined challenge of the fall in the demand for motorcycles in Britain and the advent of major competition, principally from the Japanese, in both home and export markets.

As these pressures defeated the industry, Smith examined British competence, profitability, investment strategies and dynamism in the years preceding its collapse. She recognised that indictment of the British companies alone was too simple, as the motorcycle industries of Germany and Italy, were also badly hit by Japanese competition

Smith B. also focussed on other events and trends adverse to the industry. These were: post-war American policy towards German and Japanese industry; the urgent need in Japan

for a low cost, low petrol consumption form of personal transport; the expansion of the motor car industry (that took markets, workers and suppliers from the smaller motorcycle industry); the conglomerate and merger fashion that led BSA into many diverting and ultimately unrewarding alternatives to motorcycles and obscured its vision of its main function. She also highlighted variations in taxation and vehicle licensing systems (that, in Britain, used hire purchase and purchase tax as controls on consumption, without consideration of the harm done to particular products and producers affected and treated a scooter or motorcycle as a kind of car); regional policy that hindered alternative manufacturing industries and firms from developing in the West Midlands to replace motorcycles; the blind and often suicidal devotion of British governments and their officials to free trade (exemplified in the 1962 Anglo-Japanese trade agreement) which did not extend to motorcycles, even temporarily, the quotas and voluntary controls put on imports of textiles, radios etc and the persistent failure to pay sufficient attention to marketing, investment and productivity improvements needed to retain market share. The external influences listed above were outside the control of the management of BSA and had a significant influence on the fortunes of the company, regardless of the professionalism, or otherwise, of its management. It could be argued that these external forces may have had a greater effect than the influences of the ‘cultural critique’.

UK licences for motorcycles, scooters and mopeds rose to a peak of 1,7996,000 in 1960 and then declined to a trough of 982,000 in 1972 i.e. the number of motorcycles etc in use almost halved between 1960 and 1972. New registrations peaked at 332,000 in 1959, with the corresponding trough of 85,400 falling in 1969. Both usage and demand recovered after this trough and, in 1979, current licences at 1,292,000 were back to the 1968 (and 1956) levels and new registrations at 286,000 were higher than any previous year except

1959. In summary, the use and demand for motorcycles etc. in Britain rose, until 1960, and then fell steadily for a decade before recovering in the 1970s.

The Japanese onslaught was sudden and sharp in its impact on the market place (in 1963 they exported almost 50,000 motorcycles to Britain, providing 89% of all such imports and close to two motorcycles imported for each one exported from Britain). Smith B. made several points in relation to this. First, the Japanese invasion had, in a sense, been building up in the development of the Japanese home market. It was surprising that motorcycle producers outside Japan seemed to have overlooked both the opportunity offered by the Japanese market in the 1950s and the build up of Japanese industry, with its economies of scale. There may have been an element of racial superiority here: i.e. the unwillingness of white Europeans to consider, in the 1950s, that the Japanese were capable of world class design and manufacture, in spite of early evidence to the contrary.

British manufacturers in the 1950s, however, were working to capacity. Several chose not to expand either capacity or sales, either by advertising or pushing in to new markets or, for some time, entering the scooter market in competition with continental producers. They thus missed the opportunity in the period 1954-60 to establish themselves in the new Japanese market and benefit from the economies of scale in design and production at the critical time. Such a decision, of course, would have involved an imaginative leap for any British producer, but surely was within the compass of BSA.

Smith noted the suggestions that the export onslaught occurred in motorcycles (rather than in some other goods) because opposition abroad was weak and therefore encouraged, rather than stifled, the potential Japanese competition (Magaziner, 1980, p.13-26). She stressed the importance of their home market to the Japanese producers until the mid-1960s as a

base from which to work. Even in 1980, with eight million motorcycles in use in Japan and their home market saturated, one third of their production went to the home market.

Moreover, apart from this large home market, the Japanese were aware that the North American market had no indigenous producers for any motorcycles under the 1000cc bikes built by Harley Davidson. In 1975, one fifth of Japanese production was exported to the US, but only one twentieth to the UK.

The Japanese assault started quite mildly in the early 1960s, with a few unsuccessful models in the smaller engine sizes. Within a year or so the Japanese had learnt the essential lessons to enable them to succeed in this market, then to gradually to move up the engine range to the largest size motorcycles and total command of the whole motorcycle market by 1980.

Smith B. completed her analysis of the reasons for the success of the Japanese onslaught by recognising that they saw and seized their opportunities through new thinking, new demands and new technology. They saw new marketing opportunities at home and in south-east Asia: in motorcycling for pleasure and excitement; in clean, attractive and reliable machines, that did not assume a manly attitude to oil drips, vibration, kick-starts and the need for regular mechanical adjustments. They established themselves and their excellent after-sales service in the smaller machines before invading the larger capacity market. They also mounted innovative advertising and marketing campaigns and integrated design and manufacturing engineering. In this way prices were cut, markets extended and economies of scale obtained. Improvements in productivity were delivered year after year as the benefits accumulated and combined.

Smith B. then asked a key question.

‘When was the last date at which reforms in the British motorcycle industry, or individual companies such as BSA, would have enabled the defeat of (or

restriction and co-existence with), the Japanese onslaught? Does this date lie in the 1950s (when the Japanese home market had not enabled such big economics of scale in R&D and production engineering), or in 1962 (when Japanese motorcycles, assisted by the one-sided Anglo-Japanese Trade Agreement, first became significant imports into Britain and the US), or in the early 1970s (when attempts were hurriedly made to improve the British industry by mergers, investment and new models)'. (Smith B. 1983, 24).

She concluded that the years 1954-62 were critical, rather than the 1970s, when the die was already cast

While British motorcycle output per worker per year had almost halved by 1973, compared to that in 1961, in Japan it had doubled. Starting from a more favourable position in 1956, British output had fallen to one fifteenth of the Japanese average or one twentieth of Honda's record figure in 1973. Smith B. concluded that, in the UK, government investment, mergers, new models or rationalisation down to one or two manufacturing sites, were never going to counter the competitive forces that the productivity difference unleashed.

Smith B recalled that the industry in Britain comprised a number of private enterprise concerns motivated by profit and asked whether failure to invest in more advanced motorcycle production (as distinct from new models) could be explained simply by poor relative returns and prospects for the industry even before the days of Japanese competition? The financial analysis of her co-worker (Rogers, 1979) suggests that returns were such that funds could have been made available in the 1950s, but that investments were not made on anything like the scale necessary to advance and expand motorcycle production. This was not due to a lack of a market at that time.

Smith B. catalogues the management errors made in the 1950s and 60s and concludes that it was these errors, rather than the competition from Japan that brought the industry down. Japanese competition was only relevant in the sense that, with falling home demand, it

gave rise to some of the errors. Thus, decline was not caused directly by Japanese competition. The British companies making up the industry had already taken major decisions, with fatal consequences for each of them. These decisions were variable in time-scale, content and justification. Whilst it is appealing to find only one explanation in a panic reaction to the Japanese threat, it seems to have had no justification in practice; British top management were too complacent and unaware, to appreciate fully the Japanese threat.

Incredulity comes through in Smith's language. She goes so far as to suggest that the British motorcycle companies almost committed suicide by errors of judgement or by apparent indifference to the Japanese threat and the state of the industry. As she wrote, some of the decisions made were 'literally incredible and large scale' (Smith B. 1983, 35, 38)

Smith's overall conclusion was tentative. She argued that there is no one feature which explains the decline of BSA and the rest of the British motorcycle industry. She felt it difficult to be sure that she fully understood the problems and why decisions were taken as they were. The motorcycle industry faced a combination of international, national and company structural problems and it is the conjunction of events at these three levels that caused problems for individual companies.

Although Smith covers a wider ground than the later BCG report, there are no inconsistencies between the two analyses. The paper is well supported by UK, Japanese and World trading statistics, thus ensuring that the judgements made were well grounded in fact. This is important in a series of events, which engendered nostalgia, wishful thinking, interpersonal vituperation and shame that so much was lost so negligently.

‘The Political Economy of Producer Co-operatives: A Study of Triumph Motorcycles (Meriden) and Britain’s Industrial Decline’. (Fairclough, 1986)

Although ostensibly dealing with the sociological and political aspects of the Meriden Co-operative Fairclough’s PhD thesis also includes a history of the events leading up to the collapse of BSA, written from the perspective of Triumph and the Meriden workforce. It also includes a description of the production and assembly processes of the Meriden factory.

Fairclough’s early history of BSA and their Triumph subsidiary, leans heavily on Smith B. (1983). He discusses the implications of Edward Turner’s report to the BSA Board on his visit to Japan in September 1960 (*Appendix G*) and considers the Japanese phenomenon at four levels: national, industry, corporate and plant. He believes that the seeds of the UK decline are to be sought in the formative years of post-war reconstruction of the overseas motorcycle producers, especially the Japanese. This takes us back more than ten years before the start of the 1960s, by which time the trends had become clear. They aimed for higher volumes (based on their large home market) than BSA could aspire to and developed high technology production processes backed with well thought out management control.

It does not appear that the Directors of BSA, in spite of lengthy discussions, (Ryerson, 1980,159-60) understood the full implications of the Turner Report (*Appendix 6*). Their attempts to develop a strategy and policies to counteract the threat described were inhibited by their reluctance to invest the necessary capital for major product development and modern production plant.

Fairclough compared BSA and Honda (visited by Turner), the two major world producers from the mid 1950s on, the largest volume suppliers of their domestic markets. In the early

1950s, within BSA and Honda, there were similar resources and scale of production and the market size and overall output of both companies was roughly similar. They shared similar status in relation to their competitor firms (e.g. AMC and Enfield in the U.K. and Suzuki, Yamaha, Mitsubishi and Fuji in Japan).

Fairclough considered that, from 1950, the BSA Group was a corporation in financial reality alone and noted that business linkages were virtually non-existent outside the financial realm. This meant, for example, that in the 1940s and 1950s the healthy profits of the motorcycle business were diverted into satisfying the immediate capital needs of the Group's non-motorcycle subsidiaries, while plans for the motorcycle division remained ill developed and were not based around the mutual long term benefits that might have been derived from the integration of the industrial subsidiaries and motorcycle manufacturing. It also meant that the Group's motorcycle subsidiary was fragmented by brand loyalties, as the original motorcycle firms had been absorbed but not rationalised or amalgamated. Triumph in particular was semi-autonomous, 'personal capitalism' (Chandler, 1990) reigning. The result was the duplication of models which was allowed to continue throughout the 1950s and 60s. The policy of internal competition, which underlay the survival of fragmented 'family-firm' structures in terms of organisation, control and batch production within BSA, also extended to marketing. Honda, however, had developed strong internal linkages and a management that implemented a long-term strategy based on economies of scale and technologically-based productivity improvements, only manufacturing a few models, all sold under the Honda marque. The validity of Fairclough's assertions is examined in depth in Chapters 4.2.1 of this thesis.

Fairclough concluded that economies of scale in British motorcycle production were precluded, not by the structure of the industry, that reflected the domestic demand pattern,

nor because of a predominance of independent firms, but because of the internal organisation of the dominant BSA Group, that was derived from purely financially orientated strategies. BCG, however, took a different view, i.e. that economies of scale for Honda were derived from the large Japanese home market, which they had stimulated, and the use of capital intensive manufacturing processes.

Already, by the late 1950s clear differences were discernible between BSA and Honda and, for the few who recognised the trends, there were serious implications for the medium term future of BSA. In 1960, the number of motorcycles imported into the UK exceeded exports for the first time (Smith B, 1981, Table 3) and Japanese imports accounted for 89% of the total by 1963 (Smith B., 1981, 10). The Japanese penetration was given a great boost by the 1962 Anglo-Japanese Trade Agreement (*Chapter 3.2.3*), which failed to provide any transitional protection to the British motorcycle industry. In 1960 the output of the industry fell below 100,000 machines pa, and never recovered. The rate of return, on capital employed by the industry, fell every year from the mid-1950s (Smith, 1981, Table 6.). In 1953, three quarters of all motorcycles manufactured were from Western Europe with BSA the largest producer. By 1975, one half of the world output came from Asia, with Honda as the world's largest producer.

‘Trade Unionism and Collective Bargaining at Two British Motorcycle Factories’.

(Koerner, 1990)

This was a comparative examination of trade unionism and collective bargaining at BSA's two motorcycle factories, Small Heath and Meriden, 1951-73. The study considered the different responses of workers at Small Heath and Meriden to the collapse of BSA and sought explanations for their subsequent behaviour. Even with the number of shared similarities – the same corporate ownership, with the common link of motorcycle

manufacture and trade union membership as well as their relatively close proximity- the differences in behaviour between the two groups proved to be significant.

These differences, including the development of collective bargaining at the two factories, occurred within the context of the decline of the entire British motorcycle industry. While there were several factors that contributed to the collapse of BSA, compared to such matters as low productivity, under investment or government trade policies, labour relations were of secondary importance.

Ministry of Labour statistics indicate that there were no official or unofficial strikes in the industry between 1945 and the early 1960s (but miss the 1956 Norton strike and the 1959 'clocking-in' dispute at Meriden). Between 1968 and 1973 there were six and eleven (mainly post 1973) strikes respectively at Meriden and Small Heath. These latter figures, neither include the numerous unreported stoppages at Meriden, which began in the early 1960s, nor the strikes at key suppliers, such as Joseph Lucas Ltd, electrical equipment suppliers, which had a considerable impact on production at both motorcycle factories. Koerner notes that the record of strike activity grew proportionately to BSA's deteriorating trade position relative to its Japanese competitors. Yet the statistics alone do not satisfactorily explain the cause of the different reactions of the workers in the two factories to the economic crisis that beset the industry.

Prior to the study, the generally accepted explanation (but without hard evidence to support it) was that the militancy at Meriden was due to its location within the Coventry District of the Engineering Union and thus its exposure to the attitudes and unofficial actions of the car industry in that area. Small Heath was in the Birmingham District, a reasonably passive area by comparison, at least until the local shop stewards took control at British Motor Corporation, Longbridge.

Koerner sought a more rigorous explanation for the differing reactions of the two groups of workers, one (Small Heath) that acquiesced to massive redundancies and the other (Meriden) which, at the threat of closure, occupied the factory. He claimed to have found it in the history and structure of the company and its two motorcycle subsidiaries.

The BSA Group was a holding company with many subsidiaries and with the multi-product Small Heath factory at its core. It was generally paternalistic and was able to offer its employees a variety of services and benefits.

The Triumph subsidiary was a very different organisation. Up to 1951 it was a private company and, after its acquisition by BSA in 1951, the Meriden factory was run by Edward Turner as his private fiefdom, under the protection of Triumph's previous owner who had joined the Group Board and ultimately became Chairman in 1956. As late as 1971, the Meriden factory still enjoyed a high level of managerial autonomy not granted to other subsidiaries in the Group.

Triumph was a semi-detached subsidiary company dedicated to one task – building Triumph motorcycles. Meriden was built for that purpose only and there were never any distractions from other products. Because of the profitability of Triumph wages were high, even by Coventry standards. These factors imbued the workers there with a sense of superiority and élan that was dramatically illustrated when, in October 1973, they instituted a blockade and work-in (a post-BSA collapse event not covered by this thesis).

Although the Small Heath factory built more motorcycles than Meriden, it was less dependent on exports. The Group Board had placed emphasis on exports, especially to the crucial US market, and production delays were not tolerated. This gave the Meriden trade unions an advantage over the plant management, one that they did not hesitate to exercise. Time and time again a stoppage would result in another management capitulation, not so

much because of inherent weakness but from being persistently undermined by the Group's Executive Directors.

Koerner concluded that the nature of the workforces at the two motorcycle factories was much influenced by their respective corporate structures, product, sales strategy and location.

'The British Motorcycle Industry: 1935-75'. (Koerner, 1995) This PhD thesis, examines the history of the British motorcycle industry, and particularly BSA's motorcycle division, between 1935 and 1973. Koerner concentrated on an area not fully addressed by either BCG(1975) or Smith (1983) i.e. the role of successive Governments since 1945 in the events leading up to the collapse and the belief of most of the redundant employees that they had been badly let down by the Treasury, the Board of Trade and the then Ministry of Technology.

Koerner first highlighted three phases through which the industry passed. The first occurred as the industry adapted to the abrupt collapse of demand after 1930.

Manufacturers took a conservative approach to this crisis concentrating on a loyal but limited market of essentially dedicated enthusiasts. None of the larger firms made any effort to break out of the impasses presented by this contraction. If the solution was to try to discover a new kind of customer, for the most part the industry was unwilling to find out whether he or she existed.

The second phase occurred immediately after the end of the war in 1945. Pre-war competitors were out of action, leaving British motorcycle manufacturers with an unparalleled opportunity to consolidate their international supremacy. When pressurised by the Government to modernise and seize the opportunity, the leadership rejected any suggestion that their manufacturing programmes needed to be changed or that they might

be insufficiently prepared to meet foreign competition. The industry was a captive of its own preconceptions of what the market was and could see no reason why it should not continue as it had before.

The third phase identified by Koerner occurred in the face of Japanese competition during the 1960s. After they had lost what was left of the home market, the manufacturers found a substitute in increased sales to the north American market on the back of which BSA launched its ill-considered bid to try to re-enter the mid and lightweight market.

Koerner rejected several factors, believed by local and industry pundits, to be significant causes of the industry's collapse. First, government policy was not as detrimental as many so frequently claimed. The manufacturers failed to convince the Board of Trade and the Ministry of Transport to grant the concessions they sought, particularly the removal of tax from lightweight motorcycles. The industry consistently failed to provide the facts to substantiate the case and presented arguments that were virtually a matter of faith. He also rejected the proposition that a lack of technical skill and education was a severe handicap to the company (*Chapter 6*).

Koerner identified several factors that he believed explains the decline of BSA. These were the often poor state of co-ordination within the company, the early preoccupation of the Directors with the Daimler motor car subsidiary that excluded any coherent forward planning and worked to the disadvantage of the motorcycle business, the lack of effective leadership of the Motorcycle Division after the retirement of James Leek in 1956, the catastrophic Eric Turner/Lionel Jofeh partnership, and the limited concept the senior management had of the motorcycle market. He also drew attention to the excessive and costly involvement in motorcycle sport, the failure to master the techniques of quality control and large-scale production engineering and the chronic lack of investment.

Koerner's thesis was that BSA, and the smaller companies that made up the British motorcycle industry, collapsed because of the implications arising from its inability to develop a successful lightweight model. From its birth onwards the industry, led by BSA/Triumph, was a producer of larger displacement models and was unable to get out of this straightjacket.

'The Giants of Small Heath' (Ryerson, 1980).

Ryerson, while noting that the popular writings and discussions in the immediate aftermath of the collapse blamed 'bad management', tried to look deeper and provide a more satisfactory explanation. He believed that the collapse was due to a combination of a poor organisational structure, lack of clear objectives, an 'injurious lack of communication' and a Group Board that 'had no interest in the design, manufacture and sales of motorcycles' (Ryerson, 1980, 141). He wrote:

'I am quite sure that the 'incompetence' explanation, which is the one usually put forward, just doesn't carry conviction; whereas the concept of a quiet, steady merciless erosion of the company due to lack of true, deep-seated commitment and sense of purpose in the manufacture of motorcycles, coupled with the failures of true communication, carries a great deal. (Ryerson, 1981, 167).

'Whatever Happened to the British Motorcycle Industry' (Hopwood, 1981).

Hopwood's explanation for the collapse also centres on the lack of product knowledge of the Group's Directors. His book adds flesh and bones to the analyses above and illustrates the importance of personalities in the higher reaches of management. The autobiography is a primary source as Hopwood participated himself in almost all the key decisions relating to BSA's motorcycle division.

'We at BSA in the last decade or so (i.e. the ten years up to the reconstruction of the company in 1971) had been inundated with industrialists and management specialists, with good pedigrees and fine business records, who had failed miserably, because they had no product background and were unable

to comprehend the situation that existed in the business in to which they had graduated. They were equally unable to recognise the solution to our problem, for to them a motorcycle was no more than two wheels with an engine in the middle' (Hopwood, 1981, 274).

'A Million Miles Ago'. (Shilton, 1882).

Shilton did not offer his views on the collapse of BSA as such but argued that Triumph was efficient and profitable until the BSA management interfered. He rejected the profiles of Edward Turner in Ryerson (1980) and Hopwood (1981) and supported the efforts made by him to keep Triumph motorcycles away from BSA and the Small Heath management. He particularly resented that Triumph's profits had to be remitted to BSA.

'Meriden: Odyssey for a Lame Duck' (Bruce-Gardyne, 1978)

Jock Bruce-Gardyne M.P., writing on behalf of the Centre for Policy Studies (CPC) about the demise of Norton, Villiers, Triumph Ltd (the company that absorbed the collapsed BSA motorcycle business), took a different line to the authors reviewed above. The CPS placed the blame for the collapse of the industry squarely on the shoulders of successive governments. It attributed the constant manipulation of the domestic demand for motorcycles by fiscal regulation for the weak performance of the industry post 1945, combined with what it termed the 'disastrous' rescue attempt in 1973 for the inevitable and ultimate collapse.

BSA established semi- autonomous units based either on products (e.g. guns, motorcycles, tools etc) or on geography (the North American selling operation), overseen by a managing director responsible for the operating decisions of his division and its performance. Crucially the company did not set up the necessary strategic planning office, responsible to the Executive Chairman, to develop an overall group strategy and to monitor performance of the subsidiaries as later recommended by Cooper Bros. Furthermore, the

presence of some of the Divisional Managing Directors on the Group Board inhibited the setting and monitoring of demanding performance targets.

Channon (1973, 240) reported that, despite the widespread adoption of the multi-divisional structure, British general executives (for example the directors of BSA) had not wholly emulated their American counterparts in adopting certain key characteristics of this organisational system. There was little use of performance- related rewards or sanctions, except through the indirect link to promotional prospects and ‘many general executives had not yet divorced themselves from the operations of the divisions in order to concentrate on their entrepreneurial role of strategic decision making’.

The two threads that run through most of the explanations for the collapse of BSA are that of the major errors and omissions of the directors/senior managers of the company and the impact of strong overseas competition in both home and export markets. None of the explanations, however, address the issue of how it was that the relative quality of the board, as measured by performance, deteriorated so much in the post 1945 years and the directors squandered the commanding position and unique opportunities they inherited at the end of the war.

2.4 Corporate Governance

Corporate Governance may be defined as:

‘A concern with the institutions that influence how business corporations allocate resources and returns. Specifically a system of corporate governance shapes who makes investment decisions in a corporation, what type of decision they make and how returns from investments are distributed’ (O’Sullivan, 2000, p.1).

or alternatively as:

‘The primary purpose of a corporate governance system is to minimise the loss of control associated with the separation of ownership from control. It is

management's behaviour that must be controlled and it is the linkages among shareholders, directors and senior managers that are of concern' (Kester, 1992, 8).

In considering corporate governance in BSA, post WW2, it is helpful to use the theoretical framework developed from the literature by Lloyd-Jones et al (2004, 1-3) in their three case studies of episodes in the struggle for control of BSA before 1939. The first was concerned with insider/outsider conflict between directors and shareholders; the second examined the change in Board composition and the consequence for the company's governance brought about by BSA's take-over of Daimler in 1910; while the third explored a dispute in the 1920s and 30s between the board and dissident shareholders, two of whom were former directors.

Lloyd-Jones (2004, 2) expanded O'Sullivan's definition of corporate governance to include the form, extent and quality of disclosure of relevant business and financial information and the means by which directors project, articulate and justify the corporation's role as a socio-business organisation. They quote Sheikh & Chatterjee (1995, 5):

'Based on a system of accountability, an effective corporate governance system should provide mechanisms for regulating directors' duties in order to restrain them from abusing their powers and to ensure that they act in the best interests of the company in its broadest sense'.

They derived three principles from the literature. The first, from Sheikh & Rees, (1995, 6), concerned the need to distinguish between the 'management' of the company and its 'governance', whereby the latter is not concerned with the day-to-day running of the business of the company per se but with the directors giving overall direction to the enterprise, with overseeing and controlling the executive actions of management and with satisfying legitimate expectations for accountability and regulation by interests beyond the

corporate boundary. They might have gone on to note that this is one of the principles underpinning the present Combined Code (2003).

Secondly they noted that, in Britain, the evolution of corporate governance is closely related to the institutional arrangements of personal capitalism and commented on the important distinction between personal and managerial capitalism, both of which represent forms of control over companies and are clearly linked to the issue of corporate governance. Chandler's view (1977) of personal capitalism asserts that the persistence of personal forms of control shaped the governance of British manufacturing companies into the second half of the 20th century. Despite the growing challenge to Chandler's work it remains 'the dominant hypothesis and the notion of personal capitalism is a useful means of trying to understand the evolution of British business organisation in the 20th century' (Toms and Wilson, 2003, 3). Lloyd-Jones stressed that personal capitalism can take a variety of forms. It is not reducible to family capitalism and in inter-war Britain and even beyond, ranged from the small family firm to the relatively large holding company such as BSA. As a generic type the personal capitalist business organisation has a strong linkage between ownership and control, has a limited managerial hierarchy and tends to evolve a governance system based on the establishment of a governing group who place a high premium on loyalty, trust and stewardship as core social habits.

Thirdly, Lloyd-Jones notes that, whilst the analysis of personal capitalist firms recognises the importance of the development of common patterns of governance, such an approach necessarily places considerable emphasis on the idiosyncratic behaviour of firms. It is because firms 'are not simply a set of transactions but can (and clearly do) build organisational capabilities not available on the market' that they are idiosyncratic and

consequently lend themselves to a case study approach. This method of enquiry is consistent with the history of business development.

Because of the permissiveness of English company law in the first half of the 20C, the firm can be seen as a complex set of explicit and implicit contracts. This requires that a historical study of corporate governance needs to look at the behaviour of different parties to the contract – directors, shareholders, finance providers, auditors etc- and see how they related to each other and how they became more or less powerful relative to each other.

Toms and Wilson (2003, 3) stress the importance of accountability, which they define as ‘the processes whereby the stewards of the business are held accountable to its owners, and other external stakeholders through the processes of corporate governance’.

CHAPTER 3

THE GROUP AND ITS BOARD OF DIRECTORS

3.1 Introduction

This chapter gives an overview of the BSA Group, its Board of Directors and the businesses they ran during the 1950s and 1960s. The Group was dominated by its Motorcycle Division, which embraced the BSA, Triumph and Ariel marques. It also included the Daimler Car Co. Ltd (until 1960) and the alloy steel manufacturer Jessop-Saville Ltd (until 1967), as well as a wide range of smaller companies in nine different industrial sectors. At the time of the Group's collapse in 1973, however, the company had withdrawn from four of them (automobiles, alloy steels, machine tools, and heavy constructional fabrications) with varying outcomes (*Appendix 9*).

In 1956, Jack Sangster, the new Executive Chairman, following the dismissal of Sir Bernard Docker (*Chapter 4.3.2*), stated (*Investors Chronicle*, 18th Dec.1956) that the role of the Board was that of leading a Holding Company, with wholly owned subsidiaries. Cooper Bros, Auditors and Consultants to the Board, retrospectively confirmed this in these terms:

‘The parent company has seen itself as a holding company with a number of diverse operating companies reporting to it. The directors of the parent board, therefore, are largely concerned with the financial appraisal of acquisition opportunities and assessing the results of subsidiary operating companies’ (Cooper Bros letter to BSA Directors, 3rd Dec. 1971, in *Appendix 5*).

In keeping with the holding company philosophy, Eric Turner, successor to Jack Sangster, had declared that the motorcycle division was in the business of making ‘consumer durables’ (Ryerson, 1980,141), a statement that did untold harm to the proud engineers of that division.

‘Never for one moment did they (i.e. the Directors) understand that these were motorcycles and that we were supposed to be earning a living from them’ (Hopwood, 1981, p.303).

Ryerson (1980,141), described the situation in wider terms:

‘BSA, at least in the top levels of management, ceased to make motorcycles altogether. Others, at lower levels, continued to do so but the men in charge at the top abandoned the idea and had no interest in the design, manufacture or sale of motorcycles’.

BSA had not always been an industrial holding company. Its organisation and management philosophy had evolved, since its incorporation in 1861 to ‘manufacture guns by machinery’, by both organic growth (notably motorcycles) and multiple acquisitions. The arguments for and against diversification (*Chapter 5.5*) still rage and it is not unknown for companies to diversify and then, some years later, go back to where they came from, for example GEC/Marconi (in then out of Power Engineering) or Marks & Spencer (in then out of Europe) as did BSA.

It was Smith B. (1983, 37) who first hypothesised that BSA’s investments in non-motorcycle activities was a major factor in the Group’s ultimate collapse. She postulated that BSA invested in non-motorcycle companies, that failed to generate the expected returns, rather than in updating motorcycle production facilities. Much of this diversification preceded the decline in UK motorcycle demand in the 1960s and thus was not simply a response to that; nor was it planned coherently.

After Eric Turner (Chairman, 1961-71) had been forced to resign (*Chapter 4.3.2*), Lord Shawcross, a non-executive director, was prevailed upon to become non-executive Chairman. He delegated to Cooper Bros the planning of the reorganisation that became inevitable following the motorcycle production and quality crises of 1968-69 and 1970-71 and the losses that flowed from them (*Chapter 4.2.6*). The most significant of their

proposals were that BSA should revert to being a motorcycle company, with a ‘hands-on’ board of directors who understood the business, and that the remaining subsidiary companies should be sold (*Appendix 9*).

3.2 Structure of, and Relationships within, the Group Board

As a public company, BSA Ltd had a unitary (single tier) board of directors elected by the shareholders at Annual General Meetings of the Company. Since 1940, the Board had been presided over by an Executive Chairman (successively, Docker, Sangster and Turner).

After the 1971 reorganisation, however, the Company reverted to a Non-Executive Chairman (Shawcross) with a Group Chief Executive (Eustace). Executive Chairmen are discouraged today (Combined Code, 2003, 5) but were common in the pre and post-1945 years, e.g. ICI Ltd (Reader, 1975). Pre-reorganisation, the structure concentrated power in the hands of the executive chairman who, while overseeing the strategy and performance of the subsidiary companies, also represented BSA in the City of London and opposite the Financial Press.

From 1945-1971, BSA’s Board was made up of:

Executive Directors	Executive Chairman, Finance Director
Non-Executive Directors	Supposedly independent of the Executive and representing shareholder interests
Hybrid Directors	Some Chairmen/Managing Directors of Subsidiary Companies, who were required to take a Group view while sitting on the Board
Former Executive Directors	Former Executive Directors, who had retired and who had been retained on the Board in a non-executive role

Some of the non- executive directors (*Appendices 3 and 4*) chaired one or more of the boards of the subsidiary companies, otherwise, notably in the case of the motorcycle division, this fell to an overworked Executive Chairman. The presence of hybrid Directors on the Board is judged to have been a mistake. While they may have brought much needed product and technical expertise to the Board, it surely must have inhibited discussion of current performance and future strategy of their subsidiary.

The Group Board had only two Committees, a Sealing Committee and a Stock-Transfer Committee. Remarkably, it did not have a Nomination, Audit, Capital Expenditure or Forward Planning Committee. The Board met monthly, ten times per annum and received a financial report and a progress report from the managing director of each subsidiary company. The main business of the Board, however, was to approve acquisition proposals and requests from the subsidiary companies for capital expenditure and to set the dividend (Director's Minute Books, Solihull Library, BSA Archive Items 10-17). On several occasions when the discussion became sensitive e.g. 'the Finance Director reported that the end year outcome was likely to be far worse than previously expected', the Secretary recorded that 'subsequent discussion on this topic is recorded in the Private Minute Book'. As this is not to be found in the archives one might speculate as to whether it may have been destroyed to preserve what was left of the post collapse reputation of the BSA Directors.

Crucially, the Chairman did not have the support of a strategic planning director. The need for such a function was highlighted in the letter from Cooper Bros, 3rd Dec.1971 on Board Reorganisation (*Appendix 5*). The Management Services Department and the small Market Research Section established at Group HQ in 1965 provided specialist services to the subsidiary companies, not to the Board. It is presumed that the Executive Chairman sought

analytical support from the Finance Director when considering the acquisition or sale of subsidiary companies.

While the Executive Chairman and his Finance Director no doubt reviewed the sales and financial results of the operating companies. The interest of the non-executive directors in their performance appears to have been minimal, for the Board Minutes 1956-71 regularly record that the reports from the MDs of the subsidiaries were merely ‘noted’ without discussion. The outcome of the acquisition/sale opportunities that were approved by the Board, is tabulated in Appendix 9.

In late 1971, after Lord Shawcross took over as non-Executive Chairman and culled the Board. The new Directors, as they fought to save BSA (*Chapter 4.2.9*), took a more detailed interest than their predecessors in the monthly performance of the subsidiary companies, especially that of the motorcycle division, and in crucially the cash position. Throughout 1972 the Directors were also provided, by Coopers, with a monthly report (*Appendix 5*) of the sales and production performance of the motorcycle division that was discussed by the Board. For the first time the Board approached the reporting and review standards long commonplace in other large public companies. Lord Shawcross did not use the Private Minute Book.

Independent directors are a key component of the boards of public companies. In the absence of a nomination committee, where a majority of non-executive directors were charged (Combined Code, 2003) with identifying and nominating for the approval of the board candidates to fill board vacancies, and where the selection had been made by the Chairman alone (as at BSA), there must be doubt about the independence of the non-executive Directors. .

The following succinctly summarises the most important aspects of their role:

‘Non-executives should be looking at strategic options and ensuring that the true position of a company is accurately communicated to the stakeholders. They should be asking how is the business doing, what is the financial performance like, what are the opportunities ahead, are we really evaluating strategy well, do we have the depth of management balance?’ (Sir Tom McKillop, Chief Executive AstraZeneca p.l.c. The Times, p.54, 2nd November 2004).

Their performance is dependent on the timely flow of key information to them. While the directors may have the power of veto, it is the chairman and finance director who control the agenda. Nevertheless, lack of information is no defence; it is up to the non-executive directors to insist that they are provided with the information they need, in the form they require. They also need to resist information over-load that prevents them from concentrating on key issues, and have the strength of character to reject unacceptable proposals from the Chair.

It is only recently (Combined Code, 2003, 71) that the role of the non-executive director of a public company has been codified. Unfortunately, the letters of appointment of BSA’s directors have not survived so it is not known how their role was defined, if at all.

During the period 1945-7, fifteen non-executive directors were appointed, whose CVs are set out in Appendix 4, with the name of the chairman who nominated each director and the date he joined the Board. They were all proposed by the chairman at the time (probably after discussion with the company’s merchant bankers or stockbrokers) and subsequently approved by the shareholders at an Annual General Meeting. Even as late as 1956 nepotism had not been eradicated, shown when Sir Bernard Docker made an unsuccessful attempt to ensure the election to the board of his wife’s brother-in-law (*Chapter 4.3.2*)

Of the thirteen post war non-executive directors appointed before the 1971 collapse:

- 6 had attended a public school.
- 2 had a First Class Honours Degree.

- 5 had a science, engineering or manufacturing background.
- 0 had prior knowledge or experience of the motorcycle business.
- 4 had experience of directing large scale industrial enterprises.
- 4 had a legal, financial or commercial background.

What contribution did they make to the business? Did they discharge the responsibilities given to them by the shareholders? To what extent can they be held to account for the collapse of the company and the destruction of shareholder value?

A key characteristic of BSA's non-executive directors (apart from ex-Chairman, Jack Sangster) was their lack of knowledge of the company's core motorcycle and gun businesses. They were thus unable to interrogate the executive directors (who knew little more than they did about motorcycles) or the senior professional managers responsible for the motorcycle business.

There was a preference in British industry, including BSA, for wide general experience and 'good chaps' with the right education (*Chapter 7*) and who were socially at ease in the Boardroom (Sampson, 1971, 516-17), rather than for men who were masters of the relevant technology and had a proven track record in the management of large industrial companies. Later chapters of this thesis show that collectively they failed to adequately fulfil their responsibilities and this was a major factor in the decline and ultimate collapse of the Company. Nevertheless, the shareholders could hardly complain at the destruction of value that occurred, because ultimately it was they who voted the non-executive directors into office.

Whether the survival of Eric Turner as Chairman, following the drastic collapse of the Group's profits in 1968/69 from £3.33m to £0.85m, was due to the personal loyalty owed to him by the non-executive directors is not known. Three years later, however, when

further large losses were incurred and the company ran out of cash (profit warning on 30th July 1971 in MRC/MSS/19B) it was the company's bankers and stockbrokers who insisted that Turner should go, rather than decisive pre-emptive action by the non-executive directors.

The Board met ten times per year. It had two sub-committees, a Sealing Committee and a Transfer Committee, whose Minutes were on the agenda of each Meeting. The Chairman did not appear to have held regular meetings (often known in other companies as the Management Committee) of his executive directors and key senior managers. The Minutes of the Board meetings recorded decisions but rarely summarised the earlier discussion. Minute Books 18-20 incl., covering the period April 1960 to March 1969, are unfortunately missing from the archives (MRC/MSS/19C/21-22). Board meetings started at 11-45 a.m. and finished soon after 1pm to be followed by luncheon. It is doubtful, however, whether an hour and a half was long enough to do justice to the company's strategy and financial performance, given the breadth of BSA's interests.

In 1959/1960 the Chairman's span of control was nine (Finance Director, Secretary and the MDs of the Automotive, Steel, Tools and Metal Components Divisions and the MDs of the stand alone subsidiaries, Carbodies, Birtley, and BSA Guns). Bearing in mind that he did not have a personal staff to assist him, this was too many for comfort (Graicunas, 1937, 183-187), especially with the wide range of technologies across the group. It was certainly greater than the span of control necessary to direct a single product (such as motorcycles) company, i.e. Finance, Engineering, Production and Marketing Directors. The importance of this was explained thus:

‘One of the surest sources of delay and confusion is to allow any superior to be directly responsible for the control of too many subordinates’ (Graicunas, 1937, 183-187)

‘There is nothing that rots morale more quickly and more completely than poor communication and indecisiveness – the feeling that those in authority do not know their own minds. And there is no condition which more quickly produces a sense of indecision among subordinates than being responsible to a superior who has too wide a span of control’ (Urwick, L.F., 1956, 39-47).

Gracunas (1937, 185) suggested that the maximum number of relationships should be five, and ideally four, and showed the exponential growth in relationships as the number of subordinates increases. There is no right answer, however, it is a matter of judgement, influenced by factors such as the abilities and style of the superior, the scope and scale of the work assigned to individual subordinates and the amount and nature of interaction required between subordinates and the superior. On this basis, the span of control of BSA’s Executive Chairman limited the time he could spend on the key motorcycle business. This must have been a contributor to the inefficiencies identified in Chapter 4, the breakdown in Eric Turner’s health during the terminal crisis of the company and his relatively early death at 62.

Executive directors of public companies are required by the shareholders who elect them to be competent professional managers, to provide leadership and to have the will to dominate and the character that inspires confidence. They should not allow events to get the better of them; they should not allow anything to divert them from their objectives and they should be on top of their jobs. The examples in Chapter 4.2 show that these attributes were lacking in BSA’s executive directors and that the collapse of the company was due to a failure of leadership, as well as management, at the top of the company. Ryerson (1980, 9-10) reported that, from the late 1960s onward, there was a fall in morale, that state of mind and intangible force which will move employees to give of their best and feel they are part of something greater than themselves, that had been one of the defining characteristics of BSA.

In 1957 the Board addressed the problem of the Chairman's workload (Minute 10949 of 15th October 57 in MRC/MSS/19C). It was resolved that:

‘ a Management Committee be set up, covering all major sections of the Group, composed of managing directors (and other senior executives as necessary) to meet quarterly to discuss matters generally affecting all sections of the Group’.

The Board directed that this committee should not direct or instruct any managing director but should make recommendations for consideration of the Chairman. All members of the Board, however, were free to attend meetings of this Committee. At the following Board meeting the Chairman reported that the first meeting of the committee had gone well, but no minutes were tabled. Subsequent Board minutes do not record any recommendations from the committee and it is presumed that this initiative fizzled out. Divisional and subsidiary company managing directors were paid to maximise the profitability of their businesses and their job depended on the financial outcome. They were not paid to take a ‘Group view’; that was a matter for the Board itself.

The key relationship within any Board is that between the Chairman and his Chief Executive/Managing Director. It is this relationship which sets the tone of the Board and the standards that the company should aim for. There were six such relationships in BSA, post WW2, and they merit examination:

- Bernard Docker and James Leek	1945-56
- Jack Sangster and Edward Turner	1956-61
- Eric Turner and Edward Turner	1961-63
- Eric Turner and Harry Sturgeon	1963-67
- Eric Turner and Lionel Jofeh	1967-71
- Lord Shawcross and Brian Eustace	1971-73

Bernard Docker – James Leek (1945-56)

Seen by many BSA men as the ‘Golden Age’ of the Company (Cave, Interview, 2003), the sophisticated Harrow-educated, Bernard Docker and the grammar school educated

production engineer, ‘the best managing director BSA ever had’ (Wright, 1992, 40), were a successful partnership. Forged in the war years, this partnership led the company into the post war era and re-established BSA as the leading motorcycle manufacturer in the world (Koerner, 1995, 173). There was, however, a different view. ‘The Docker era was one of complacency, feebleness and gross incompetence’ (Robinson G. quoted in Clarke 1983, p.72), but this may have been the over-reaction, based on hindsight of a hard pressed managing director, grappling with the consequences of decisions made, or rather not made, during Docker’s watch.

In the latter years of his tenure of office, Sir Bernard became autocratic, failed to provide the directors and shareholders with key trading information, treated one of BSA’s largest shareholders with disdain and, by virtue of his private life, brought the company into disrepute. In 1956, he was publicly dismissed (*Chapter 4.3.2*). James Leek retired and the company started on the downward path which, seventeen years later, ended in the collapse of the company.

Jack Sangster – Edward Turner (1956-61)

This relationship started in 1936, when Sangster formed the Triumph Engineering Company and appointed Edward Turner as General Manager and Chief Designer. (Davies, 1991, p.3). In 1956 Triumph was part of BSA and Sangster was Group Chairman. He appointed Edward Turner as MD of the Automotive Division, seen by Ryerson (1980, 154) as one of the most disastrous decisions ever made by BSA, and gave him a seat on the Board. Both were Triumph men to the core and Sangster acquiesced in Turner’s determination to keep Meriden as independent as possible within BSA. He also allowed him, after executive retirement, to use seconded company draughtsmen to help in the

design of a new and controversial 350cc motorcycle from home, under the umbrella of his private company 'E.T. Developments' Ltd.

Eric Turner - Harry Sturgeon (1961-67)

The 'retirement' of Edward Turner provided the new Chairman, Eric Turner, with the opportunity of placing his own man at the head of the motorcycle division by virtue of his position as both Chairman and Group MD, made even more powerful in the absence of a Board Nomination Committee. He chose Harry Sturgeon, who had only recently come into the BSA Group on the purchase of the Churchill Grinding Machine Co and whose forte was engineering sales (Wright, 1992, p.46). He quickly gained the confidence of his experienced, longstanding BSA subordinates, 'I had a tremendous admiration for him. He was a dynamic man who inspired confidence' (Hopwood, 1981, 206) and developed a sound professional relationship with Eric Turner. There were some doubts, however, about his full commitment to the motorcycle business, rather than to his farm in Hertfordshire (Ryerson 1980,162), a matter to which the Chairman turned a blind eye. Unfortunately Sturgeon fell seriously ill in 1965. He briefly returned to work, but died in mid 1967. The already over stretched Eric Turner stepped into the breach and the senior divisional directors held the fort well during a period when motorcycle output rose by 40%. During this period one of them, who was working directly for Eric Turner, noticed that 'he seemed to effuse an atmosphere almost of contempt for engineers.....he seemed like someone who had strayed into the world of business' (Hopwood, 1981, 218).

This was the first, but not the last, time that neither the Chairman nor the MD of the motorcycle division had any motorcycle experience. There were those who believe that the untimely death of Harry Sturgeon was a major factor in the demise of BSA. (Cave, Interview, 2003).

Eric Turner - Lionel Jofeh (1967-71)

Notwithstanding the available talent inside BSA, Eric Turner again decided to go outside for a replacement for Harry Sturgeon and, as a result, provoked a near mutiny of senior executives (Hopwood, 1981, 221). He chose Lionel Jofeh from Sperry Gyroscope Ltd, who also knew nothing about motorcycles. For all his acknowledged ability, Jofeh had an unfortunate personality. ‘ Few of those who worked with Jofeh had a good word to say about him. They described him as vain and cold, a man who would not listen, who worked everything out on a slide rule’ (Ryerson 1980, 164). Unfortunately Eric Turner was unable to stamp his authority on his protégé and his inability to probe Jofeh’s over-optimistic forecasts during the production and quality crises of 1968-71(*Chapter 4. 2.5*) went a long way towards costing him his job. Whatever their other contributions to the company may have been, together Turner and Jofeh presided over a catastrophe, that ultimately brought the Group down.

Ryerson (1981, 176) reported on a bizarre incident, that spoke volumes about life at the top of BSA. After Lionel Jofeh took up his post as MD of the Motorcycle Division in 1967, Laurie Beeson, the Group Finance Director, was told by Eric Turner no longer to enquire into the affairs of that business. While this may seem improbable, Ryerson later proved to be a reliable reporter of events and personalities at BSA.

The other key relationship was that between the Executive Chairman and his Finance Director. During the ten years (1961-71) of Eric Turner’s tenure he had two Finance Directors, J.E. Rowe, and L.J.E. Beeson (who, remarkably, was not a Chartered Accountant) while his successor, Lord Shawcross, appointed, or probably was told by the company’s bankers to appoint, D.H.Probert from Cooper Bros.

Even after the 1971 board reorganisation (*Chapter 4.3.2*) the relationship between the executive management and finance functions was not as close as it should have been. In 1972, instead of producing for the Board a jointly agreed Action Plan for the 1972/73 year, the Directors received a provisional plan from the CEO and a separate report on the financial implications of the plan from the Finance Director (MRC/MSS/19B/TB3). Good relationships are built on effective formal and informal communications. Ryerson (1980) testified to the effects of poor internal communications within BSA. There were several examples: the refusal of Lionel Jofeh to communicate effectively with his Chairman; the attitude of Edward Turner towards everybody who was not for Triumph; the standing order that a non-executive director could only speak to a divisional or subsidiary company MD with the permission of the Chairman; and the paucity of the non-financial information provided to the non-executive directors. The archives do not appear to contain a record of any formal or informal meeting between the parent and motorcycle division boards. On the other hand, the monthly BSA Group News, 1957-73 (MRC/MSS/4/60/1-5) did provide a mechanism that enabled the Chairman to communicate (e.g. articles and transcripts of interviews) with those employees who read the newspaper.

Lord Shawcross – Brian Eustace (1972-73)

Lord Shawcross was strictly a non-executive chairman, while Brian Eustace, new to the company, was temporarily managing director of both the group (pending the disposal of the diversified subsidiaries) and the motorcycle division. Neither had any experience of the motorcycle business, but Lord Shawcross, as a non-executive director, had served through the 1968-71 debacle.

The formal relationship between the Group Board and the Motorcycle Division Board arose from the Executive Chairman's chairmanship of both Boards and the Divisional

Managing Director's obligation to report monthly, in writing, to the Group Board on the performance of the motorcycle business. Given the existence of separate dining rooms and the social differences between the Directors and the subsidiary company Directors/ Senior Managers, it is sensed that there were few, informal relationships.

3.3 The Individual Businesses

3.3.1 Motorcycles

BSA's motorcycle business latterly consisted of three separate units but traded as BSA Motorcycles Ltd, based at Small Heath, the Triumph Engineering Company Ltd at Meriden and the smaller Ariel Motors Ltd at Selly Oak (Appendix 8, Org.Chart 1). The three marques competed against each other in the then belief that such intra-divisional competition provided a stimulus to refine the company's design skills and maximise market penetration (Sturgeon,1964, in MRC/MSS/19B/TB4). In the mid-1950s BSA offered the most comprehensive product range of two-wheelers anywhere, with twenty individual models. Triumph, however, built twin cylinder machines in the larger displacement categories, primarily aimed at the American market (Hopwood, 1981, 252-254).

A feature of the motorcycle business was the practice of financing stocks held by distributors in the US and elsewhere. This imposed a heavy burden on internal cash flows and the overdraft facility (circular to shareholders, 7th October 1971 in MRC/MSS/19C/TB2) and discouraged the expansion of production. (The Japanese overcame this problem by broadening their world markets, on top of a substantial home market, to benefit from complementary selling seasons).

These factors, especially the cash demands on the company, may have inhibited the expenditure of capital (*Chapter 5.4*) to reduce motorcycle production costs and/or grow the business.

3.3.2. The Diversified Businesses

The industry sectors into which the Group diversified, both pre- and post- WW2 and the products within them, are set out below. The following conflicting quotations provide an initial commentary on the outcome of this policy:

‘It remains to be seen whether any coherent policy informed these (diversification) activities or whether they were ad hoc responses. The initial impression is that no long-term plan was in operation for the group’ (Rogers, 1979, 16).

‘It has been the policy of the Board that the non-motorcycle interests should make a proportionally greater contribution to Group profits’ (Interim Report to Shareholders 1969/70, dated 28th May 1971).

‘Most of the companies in the Group are market leaders in one way or another’ Eric Turner, Chairman, to 1966 AGM (Investors Chronicle, 11th Nov.1966).

The sectors were:

- | | |
|--|---|
| • Automobiles and Diesel Engines | Cars, Buses, Carbodies, Automatic Transmission Systems, Turbochargers for Diesel engines. |
| • Engines for Agriculture and Industry | Small Internal Combustion Engines for Agriculture and Industry |
| • Metals Industries | High-temperature Steels, Zirconium, Titanium Iron and Steel Castings |
| • Machine Tools | Machine Tools; Special and Hand Tools |
| • Powder Metallurgy | Pre-alloyed Metal Powders for Sintering Components. Engineering industry |
| • Heavy Process Engineering | Materials Handling and Coal Washing |
| • Building Industry | Central Heating Systems and Electrical Panels |
| • Radios | Domestic Radio Sets. |
| • Vending Machines | Vending Machines |

The names of the companies, and the timetable of the thirty-three acquisitions and fourteen pre-collapse disposals, are set out in Appendix 9. With a significant number of both acquisitions and disposals occurring in the 1950s and 60s, the proportion of Group sales contributed by the motorcycle division varied considerably. This proportion fell to around 24% until the Tools Division was hived off in 1966 and Jessop- Saville was sold in 1967 and then rose to 71% as the Group approached its terminal crisis in 1971/72 (BSA Annual Reports and Accounts). BSA was secretive about the source of its profits, so these figures relate to the split of external sales only.

There is no evidence to support the claim by Eric Turner, that most of BSA's subsidiaries were 'market leaders one way or another' other than for pumps for central heating systems (Annual Report 1964/65) and perhaps sintered components. It appears to have been wishful thinking, or perhaps even an attempt to put a gloss on the Group's prospects. The only internal market share analysis done was by the motorcycle division's Export Sales Team, which was formed in July 1966, but retrospective calculations were made by Smith B. (1983, pp.14-15) and Boston (1975, Appendices 1-4).

The significant aspects of the acquisition (and, where applicable, sale) of the more important diversified BSA subsidiaries and their subsequent contribution to the Group were:

Automobile Industry.

Daimler Motor Co. Ltd

BSA entered the automobile industry in 1906 and bought the near bankrupt Daimler Motor Car Company in 1910 and the Lanchester Motor Co in 1931. In doing so they also acquired Edward Manville, who ultimately became Chairman of BSA, and Percy Martin who became a Director.

BSA's management of Daimler was a sad story (Montague, 1995). Two historians of the British motor industry summarised the subsidiary's performance during the inter-war years, during which its customer base, in spite of the acquisition of Lanchester, steadily declined:

‘Want of purpose and division of ideas were always the twin evil spirits of the Daimler Company (which)..... wasted too much of its strength on making an uneconomically large variety of models and pursuing a number of grandiose schemes which prevented the designersfrom rationalising production’
(Miller M. and Buxton C., 1979).

The Investors Chronicle (22nd Dec.1956) commented that ‘Daimler was being run with an eye for publicity and prestige, rather than profit’. In 1960, faced with the cost and marketing implications of remaining a niche player in the rapidly changing automobile business, BSA sold Daimler to Jaguar. The new Chairman of BSA, Jack Sangster, justified the sale in the following terms:

‘During the post-war years the Daimler subsidiary, on balance, has incurred a substantial loss and could not have survived but for the financial support of the Group. Due to the technical progress made recently, however, the position improved and moderate profits were earned in 1958 and 1959. When, at the beginning of the year, the new designs we had developed went into production, the commercial outlook was not unpromising. Our manufacturing equipment, however, was not geared to quantity production and the additional plant and tooling necessary to produce in economic quantities would have required the investment of several million pounds. Your Directors were thus concerned as to whether acceptance of the risks involved in an investment of this nature and magnitude, despite the merits of our new designs, would be justified in the face of the present vast expansion plans of the motor car industry’ (Chairman's Statement to AGM Dec1960, BSAGN, MRC/MSS/19A/4/60/1-5).

In an earlier interview the then Deputy Chairman, Eric Turner had said:

‘The most important reason was that we could not see much prospect during the next few years of using the factory to its full potential. Furthermore as much as £2m needs spending on production tooling and machine tools and equipment if we are to be in a position to meet any substantial increase in orders for the new vehicles being introduced’ (BSAGN, July 1960).

The decision was inevitable. Low productivity, losses and minimum capital expenditure is a pattern that is extremely difficult to break out of, however good the product may be. The local Daimler management was not up to the challenges posed by a changing market and the need to utilise up to date automobile production technology, and the Group Board delayed in taking decisive action to rectify poor performance for over a decade.

A recent primary resource (Hawkins, 2006), has revealed that Jaguar bought Daimler in 1960 primarily to acquire their ill-equipped factory in Coventry as a way of getting round the 'no planning permission for new industrial sites' regime, imposed on the Birmingham-Coventry axis under the then government's regional employment policy.

Automatic Transmission Systems

In the early 1930s BSA, through Daimler, were one of the technical leaders in the development and application of automobile automatic transmission systems. Such systems were then only seen as being applicable to large and expensive cars and the longer term potential was not recognised by the BSA Directors. It was not until 1957 that this potential motivated the Group to buy a majority holding in Hobbs Transmission Ltd, a small firm specialising in automatic transmission systems for smaller, popular cars. Prototype units were fitted in a range of vehicles with engines ranging from 1-8 litres. In 1960, in a complete about turn following the sale of Daimler, BSA sold its holding to the minority shareholders. Without a close association with a successful car-maker the business could not make headway. This was a missed opportunity and the consequences of not having a long-term product strategy.

Carbodies

BSA purchased Carbodies Ltd in 1954 for £1m. They made complete motor car bodies, London taxi-cab bodies and panel pressings. The business logic of the acquisition was to

control the supply of bodies to Daimler and to reinforce the Group's presence in the automobile industry, especially in the niche taxi business.

For many years the financial benefits of the acquisition were modest and the company always seemed to be on the verge of great things without ever quite delivering, due to unforeseen problems. Nevertheless, the company was retained within the Group after the sale of Daimler and formed part of the fire sale of the remaining BSA subsidiaries to MBH in 1973.

Turbochargers

The decision, in 1957, to develop the first British diesel engine turbo-charger was sound because there was, at that time, a rapidly growing market for them in the international heavy diesel engine business. The cost and resources needed to enter the diesel engine component business, however, appears to have been significantly underestimated.

Technically, the development work was well done, in spite of BSA having no rotary turbine/compressor experience. The first production units were built in the Automotive Research Department at Small Heath where the initial development work had been done. Performance matched that of competitive units and first indications were that BSA would be able to manufacture them at a lower price (Interview, P.Oppenheimer, February 2004). The initial marketing appears to have gone well, with forty prototype turbochargers on vehicle tests and presentations made to all major diesel engine manufacturers in Europe (BSAGN, July 1958). The embryonic business was sold, however, to the CAV Division of Joseph Lucas Ltd, who supplied diesel engine fuel injectors world-wide. Heads of Agreement were agreed on 23rd July 1959 and the Licence Agreement was signed on 25th February 1960.

Engines for Agriculture and Industry.

Small internal combustion engines have many applications outside the motor car and motorcycle sectors e.g. as stationary engines, for industrial tools, gardening equipment, and, for the higher powered units, tractors, elevators, grain blowers and water pumps.

BSA Power Unit Division was formed in April 1961 on the back of the Group's extensive experience of single and twin cylinder motorcycle engines. The engines were assembled at BSA Redditch. They were all single cylinder four-stroke units with power outputs up to 7HP in six different cylinder sizes. The business was sold in 1965 due to an acute shortage of labour, which led to a policy decision to spread the available skilled workers in the greater Birmingham area over a narrower range of products and concentrate on sub-contract work for the motor cycle division.

The diversification into these engines was the most logical of BSA's non-motorcycle ventures in that the company should have been master of the design engineering required, if not of the production engineering skills needed to be competitive in European markets.

The expansion of this subsidiary, however, was stymied by the stranglehold the Amalgamated Engineering Union had on the training (*Chapter 6*) of fitters and machinists (no unskilled to skilled upgrading allowed), so there was little the local management could do to improve the labour situation in the short term (Annual Reports, 1960-61 to 1965-66; BSAGN)

Metals Industries

Jessop-Saville Ltd

BSA entered the alloy steel business in 1919 by the purchase of William Jessop Ltd, who were the sixth largest firm in the Sheffield steel industry. The business logic was to

diversify backwards to acquire a key material supplier. In 1928 BSA also acquired a complementary firm, J.J. Saville Ltd, but it was not until 1959 they merged the two firms to form Jessop-Saville Ltd, although production had been concentrated at Jessop's Brightside works since 1934. The product range of the two companies, as well as alloy steels, included tool steels, steel forgings, alloy constructional steels and stainless steels. BSA did not invest major capital (1.5m) into the two companies until 1957. In October 1967 the steel business was sold to Thomas Firth and John Brown Ltd for £5m and the titanium business to IMI. Ltd for £ 0.5m. The Chairman of BSA explained the decision to sell Jessop-Saville:

‘Approaching one-half of the Company's turnover was in products which, by reason of its size and facilities, it was unable to manufacture at competitive costs. Consequently, the return on capital employed during the last few years has been low. We had plans for building up the volume of the more profitable special steels business, thus allowing us to reduce the volume of business in which we were not fully competitive, but these plans would have involved heavy capital expenditure for a return which, almost certainly, would have been far from generous. Since we are primarily an engineering organisation, we did not wish to take over any other steel company and so sold the business to two companies in that industry’ (E.Turner, 1966/67 Annual Report).

In 1956, however, the then Chairman, Jack Sangster had described Jessop-Saville as ‘one of the most important elements in the BSA Group’ (Annual Report, 1956/67)

How did this situation arise? BSA owned Jessop-Saville for sixty-eight years, made very modest profits and, on sale of the business, had to write-off over £ 0.5m. During this period the relative position of the company within the Sheffield steel industry declined. Tweedale, (1995,198) when analysing the relative international decline of the Sheffield steel industry, suggested that this was due to a failure to invest during the inter-war years, the quality of entrepreneurship and the organisation of management. All these factors applied in the case of BSA/Jessop-Saville. It appears that, notwithstanding Sangster's

comment above, the BSA Board did not address the strategic question, as to whether or not the Group should be in the steel industry, until 1966. If BSA had been committed to the steel industry in the long term the company from their alloy steel base, surely would have entered the embryonic stainless steel industry in the early 1930s. Ultimately the sale became inevitable. Technical improvements in alloy steels became slowed and the business started to become 'production', rather than 'special steel' orientated, thus requiring an investment that was beyond BSA's capacity as an engineering company.

Machine, Special and Small Tools

BSA entered the tools business in 1919 on the back of their Tools Department, which had supplied tools to firms working on Government contracts. They also purchased Burton, Griffiths & Co. who were primarily machine tool importers and had a subsidiary, B&G Machinery Ltd, that rebuilt machine tools,

The seeds of the decline of the British machine tool industry, which eventually was to cost BSA dearly, had already been sown when they entered the business. In the inter-war years thirty seven different machine tools types were imported that were not made in Britain, compared with twelve general utility tool types that could be supplied by British firms. Redressing this balance would have required a research and development and marketing effort that BSA were unwilling to invest in (*Chapter 4.2.6*). Throughout the 1919-39 period, the relative export performance of the UK industry fell from 19.7% of world exports in 1923 to 6.6% in 1937 as the American and German manufacturers consolidated their grip on the international market. Post WW2, the British industry's share of world machine tool deliveries fell continuously: it was 8% in 1965 and only 6% in 1969. (*DTI, 1970, Table 5.1*). The market judged British machine tool manufacturers to be the equal of their international competitors in workmanship but found them too slow in

improving their production methods and marketing arrangements and latterly in the application of numerical control to machine tools (DTI, 1970).

The productivity of the British machine tool industry fell well below that of their overseas competitors:

Table 3.1 Output per Employee from National Machine Tool Industries

Country	Output per Employee 1975 (000 US \$)
Germany	23.6
Italy	23.9
Japan	19.0
UK	13.7
US	27.6

Source: European Machine Tool Industry: EC Statement
1983, Annex 18.

Although the above figures relate to a period later than the collapse of Herbert-BSA Ltd, there is no reason to believe that the relative differences in productivity had changed significantly in the subsequent five years.

By 1960, BSA Tools was profitable and turned over £6m per annum. In 1961 it acquired, for around £6m the Churchill Machine Tool Company Ltd, world market leader in the design of precision grinding machines. Seen in isolation as part of a diversification strategy, this was a good decision, reinforcing apparent success within the UK. Smith, B (1983, p.37), however, saw it as a missed opportunity for BSA to invest a major capital sum into the motorcycle business.

In August 1966 BSA agreed in principle with Alfred Herbert Ltd, the industry market leader, to place Tools Division and the complementary machine tool activities of AH, into a new AH subsidiary named BSA-Herbert Ltd., on the Board of which the Chairman of BSA (Eric Turner) and the MD of Tools Division (S.A. Roberts) would sit). In 1964 AH

had declared a net profit of £2.2m and its net earnings on assets were 9.9% (AH Annual Accounts).

AH initially valued BSAT at £11.5m but in October Eric Turner was forced to reveal that the profit of the Division had collapsed from £1.25m to £600,000 p.a. Only firm assurances from the Chairman that profits would recover to £1m in the following year saved the day. Agreement was reached in December 1966 and AH issued BSA £2.5m in loan stock and £3.2m in newly subscribed Alfred Herbert Ltd ordinary shares. They also agreed to let BSA retain £2.5m of debtors due to Tools Division.

The Chairman of BSA justified the merger in these terms:

‘We believe these arrangements are in the best interests of the company and are convinced that substantial benefits will accrue from the merger higher productivity and efficiency in the fields of research, development, production and marketing. In the short term we expect our share of the profits will be much the same of those of Tools Division, had they remained within BSA. I have every confidence, however, that our income will gradually increase as the fruits of the merger are realised. BSA will become a large shareholder in an organisation, which will have a wider range of machine tools than in any other country in the world. It is our intention to retain this shareholding as a permanent investment’.
(Annual Report, 1966/67).

Lloyd-Jones (2006) provides an Alfred Herbert perspective on what their Board considered to be a take-over. They saw opportunities for rationalisation, involving large-scale capital re-equipment, improved machine design and the integration of BSAT’s Marketing into the Herbert organisation to increase Group Sales. They also believed benefits would accrue from the integration of management BSAT’s R & D capability into the Herbert design function (p.278)

By October 1967, however, the BSA Chairman reported that ‘relatively little benefit has accrued to either Alfred Herbert or ourselves from the process of rationalisation’. A

further year on Mr Turner said that 'our income from this investment fell by more than £200,000' (BSA Annual Report, 1967-68). Later reports offered cautious optimism but lowered expectations. In August 1971 BSA, desperate for cash, sold its shareholding in Alfred Herbert Ltd for £1.6 m (Daily Telegraph, 26th August 1971) and thus wrote off £6.9m.

How did this happen? Lloyd-Jones (2006) describes (p.282) the problems that AH's top management had in integrating BSA Tools, an exercise that exposed weaknesses in the Herbert-BSA management. Nevertheless optimism remained high and over ambitious sales and capital expenditure forecasts remained in place in spite of capacity shortages, wages problems and deteriorating industrial relations (p.283).

Commentators, notably Smith B. (1983) and Ryerson (1980), later criticised BSA's Directors for the merger and implied that the ultimate collapse of the Group was due to this decision as much as any other cause. But was it? Hindsight is dangerous and often distorts analysis. The merger of the two largest machine tool companies in the U.K. to form a company robust enough to stand up to the large and technically strong overseas companies which were attacking the UK market, was supported at the time by the City, the DTI and the financial press. Given that the principal cause of the demise of the joint company was the collapse of UK machine tool orders, would the outcome have been much different if Tools Division had remained within BSA? What happened was the culmination of the inexorable slide in world market share of the two companies and the relative lack of investment in advanced R&D.

Sintered Metals by Powder Technology Techniques.

This is one of the few high technology areas into which BSA diversified. A new acquisition (Metal and Plastic Components Ltd, 1957) manufactured small, high

temperature, high strength engineering components in brass, bronze, precious metals and mild or nickel steels using sintered powder techniques. They also fabricated alloys that could not be produced by melting and casting.

The metal powders used by this company, however, were judged to be inadequate and GRC was asked to develop better powders. They did so by improving the atomisation and placing it in a controlled atmosphere. The new powders attracted outside customers and, in January 1959, a new company, BSA Metal Powders Ltd, was formed to exploit this demand.

Two years later the new company was contributing to Group profits and the construction of a new plant was sanctioned to meet the increasing demand for pre-alloyed powders for the metal powder and metal spraying industries. As a result of intensive research several new powder based materials were introduced.

By 1963, BSA Sintered Components Ltd had an increasing turnover, a wider product range and good growth prospects. Meanwhile BSA Metal Powders had also strengthened its position and introduced new powders.

Turnover and profitability continued to rise and SMC Sterling Ltd, and one other small company, were acquired in 1964. The four companies were placed in a Metal Components Division. In 1968 the operations of BSA Sintered Components and SMC Sterling were transferred to a new factory in Birmingham (the largest in Europe for sintered components) but the relocation was a near disaster. £80,000 of unbudgeted exceptional charges were incurred and valuable orders lost in a period of high demand. At the same time Metal Powders Ltd suffered from a shortage of nickel that reduced sales.

In the 1970s the metals components division was caught up in the trauma of the cash needs of the motorcycle division. It was unsuccessfully offered for sale as a stand alone business

and, in 1973, as the Group collapsed, went to Manganese Bronze Holdings as part of the reorganisation of the British motorcycle industry (*Chapter 4.2.9*)

For once, BSA got product development, leading to diversification, almost right.

Recognition of, and entry into, a growth market, improving the technology to add value to the product, consolidating by the acquisition of smaller competitors, providing capital for growth. And yet the production engineering weaknesses of the Group dragged them back. The collapse of BSA means that it will not be known whether the Board had the capability of building the metal components business internationally on the good foundations that had been laid.

Heavy Process Engineering

BSA acquired the Birtley Co. Ltd during WW2 to obtain a heavy fabrication facility to supply the Army with Bailey Bridge sections, heavy lifting equipment and tank chassis.

Post-war, a manufacturing licence was taken from the US Caterpillar Tractor Co. for large earthmovers and the product range was extended to large precision welded fabrications, material handling systems and coal washing plants. In 1957, however, Caterpillar bought the earth moving plant business and BSA established a new company, Birtley Engineering Co Ltd to carry on the business of the design and manufacture of coal-washing plant and material handling plants for the coal-fired power stations of the CEGB.

In 1971, when the coal-fired power station business had dried up, BSA realised that they did not have the technical expertise to diversify from coal washing in to international large scale mineral processing. Therefore as the Group was short of cash, they sold Birtley Engineering Ltd to another American firm, Great Western Steel Industries and reverted, as Birtley Manufacturing, to mechanical/ structural work, such as bulk material sampling, screening, vibratory conveying and the supply of centrifuging equipment.

Although BSA, as a mechanical engineering company, never had a base from which they could enter the heavy process engineering business that was dominated by large American companies, they were wise enough to take the opportunity to supply coal washing plants to two large companies (CEGB and SSEB) that exclusively bought British plant. They provided their main equipment suppliers with exceptional technical support. Like many other British engineering companies, however, it is doubtful whether BSA realised that these good times would inevitably come to an end. Birtley Manufacturing Ltd was one of BSA subsidiaries sold in the fire sale to MBH in 1973.

Central Heating Components

BSA recognised commercial and domestic central heating systems and components as a potential growth market in the late 1950s. Led by BSA Small Tools Ltd, the Group entered the business initially as a subcontractor to, and then an investor in, Harford Pumps Ltd. In 1962, BSA formed a new company, BSA Heating Equipment Ltd and declared that it was the world's leading manufacturer of accelerator pumps to this market. They also introduced a range of oil-fired boilers. These products were marketed by BSA Hartford Pumps Ltd, in which the Group's holding had been increased to 75%.

This new business expanded rapidly, both in the UK and overseas, and in 1964 BSA Heating Equipment Ltd granted manufacturing and sales licences to an American company for circulating pumps and to an Italian company to make boilers. Two years later, however, due to a turndown in the economy leading to a 20% reduction in sales and the cost of launching new products, a loss was incurred.

Possibly due to the need to offset at least partially, the loss in value of the Group's trade investment in Alfred Herbert Ltd, the circulating pump business was sold in June 1969 to the Sealed Motor Construction Co. Ltd (the market leader) for two million shares, valued

at £1.5m, in that company with the expectation that this shareholding would produce a 'substantial' income. The remaining central heating business, consisting of oil fired boilers, burners and a range of radiators and valves was to be expanded and was expected to make a useful contribution to Group profit.

In 1971 BSA formed a joint company, Harford-Unical, with Shell Mex & BP for the manufacture of oil-fired boilers which soon became the largest UK manufacturer of such domestic boilers. Difficulties with several new products, however, and the cost of laying down new production facilities to meet expected future demand, resulted in a trading loss for the financial year 1971/2. BSA had diversified into a growth market that matched its engineering, but not marketing, skills. It was a business that needed a great deal of capital if BSA were to be a significant player in Europe but the early sale of one of its crown jewels (circulating pumps) to establish an income stream was a retrograde step. The marketing link with a major oil company was a sensible move, but its potential benefits were limited by the onward march of gas.

Vending Machines

While it was clear by 1970 that the supply and servicing of vending machines would become a growth business it difficult to see why BSA should have wished to enter into a business they knew nothing about. They did so in 1971 by taking over a small vending machine manufacturing company, with factories in Chiswick and Manchester, and re-naming it BSA Allvin Ltd, and by establishing a leasing company, BSA Leasing Ltd. The records and the details of the demise of these two short-lived subsidiaries were not found.

Electrical Equipment

BSA also formed a small subsidiary, BSA Electrics Ltd, in 1970, to manufacture electrical control panels and snap-lock switches at a factory in Sparkbrook, Birmingham. The

business logic behind this decision is unfathomable; it is another case of BSA entering a business they knew nothing about, even if it was on a small scale.

It is difficult to detect any long-term overall strategy that informed BSA's post 1945 diversification programme, such as only acquiring companies whose UK market share was in the top three firms that offered synergy with other technologies within the group, or maximising market share of a particular product in a given market. The impression is of opportunism rather than a well thought through, long-term, strategy. Cooper Bros, commenting (Letter to Board, 6th October 1971. Appendix 5) on the post 1960 disposal of diversified subsidiaries, previously thought to be potential winners, wrote:

‘With the possible exception of machine tools all these activities have provided other companies with profit earning activities during the same period. We believe that BSA's failure to hold its place in these fields stems from a lack of clearly defined objectives and sense of purpose on the part of the Board’.

There was, however, a defensible business logic about some of the earlier acquisitions, for instance; the purchase of Lanchester in 1931 to extend the range of Daimler; the acquisition of J.J. Saville Ltd in 1940 to integrate into Wm Jessop; and the purchase of the Triumph Engineering Co. Ltd in 1951 to complement their motorcycle business into that of BSA and to increase market share.

Daimler was badly managed at both the strategic and quarterly levels. For fifteen years, 1945-60, the Board dithered whilst accepting annual losses, or poor profits, from a significant proportion of the shareholders' capital. Up to 1956, the preoccupation of Sir Bernard Docker, and his wife, with their social image obscured clear thinking but it was a further four years before reality set in and Daimler was sold.

In November 1967, Eric Turner, the Chairman, declared that ‘all subsidiaries were capable of returning a satisfactory return on capital’. (Financial Times 14th November, 1967).

‘Capable of’, however, was a long way short of delivering a ‘satisfactory’ return every

year, if this was in the Chairman's mind. There is nothing in the archives to show that the Board set 'return on capital employed' targets to the Managing Directors of the subsidiary companies, or removed them if they failed to deliver an acceptable return or that they had such a target for the Group as a whole.

The strain on the Main Board Directors (if they did so) and the Finance Department of monitoring the performance of so many diverse subsidiaries must have been considerable, especially since BSA had not developed a standardised financial reporting system for subsidiary companies similar to that installed in GEC Ltd or Hanson Ltd, both highly performing industrial holding companies.

The possible effects of the post-1945 diversification programme on the motorcycle business were two-fold. First was the use of funds for the purchase of non-motorcycle diversified companies that might better have been invested in the motorcycle business. Second was the Group's management time and effort spent on the diversified subsidiaries to the detriment of the motorcycle business.

The diversification programme could only be justified if it consistently produced a significantly higher return on capital employed than delivered by an expanded motorcycle business. There is no evidence that this criterion was applied to acquisition proposals.

As this issue requires quantitative analysis, it is considered in Chapter 5.5, 'Financial Performance and the Motorcycle –v- Diversification Analysis'.

3.4 Research and Development

Applied research and development, and the funds available to sustain the work over a long period, is a vital attribute of any advanced engineering company and the temptation to cut it back in difficult times has to be avoided. Whether BSA's applied research output was large enough to sustain the company's position in the long term, how the available effort

was split between new and existing technology and how effective it was, required investigation.

The characteristics of successfully innovating organisations have been listed by Heap, who defined innovation as ‘the introduction of new (and especially novel) products, processes and procedures’ (1989, 2-3):

- have a management that understands and values its products and services
- have a policy for developing new products and services
- regard new product/service development as a team activity
- know their customers and clients
- understand that an effective product (or service) has quality, marketability, deliverability, reliability, serviceability and cost effectiveness, built in.

Recent research in companies with a good track record for profitable innovation has confirmed the validity of the above (Crosby, The Times, 16th March 2005). Innovation starts at the top: business leaders must have a vision for innovation and approach markets, products and services with this lens. Successful innovative companies make the right decision about which of their developments should be focussed on. Finally, they make the most of talent by creating an environment for ideas to thrive.

BSA fell far short of meeting these criteria, but the Board would have claimed that the responsibility for R&D policy had been delegated to the subsidiary companies. This meant, however, that any opportunity for realising the benefits of synergy between subsidiaries were lost, for example between the motorcycle and tools divisions in motorcycle design for low cost production, as brilliantly achieved Honda (BCG, 1975, 59-61). On the other hand some of the subsidiaries, notably Tools Division and Jessop-Saville Ltd, came close to Heap’s (1989) ideal on limited budgets. Against this, Hopwood’s

innovative idea for a modular range of motorcycles, based on the maximum commonality of parts and tools, was sat on for the best part of a decade (Hopwood, 1981, 194, 196, 275, 285).

BSA maintained the following applied research and development establishments:

- The Metallurgical Laboratories of Wm Jessop Ltd, Sheffield
Established in the 1930s.
- The Group Research Centre, 1944.
- The Group (but in reality the Motorcycle Division's) Engineering Centre at Umberslade Hall. 1967.
- The Machine Tool Development Section of Tools Division, 1959.

The development policies of the first two of these establishments were initially overseen by the Managing Director's Research Committee, chaired by Sir Frank Smith FRS, who was a non- executive Director, but this committee lapsed and development policy became the prerogative of each subsidiary company Board. Infrequent reports made to the Group Board were usually 'taken as read', unless they requested capital expenditure for research facilities/equipment, but in 1957 the level of funding for research/development was the subject of disagreement.

The appropriateness of the investment made by a company in research and development is the expenditure in any given year as a proportion of the pre-tax profits of that year. Whilst in the aircraft and pharmaceutical industries this can be up to 30%, in the slower moving vehicle industry in the UK the long term average up to 1970 was no more than 3.0%, but was 7.4% in the US and 19% in the then West Germany (Shannnon, 1973, p.33). At a Board meeting in March 1957, from which Sir Frank Smith was unavoidably absent, it was agreed that 'research expenditure at the present rate of £200,000 per annum was excessive

under prevailing economic conditions. Research activities were to be reoriented to limit expenditure to £100,000 per annum' (Board Minute, 10984, 21st March 1957). At the following meeting, Sir Frank protested and told the Directors, to no avail, he had concluded that 'BSA's rate of insurance, to prevent progressive decay, was less than that of any other British company of comparable standing' (Board Minute, 11003, 16th April 1957). Prophetic words indeed. The company's pre-tax profits for the year ending 31st July 1957 were £2,57m: £100,000 was 3.9% of these profits to be spent on research after the cutback imposed by the Board.

After the retirement of Sir Frank Smith in 1954, there was no director on the Group Board who had experience of directing large-scale industrial research and development work.

Metallurgical Research at William Jessop Ltd

The main achievement was the development, in the 1940's, of high temperature, high strength steels for gas turbine discs. Unfortunately the commercial lead established by this development was dissipated due to application problems in early Rolls Royce gas turbines (Chapman, 1960) that led to them revoking Jessop's development licence, a set back from which Jessop-Saville barely recovered.

Of equal technical merit was the development of vacuum high frequency melting in 1954. Initially developed for the melting of titanium sponge and zirconium, the process was extended to the melting of high alloy steels and gave Jessop-Saville an early technical lead (BSAGN, March 1966). This development was sold to IMI Ltd in 1967. That BSA did not reap the long term rewards that the development work justified was due to wider commercial and industry structure issues rather than any technical deficiencies.

Day to day development work concentrated on responding to the engineering sector's demand for steels with a higher cutting efficiency, greater resistance to corrosion, greater

physical strength, greater resistance, internal and external perfection and more accuracy of section and dimension.

The impression is of a subsidiary company that was not financially strong enough, nor had a sufficiently dominant position in the industry, to maximise the undoubted merits of its excellent development work.

Group Research Centre (GRC).

The Centre had three main Divisions:

- Engineering
- Materials
- Production Engineering

By 1966, GRC employed 100 people, of whom over 30 had first or higher degrees or equivalent qualifications. As well as applied research and development work, the Centre provided a technical problem solving service to the operating companies of the Group (BSAGN, Nov.1966).

Perhaps the greatest success of GRC lay in development of improved metal powders and the technical support given to the Group's metal sintering business. BSA Metal Powders Ltd was launched as a trading company out of GRC. in January 1959 and development of the company's range of powders and their application continued thereafter (BSAGN, Feb 1959). This was a text book case of the commercial exploitation of metallurgical development work. That BSA did not last long enough to consolidate its position as market leader and was forced to sell, for a pittance, a business with good growth and financial prospects (*Chapter 4.2.9*) must have been acutely disappointing for those who had brought the development work so far (Hopwood, 1981, 294-295). That even such a successful venture was financially damaged by production problems after relocation,

illustrates the difficulties throughout BSA of securing long term benefits from its research work (Annual Report, 1970).

The development of diesel engine turbochargers was also a technical, but not commercial, success. (*Appendix 2, Interview, KP.Oppenhiemer*). GRC correctly predicted that the future use of heavy diesel engines for road and marine propulsion would be dependent on the development of high efficiency turbo-chargers. BSA's design and development work was well done and the trial range units initially had a good reception (BSAGN, July 1958, in MRC/MSS/19A/60/1). The company, however, did not have the marketing capability opposite the diesel engine manufacturers to sell turbochargers alone and sold the technology to Joseph Lucas for £50,000 (Board Minute, 11332, 12 December 1958).

Group Engineering Centre: Umberslade Hall

Soon after his arrival in 1967, Lionel Jofeh, the new MD of the Motorcycle Division, persuaded the Group Board to invest more in motorcycle R&D and to establish a combined engineering and research/ development organisation, called the Group Engineering Centre (BSAGN, June 1967), to which the BSA and Triumph motorcycle design teams at Small Heath and Meriden would be transferred. The first Director was Michael Nedham, who came from the Small Engine Division of Rolls Royce Ltd. Most of the new technical staff recruited to form the research and development arm of the Centre came from the aircraft industry in the belief that a good engineer could adapt to different products. The Centre ultimately employed 300 people and the operating cost of the new organisation was around £1.5m per annum. Although the design department brought the BSA and Triumph motorcycle design teams together, the chosen location separated them from their production and assembly departments. Whilst Umberslade Hall was grandly termed the '*Group Engineering Centre*' it was effectively under the control of Lionel Jofeh and was

primarily seen as a technical resource for the motorcycle division only (BSAGN, June 1967; Ryerson,1980, p.171; Hopwood, 1981, p.223).

The motorcycle development arm of the Centre was a disappointment. Both Ryerson (1980, 168-170) and Hopwood (1981, 237-38) list the failed developments that emanated from Umberslade Hall and claim that the Centre made no worthwhile contribution to the motorcycle business. In late 1969, Jofeh became concerned and asked Hopwood (then Deputy M.D. of his Division) to review the position and make recommendations. His report was scathing about technical policy, organisation and communications and the need for development projects to be led by experienced motorcycle engineers. Jofeh's complacent and superficial response caused Hopwood to resign (1981, 240-241).

The ill-fated Centre was product orientated and did not address the motorcycle division's need for advanced production engineering processes and techniques, at a time that BSA's Japanese competitors were investing heavily into improved production technology and systems. Neither did the Centre involve BSA's Tools Division that had its own machine tool development department. By comparison, in 1970 Honda had 1400 employees working on machine tool design and manufacturing and production technology, mostly related to their motorcycle business (BGC,1975, 61).

Machine Tool Development Section

The Machine Tool Development Section within BSA's Tool Division was established in mid-1958 and was manned by ten graduate mechanical and electrical engineers with technician support. The section was set up to respond to the market's demand for machine tools having greater automation and for special-purpose machines and for the then range of BSA of standard machines to deliver enhanced speed in operation and accuracy (Roberts, 1959). Sciberras, (1985, 83-84) established that, internationally, including Japanese firms,

the machine tool industry devoted only about 1-2% of its turnover to R & D. The unique features of customised machines, however, required a good deal of new design and product engineering. It was in this area, with their greater concentration on special purpose machines, that overseas manufacturers did more than their British counterparts.

Overall, BSA's product research achievements (other than that related to motorcycles) stand up to examination. Jessop correctly forecast that the ability of the gas turbine to dominate aircraft propulsion would be dependent on the availability of high strength, high temperature turbine discs that met Rolls-Royce's requirements.

Similarly, GRC correctly predicted that the future use of heavy diesel engines for road and marine propulsion would be dependent on the development of high efficiency turbochargers. BSA's design and development work was well done and the trial range units initially had a good reception (BSAGN, July 1958, in MRC/MSS/19A/60/1-5). The company, however, did not have the muscle, opposite the diesel engine manufacturers, to sell turbochargers alone and sold the technology to Joseph Lucas for £50,000 (Board Minute, 11332, 12th December 1958).

To have led the way into titanium sponge melting is greatly to the credit of Jessop's metallurgical laboratory, as was the application of the new technology to high alloy steels. That BSA did not reap the long-term rewards which the development work justified, was due to wider commercial and industry structure issues rather than any technical deficiencies.

On the other hand the launch by GRC of Metal Powders Ltd into a growth market and its technical support to Metals and Plastics Ltd on sintering technology, was a text book case of the commercial exploitation of metallurgical development work. That BSA did not last long enough to consolidate its position as market leader and was forced to sell, for a

pittance, a business with good growth and financial prospects (*Chapter 3.2.9*) must have been heart breaking for those who had brought the development work so far (Hopwood,1981, 294-295). That even such a successful venture was almost mortally wounded by production problems after relocation, illustrates the difficulties throughout BSA of securing long term benefits from its research work (Annual Report, 1970).

CHAPTER 4.

DIRECTION, MANAGEMENT AND CORPORATE GOVERNANCE

4.1 Introduction

‘The war years demonstrated that BSA had a deep reserve of good will and technical and administrative skill at its disposal. The tragedy of the peace was that this reserve was never properly harnessed and good men eventually became disillusioned with what they perceived to be the incompetence of the company’s directors and senior managers, many of whom had been brought in from outside and had little or no understanding of its products’ (Hopwood, 1981, p.202).

‘In the period after 1945 the BSA Group was subjected for some twenty five years to a whole series of irrelevant structural reorganisations, top management reshuffles and abortive attempts at new product developments’ (Robinson G, quoted in Davenport-Hines, 1984, p.214).

‘Blindness, selfishness and incompetence of management – the venal aspect of management caused the decline’. A former M.D. of the Meridian Co-operative speaking, in 1978, of the British motorcycle industry in general (Robinson G., quoted in Smith B. 1981, p.71).

‘BSA had been badly run for years’ (Owen, 1999, p.192).

No comments extolling their virtues were found in the literature on the company other than the effusive congratulations offered to Sir Bernard Docker in February 1953.

4.2 Direction and Management

To illustrate the workings of the Group Board and the Board of the Motorcycle Division, nine examples of how BSA handled major strategic or management challenges over the period 1950-73 were examined. These are followed by a consideration of the concept of corporate governance and the way the Board handled six issues in this area.

4.2.1 Strategy and Policy

This section examines the way in which the Board, post-WW2, made key strategic and policy decisions and illustrates the way in which the group and divisional boards interacted.

During the transition from a war to a peace time economy key decisions about the medium and longer term strategies of the company had to be made in a situation of rising demand, that often could not be met due to labour and material shortages and planning restrictions. In addition to its historic businesses (cycles, guns and motorcycles), BSA operated in three industrial sectors, i.e. motor cars/buses, alloy steels and machine tools. It was initially decided that the Group should stay in those three businesses but without giving any formal consideration to their profitability, market share, their capital requirements and the availability of skilled labour. Having declared the company to be a holding company and appointed non-executive directors, whose expertise was in the assessment of investment opportunities rather than the direction of the existing businesses, the board had to decide whether the company should develop further on that basis, or revert to being a motorcycle and gun company, or restrict any further diversification to closely related businesses, or diversify into new areas that they believed offered a higher rate of return than earned by the core businesses.

There are mixed empirical results regarding profitability differences between related and unrelated diversification strategies. Much of diversification research focuses on the alleged superiority of related diversification over unrelated diversification (the BSA case) and it is argued that related diversification allows the corporate centre to exploit inter-relationships among different strategic business units to achieve cost advantages over competitors. Using this logic, related diversifiers should out perform unrelated diversifiers

(such as BSA), since unrelated firms do not have access to such inter-business unit economies of scope.

In February 1960 Eric Turner (then Chairman-designate and Deputy Chief Executive) presented a paper to the Board 'Chief Executive's Notes on Group Policy and Capital Employed'. This paper did not survive, but the Board Minute accepting its recommendations did so (*Appendix 13*). These recommendations, which were production, property and personnel orientated, were minimal; nothing was said about growth, a product/market strategy or about research and development. No profit, or return on capital employed, targets were set. In their scope and depth the recommendations fell below the standard expected from a paper submitted to the Board of major public company.

It is clear from the Board minutes and papers (MRC/MSS/19C/18-24) that the directors and senior managers, at both company and divisional levels, did not operate at the intellectual level necessary to fully understand the factors influencing long term business success in the international motorcycle industry (BGC,1975). Furthermore they did not use the analytical and numerate business language of their Japanese competitors to enable them to do so. Close observers (Ryerson, 1980; Hopwood, 1981) claim that there was poor communication between the key players in the decision making process and that policy was made 'on the hoof'.

BSA pursued a conservative dividend policy that enabled them to build up substantial financial reserves (*Chapter 4.2.8*), which had accumulated to almost £17m by 1968. That even this was insufficient to protect the company's share price against the double blow of the collapse in value of its shares in, and income from, Herbert-BSA Ltd and the heavy losses incurred by the motorcycle division during the final years 1969-73, does not imply that the dividend policy was not conservative enough, as the Directors could not

reasonably have foreseen such a combination of events. Throughout the 1950s and 60s commercial/financial know-how on the Board was increased at the expense of product knowledge (*Appendix 3*). This led to the entrenchment of short-term, accountancy based, financial controls in the subsidiaries and to short-term profit calculations as the basis for corporate policy making, rather than the winning or defence of market share.

Whether or not the diversification policy complemented, or harmed, the motorcycle business is an issue central to this thesis (*Chapter 5.5*). Ryerson (1980); Hopwood (1981); Smith B. (1981) and BGC (1975) all concluded that BSA's motorcycle business was starved of capital and the close attention of the Board by its pre-occupation with the acquisition and disposal of the diversified companies and their management problems, but up to now the issue has not been subject to rigorous analysis.

It might have been expected, in view of the high proportion of company sales/profits delivered by the motorcycle division, that the Group Board would have taken a keen interest in the strategy of this business. Major decisions affecting its future, however, appear to have been made by the managing director of the division and his close colleagues, subject to the support of the Group Finance Director. The role of the Chairman/Chief Executive (and Chairman of the Motorcycle Division Board) in this process is not clear, especially since he did not have his own planning staff. Apart from formally approving requests for capital expenditure, it is doubtful that the non-executive directors made any input into the strategic thinking of this division before the 1971 Board reorganisation.

The key decisions concerning the motorcycle business, made in the period 1950-1970, were:

- The purchase of the Triumph Engineering Company in 1951.

- The decision not to integrate the Triumph/Meriden and Ariel/Selly Oak motorcycle businesses into BSA (1951, but reversed in 1963).
- To invest heavily in international motor sport (1950-68).
- To offset the loss of sales in the home market in during the 1960s by increasing sales of large (500cc and 750cc) BSA and Triumph bikes into the US market (1960-68).
- Segment retreat in the face of strong Japanese competition (1960-1969).

Taken together, however, these decisions did not add up to a coherent strategy for an integrated international business. This was not surprising as, up to 1956, the three motorcycle companies (Ariel, BSA and Triumph) competed with each other (4.2.2 below). Edward Turner's successor, Harry Sturgeon (1963-67), died before he could make a strategic input and Lionel Jofeh (1967-71) neither understood the motorcycle business, nor had the confidence of his subordinates.

The failure of BSA to develop an attractive, cheap, lightweight motorcycle was a significant failure. It may be that men dedicated to the design and production of powerful large machines, that delivered sporting (and thus marketing) success, did not really have their heart in smaller bikes, but a heavy price was paid for this omission (Koerner, 1995, 375). A further lapse was the failure to master the then new concepts of 'quality control' and to recognise the importance of reliability to the non-enthusiast new customers.

The delay in the effective integration of the BSA and Triumph motorcycle businesses (4.2.2 below), caused by unresolved differences between BSA/Small Heath and Triumph/Meriden and the mistaken belief in the advantages of internal competition, had unfortunate longer term effects. The delayed development of competitive motorcycles, designed on a modular basis, cost BSA dearly, as it fought to stem the Japanese tide with ageing machines and known, but uncorrected, faults.

The fatal decision not to use the good profits of the 1950s to raise capital to up-grade the production facilities of the motorcycle business is discussed in 3.2.9. Anyway, it would have required an attack on the entrenched labour practices at Meriden if the potential gains from the investment were to be realised, a prospect at that time many directors in other British engineering industries also shied away from. As a consequence of under-investment in the motorcycle business the nature and condition of BSA's production facilities available to match the Japanese competition was:

‘three antiquated factories in the Midlands. Investment has been low for many years, capital employed per man was £1,300 (cf. £5000 at Honda) and the equipment in the factories is old and mostly general purpose in nature. As a result it is difficult to maintain reliability and impossible to use modern, high volume, highly automated, low cost methods’. (BGC, 1975, 57 and 211).

Any business plan is at the mercy of events, so it is vital that senior management should recognise early any changes in the assumptions on which the strategy is based. Such a change occurred in 1961 when the Japanese were about to launch their attack on the British motorcycle market. UK registrations of motorcycles and mopeds peaked at the end of the 1950s (1.52m in 1958, 1.73m in 1959 and 1.8m in 1960). In 1961 they slipped back to 1.79m, the first stage of a long run trend that would persist for the next decade. By 1975 registrations had dipped to 1.3m (Koerner, 1995, 301). These figures masked a worrying threat to BSA, for the demand in Britain for the 500cc and 750cc motorcycles was dropping even faster than the overall trend would indicate, whilst the demand for lightweight (that is up to 150cc) machines, the Japanese forte, was actually improving. BSA's response was to make good the shortfall by increasing the export of the larger, profitable bikes to the US, but thereby increasing the Group's exposure to that market and especially its demands for cash to finance sales. While, at the time, the fall in demand in the 1960s, in both Britain and the US, seemed to be a structural trend brought on by the

advent of lower cost car transport, the revival of demand arose from a somewhat different kind of customer. This was a response to more determined marketing, notably by the Japanese. Smith, B. (1983, 48) wondered whether, had such market development been done by more dynamic British motorcycle manufacturers when they led the world in the 1950s, the outcome might have been different. May be so, but even the most professional marketing could not have succeeded with ageing machines aimed at a different segment of the market.

The strategic decision with the greatest consequences came to be known as ‘segment retreat’ (BGC, 1975). BSA found it impossible in the short term to profitably match the UK prices of Japanese small bikes and responded by withdrawing from this segment of the market. Encouraged, the Japanese progressively developed experience in larger motorcycles. BSA continued to withdraw and over time shut down production of their 175cc, 250cc, 350cc, 500cc and ultimately 650cc models, finally bunkering down to build 750cc Triumph ‘super-bikes’ only at Meriden. The consequences of this withdrawal, however, were mitigated for sometime since the US market for the profitable larger machines was expanding. BSA did put some limited development effort into the design of the ill fated Ariel tri-cycle and a new 350cc bike, suggesting that there was a belated recognition of the consequences of segment retreat, but the ultimate outcome remained the same.

Whether any other short-term strategy implemented in the 1960s, would have had a material affect on the final outcome is doubtful. Smith (1983, 33) took the view that once it had been decided not to raise substantial capital to re-equip the Small Heath and Meriden factories, the events of the late 1960s and early 1970s became inevitable. The author would add that early integration of the three motorcycle businesses, and the development

and design the modular range of bikes recommended by Hopwood (3.2.1 above) would have been essential prerequisites for any such capital expenditure.

Both BSA and Triumph strongly supported international motorcycle sport as a key element of their marketing strategy and devoted considerable resources to it. Both marques were successful, but no cost benefit analysis was undertaken. The stresses imposed by racing undoubtedly helped motorcycle development, but the influence that sporting success had on sales is more problematic. It could be argued that it had no affect on those potential customers, who were only interested in cheap and reliable personal transport (i.e. the group that the Japanese courted so assiduously), who were far more numerous than the motorcycle enthusiasts who followed a fringe sport.

In parallel with these events, strategic decisions were being made by the Group Board about the non-motorcycle businesses. In 1960, faced with continuing poor returns or even losses by these subsidiaries, they sold Daimler to Jaguar and the Cycles business to Raleigh and in the same year they bought the Churchill Machine Tool Company to enhance Tools Division (*Chapter 2.2.4*). In 1967, they sold Jessop-Saville to IMI and Firth Brown. The Board then made the apparently sensible decision to fold the Tools Division into Alfred Herbert Ltd and form Herbert-BSA Ltd (*Chapter 2.2.7*). That this joint-venture collapsed in 1971, losing BSA £6.9m, does not negate the decision to try to create a machine tool company, thought at the time to be capable of holding its own on the world stage.

The analysis of the financial outcome of the diversification strategy is set out in Chapter 5.5. The conclusion that, rather than supporting, it kept available funds away from the motorcycle business, is a damning criticism of a Board, crowded with Directors recruited

for their commercial and financial acumen, and confirms the suspicions of Smith B. (1983, 37) and others.

BSA ultimately collapsed because it got its strategic thinking wrong at both the group and motorcycle division levels. Its pre-1971 Directors were not up to the job and for this the shareholders only had themselves to blame.

4.2.2 Integration of the Triumph Engineering Company into BSA.

‘Here were three companies (Ariel, BSA and Triumph) in a group, with each company trying to pursue separate product policies, sometimes at the whim of an individual but at no time under co-ordinated direction’ (Hopwood, 1981, 185).

‘Edward Turner welded together a Meriden team, which was the finest in the industry and led the Triumph company to the supreme position, which it held until it was infected by the diseases carried from Small Heath by the new management’. (Shilton, 1982, 134).

In 1951, BSA bought the Triumph Engineering Co. Ltd, Meriden, from Jack Sangster for £2.5m. Sangster joined the BSA Board and remained Chairman of Triumph. (Davies, 1991 126; Wright 1992, 43). Edward Turner became MD at Meriden and was given a seat on the Group Board. Although Triumph produced less machines than BSA Motorcycles, its bikes were larger and the company was relatively more profitable.

The Board had to decide how to bring its new acquisition into the Group but the questions of how the two companies might be integrated, and the potential benefits of synergy, were not addressed initially, especially as Sangster and Turner were fiercely protective of Meriden and the Triumph marque. This again is an example of Chandler’s ‘personal capitalism’ (Chandler 1990) persisting within a larger organisation. The non-executive Directors appeared to have acquiesced in this do-nothing situation.

It was not until 1954 that the issue was addressed. A senior non-Executive Director, H.J.S. Moyses, met Jack Sangster and James Leek to discuss the matter and he proposed that the

Board set up a standing committee under his Chairmanship to rationalise the position, with Sangster and Turner representing Triumph/ Meriden, and James Leek and A.N. Other representing BSA/Small Heath. The Board agreed in March, (Directors Minute Book, March 1954, Item 10539, in MRC/MSS/19C/20) that:

- 'It was essential to preserve the identity of the Ariel, BSA and Triumph marques.
- The proposed rationalisation standing committee be set up.
- The work of the three Buying Departments should be co-ordinated.
- The three Design Departments should collaborate in the design and manufacture of certain common parts, but not at the expense of the individuality of each marque.
- Dealership overlaps should be rationalised.

There is no record, though, in the subsequent Board Minutes, or elsewhere in the BSA archives, of the minutes of this committee and neither Hopwood (1981) nor Shilton (1982), who would have been involved in the implementation of the second and third instructions, make any mention of this committee.

Following the retirement of James Leek (MD Small Heath and BSA Motorcycles) in 1956, Jack Sangster made a decision, which meant that further discussion of rationalisation became impossible. He appointed Edward Turner, MD of Triumph, as Managing Director of all BSA's motorcycle and motor car activities. Turner, however, remained at Meriden and concentrated on the Triumph business, rarely showing any interest in what was going on at Small Heath (Ryerson, 1980, 154), a notion rejected by Shilton (1982) who noted that the time Turner could spend on Small Heath's problems were restricted by the efforts needed to sort out Daimler.

' Triumph seemed still to be run as a private company, with Turner at the helm and refusing to allow interchange at middle management level. The two units (BSA and Triumph) were soaked in antagonism. This state of affairs sprang directly from top management and Edward Turner in particular. He flatly refused to allow any movement towards inter-company management

collaboration and it is not surprising that a barrier of mistrust grew which, much later, was almost impossible to remove'.(Hopwood, 1981, 127-128).

This is firsthand confirmation of naked personal capitalism (Chandler, 1990) continuing to operate after being absorbed into a larger organisation, even to the extent of harming the wider business.

Shilton (1982, 133-34), however, believed that it was natural (and in the Group's interest) for the Triumph management to defend an organisation they considered to be better, in all respects, than BSA/Small Heath.

Eventually, in 1964, after the retirement of Sangster and Turner, and based on recommendations from McKinsey, Consultants (4.2.4 below), the two subsidiaries were integrated (Org. Chart 3 in Appendix 8) into a single Motorcycle Division under a new MD (Harry Sturgeon) and executive Directors for Engineering, Finance, Marketing and Manufacturing were appointed. (Hopwood, 1981, 203-4). In a memo to his senior staff of 6th July 1964 Harry Sturgeon wrote:

'At one time we needed the stimulus of intra-divisional competition to refine our design skills and maximise our market penetration; from now on the argument for greater consolidation becomes stronger than before. Therefore, as of 1st August 1964, the Motorcycle Division will formally become an integrated whole. Let me emphasise that these moves in no way threaten the brand individuality of BSA, Triumph and Ariel in world markets; in fact at the retail sales level all three brands will continue to compete with each other for sales'. (MRC/MSS/19B/TB4).

In this memorandum Sturgeon claimed the integration would lead to an improved design capability, more effective marketing, better quality at lower cost manufacturing and improved planning and control. These claims were later examined by the Financial Times (29th April 1965), in a generally supportive article.

The insider, Hopwood, took, a rather different view:

‘The subsidiary company Directors who lost out in the reorganisation were badly treated and the new Division unnecessarily lost talent and experience. It was bedevilled by partisan attitudes and loyalties, which the ailing Divisional Managing Director was unable to sort out’ (Hopwood, 1981, 203-204).

The systems to be operated in the combined engineering department were designed by McKinsey to the detriment of engineering flair and design team experience. The new Divisional Board, however, did agree to form a forward design and product-planning department (Hopwood, 1981, 208), the fruits of which were swamped by the sales/production crises of 1968 onwards. In 1967 the BSA and Triumph design teams were physically brought together in the new Group Engineering Centre at Umberslade Hall, where they were joined a year later by the motorcycle research and development function (*Chapter 3.4*).

Davies (1991,126) and Shilton (1982,113-134) thought Sangster and Turner had a defensible argument for their earlier protection of the Triumph marque from BSA influence but as a career-long Triumph employees these were independent judgements. There is no evidence, in the archives, that they formally argued their case in writing or that the non-executive directors arbitrated on the issue. The only written defence of the Triumph position was included, retrospectively, in the Sturgeon memorandum quoted above. All that is known of Turner’s flawed personality suggests that he would have resigned had Triumph not been left autonomous. He and Sangster were in control of the situation and could stifle rational discussion of the issue (Ryerson, 1980, 154-57). The defensive attitudes of the Triumph/Meriden management made full integration, when it eventually came, more difficult than it otherwise would have been. ‘BSA and Triumph were left fighting each other almost to the bitter end’ (Hopwood, 1981,185). While the delay in integrating the two subsidiaries cost unnecessary overheads, it also prevented the

introduction of a new range of motorcycles, designed on a modular basis, that would have placed BSA in a much better position to withstand the Japanese from 1960 onwards.

Initiating and carrying through major changes in complex organisations is a major management challenge. Such changes rarely deliver the benefits expected of them unless those proposing them win the arguments, before going ahead, and convince those most concerned of the longer-term benefits. In the case of Triumph this was not achieved.

4.2.3 Response to the Threat of Japanese Competition and the Anglo-Japanese Trade Agreement, 1962

‘We are not dismayed by this competition since we believe we can match and beat our competitors technically, in performance, in marketing and in after-sales service.’ (Speech by the Chairman, Eric Turner, to the 1969 AGM, Investors Chronicle, 14th November 1969).

Was he trying to talk up the Company’s share price or was the Accountant- Chairman ignorant of the true international competitive position of BSA’s motorcycles, machine tools and other engineering products?

‘What shocked and disappointed me was the complete unawareness of the chairman and other top executives of the British industry. They did very little to prepare for the competition which was so obviously threatening to obliterate us. Almost everyone at Board level seemed to be asleep and on the rare occasions when I had the opportunity of discussing the situation with them I was upset by the self satisfaction and lethargy that seemed to exist (Hopwood, 1981, 101).

The Board became aware of the threat of Japanese competition on receipt of a report by Edward Turner on a visit to Japan in September 1960 (*Appendix 6*), although data on the rate of increase of output and (exports) of motorcycles by the Japanese industry, 1951: 24,153/ (491); 1956: 332,760/(648); 1959: 1,215,000/(47,328) (Smith, 1983, Table 7, p.20), was available before then. While the British motorcycle industry had ‘the misfortune of being in the direct line of fire when Japanese manufactures began their attack on

western markets' (Owen, 1999, p.192), BSA might have been expected to have read the signs earlier. The Japanese invasion had been a growing threat for almost a decade, following the development of their huge home market for motorcycles and the cost benefits of the economics of scale that flowed from it. It is surprising that BSA did not respond to the potential opportunity this market provided for them in the 1950s. Small Heath and Meriden were working to capacity during this period and the Board was reluctant (*Chapter 4.2.9 below*) to invest the capital required. The Chairman claimed (Annual Report, 1968/69), without providing specific evidence, that the Japanese home market was closed to BSA at this time by non-tariff barriers (Grimwade, 2000; Laird 1990). These are quantitative restrictions on trade, domestic subsidies, national standards, restrictive purchasing rules, endless bureaucratic delays etc, that are an effective form of protectionism but are hard to prove. Edward Turner in 1960, however, had taken a different view in his report on his visit to Japan (*Appendix 6*) 'even if it (i.e. the liberalising of British imports of motorcycles) did happen it would not result in the British motorcycle industry participating significantly in the large Japanese home market owing to a very large price disparity'. It also has to be asked whether there was an element of British superiority (Koerner, 1995, 323), and even racism, in the Board's attitude to the Japanese in the 1950s, that clouded their judgement.

The Japanese onslaught was dramatic; in 1963 they exported close to 50,000 motorcycles to the U.K., providing 89% of all such imports and nearly two bikes for each one exported from Britain (Smith, 1983, Tables 5 & 7). They were able to achieve this because they had bought out existing dealers and created new dealerships (Interview, P.Taft, October 2003 in Appendix 2). Their philosophy, in contrast to that of BSA, was to concentrate on market share and volume rather than short-term profitability.

Soon after the Board became aware, in 1960, that HMG were negotiating an interim trade agreement with Japan, they sent Edward Turner to meet the Japanese motorcycle manufacturers. His terms of reference were: 'to gather information on the Japanese motorcycle industry to enable BSA and Triumph to plan counter measures to try and preserve our own share in motorcycle world markets' (Board Minute missing but quoted by Turner, 1960). This remit implied that the Board realised that they had a battle on their hands and that the best they could hope for would be to maintain BSA's market share in a growing market.

Turner's 'Report on Japan' of 26th September 1960 (Appendix G), is a seminal paper. 'Even with the years of hindsight since, it cannot be faulted. Turner understood exactly what it was all about' (Ryerson, 1980, 158). He visited Honda, Suzuki and Yamaha and deduced that the industry was producing, at an accelerating rate, well over one million motorcycles per annum (compared with 140,000 in the UK) on the back of an expanding home market. He was impressed by the design and quality of the Japanese machines and by their advanced production engineering processes, noting that Honda alone employed 400 technicians studying new manufacturing techniques and machine designs. Turner concluded that BSA's export markets would soon come under threat and that they would also make an impact in the company's home market. It was essential that the Directors of BSA understood and acted on the facts revealed to them.

How then was the report received, how was the defensive strategy developed and what were the counter measures? The BSA Group Board (on which Turner sat) and the Directors of the Motorcycle Division (of which he was MD) initially discussed the report. They had to face up to the size of the Japanese home motorcycle market relative to that of the U.K. (ten times greater). They knew already that in the three years prior to 1960,

nearly three quarters of all BSA's motorcycle production had been profitably exported to 150 countries world-wide on the back of an uncertain and varying home demand, and that the biggest overseas market, the US, was subject to exchange rate risks and had a very short selling season. The Board will have appreciated that the net fixed investment per man in their motorcycle businesses was little more than one fifth of that in the Japanese industry; £1500 compared to £5000 (Boston, 1975, pxii). It is probable that they realised that the profits BSA could generate from its motorcycle business in the foreseeable future were unlikely to sustain the investment required to match the economies of scale and the production techniques and facilities of the Japanese companies. In formulating its strategy the Board was also hamstrung by the company's earlier failure to develop a successful lightweight, economy, motorcycle (Koerner, 1995, 380).

It is doubtful that the Directors had the analytical ability to determine the fundamental strength of the Japanese industry's position beyond that of the size of their home market. The cost advantage of the Japanese motorcycle manufacturers was based on higher productivity, which arose from the greater capital employed per man. It did not arise from lower labour costs, for Honda paid significantly more than the average wage in the UK motorcycle industry (BGC, 1975, p. xiv). Expanding volumes enabled the Japanese firms to avoid redundancies, despite constant increases in capital intensity. In contrast, BSA's highly labour intensive factories at Small Heath and Meriden declared repeated redundancies as volumes fell, relative costs escalated and profitability collapsed.

The Board concluded that there were only two realistic defensive options: a significant reduction in manufacturing costs and a further increase in profitable exports. The drive for increased exports, led by Triumph, was successful when judged against a 1960 base line but less so when considered against the huge potential of the US market and percentage

market share. By 1966 both BSA and Triumph had been awarded the Queen's Award for Export Achievement, awards that were repeated the following year. In the financial year 1966/67 the motorcycle division delivered £2.51m profit, 68.2% of the Group's profit (*Appendix 7.3*). In 1968/69, 90% of all motorcycle production was exported (Chairman's Statement to the AGM. Investors Chronicle, 14th November 1969).

Reducing manufacturing costs was a more difficult problem. This is best achieved by investing capital when demand is increasing. The reasons for the non-availability of substantial capital for the motorcycle division is discussed in Chapter 4.2.8 and the money actually spent on the motorcycle division, post 1945, in Chapter 5.4.

As the labour cost of assembling a 500cc or 750cc model differed only slightly from that of a 250cc machine, while the sales income and profit from the former machines was much greater, the apparent short-term advantages of abandoning smaller motorcycle manufacture appeared to be self-evident.

Because of the profile of the home market, Small Heath produced a full range of motorcycles up to 650cc, while Meriden concentrated on large (500cc and 750cc) twin cylinder Triumph machines. Driven in part by the erroneous belief that the attractive, low-cost lightweight Japanese models would create new customers who, in due course, would trade up to the larger BSA/Triumph machines, in which the company believed itself to be pre-eminent, a policy evolved of what BGC termed 'segment retreat', to concentrate on the (then) profitable large motorcycles (1975, p.x). The unexpected news in 1963 (Hopwood, 1981, 212) that the Japanese were about to enter the large bike segment (on which BSA was to make its last stand) was thus a devastating blow. In the US market the Japanese sales in the greater than 499cc motorcycle segment increased from 27,000 in 1969 to 218,000 in 1973, while BSA's remained constant at around 30,000. BGC (1975, p.xv) later

demonstrated the relationship between market position and profitability and that segment retreat invariably led to lower profitability.

While head of Triumph, and later MD of BSA's Automotive Division, Eric Turner had paid scant attention to the bottom two segments of the motorcycle market (motor cycles and scooters up to 150cc). The way into Britain was open to the Japanese. During 1951-64 there was no co-ordination of model policy (Hopwood, 1981,185) between Meriden and Small Heath, a failure which was to cost BSA dearly. Had they known anything about the world motorcycle industry, it might have been expected that the non-executive directors would have probed into this situation and the creeping decision, to abandon the lightweight end of the market, may not have arisen.

By the second half of the 1960s, BSA had in place some measures to face the rapidly strengthening Japanese competition, but in 1969, led by Lionel Jofeh, they opportunistically walked into a disaster (Ryerson, 1980,168). BSA were offered the manufacturing rights for a lightweight three-wheel moped, powered by a Dutch 50cc engine, aimed at elderly ladies going shopping. The basic design was modified by the new Group Engineering Centre and termed Ariel 3. It ran into regulatory and mechanical problems, few were sold and BSA had to write off 1000 completed machines and 50,000 pre-purchased engines. As this was happening, Jofeh presented an optimistic sales/profit forecast to the Group Board (Hopwood, 1981, 239) which surely must have destroyed what was left of his reputation for managerial competence.

The time to meet the Japanese competition was not in the 1960s, when their highly competitive machines were on the high seas and destined to decimate BSA's markets, but a decade earlier. Unfortunately, the Board decided during the 1950s not to raise the

additional capital available to it on the basis of its good earnings but to continue with its diversification policy (*Chapter 5.5*). This was a major strategic error that cost BSA dearly. Faced, from 1964 onwards, with further Japanese competition in Triumph's big-bike territory, Hopwood returned to his argument that 'it was simply not on to keep 'tarting' up the same old, noisy dirty and expensive motorcycles' (1981, 243) and that 'a complete new range of bikes needed to be designed and developed' (1981, 77, 79, 194, 196). Nothing was done, however, until after the 1971 production/sales crisis (*4.2.5 below*) and it was not until the Board reorganisation, in which Hopwood was appointed engineering 'supremo', with a seat on the Group Board, that he was able to start on this vital project (1981, 287). Even though BSA suffered a comprehensive defeat at the hands of the Japanese manufacturers it would be unreasonable to criticise the post 1960 directors too harshly because the die had been cast by their predecessors in the 1950s and by the 1962 Anglo-Japanese Trade Agreement.

The signing of the Anglo-Japanese Trade Agreement by the British Government in November 1962, was the most important external post-WW2 event that influenced the future of BSA as it immediately exposed the motorcycle division to the full weight of Japanese competition. Educating the Board of Trade in the potential consequences of the draft agreement for the UK motorcycle industry, and persuading them to negotiate transitional relief from its provisions, was a major challenge for the Motorcycle and Cycle Industries Association and for BSA, which formed more than half of the British industry. It was also an event in which the non- Executive Directors might have been expected to play (but did not do so) a leading role.

In late 1959 the Industries Association was told by the Board of Trade that it intended to open discussions with the Japanese Government for the purpose of concluding a bilateral

trade agreement. In July 1960 the Director of the Association, Hugh Palin, reported that an interim agreement had been concluded, without prior consultation with the industries concerned, which was intended to promote greater trade between the two countries (MRC/MSS 204/3/1/92). This should not, however, been a surprise to BSA since the Conservative Party Manifesto for the 1955 General Election said: ‘ trade relations with Japan should be dealt with by mutually negotiated arrangements and our desire for a long term Commercial Treaty’.

This news caused uproar in the industry and Palin sought an urgent meeting with the Chancellor of the Exchequer, who was forced to apologise for the lack of prior consultation. The Chancellor agreed that ‘some industries would face increased competition but added that he was confident that there would be no risk of a flood of imports and that the agreement would give British exporters new opportunities’ (Financial Times, 7th November 1960). Worse, however, was the conclusion drawn by Palin after his subsequent discussions with Treasury and Board of Trade officials that they really had no conception of the Japanese motorcycle industry and could not believe they could pose a threat to us (Koerner, 1995, 325-26).

The Industries Association then pressed the Government to impose a quota on motorcycle imports, in place of the loosening of import restrictions. Some industries, notably radio and television manufacturing and textiles, were successful in this respect, but the motorcycle industry failed in its arguments. To be fair, they were up against entrenched attitudes in the Board of Trade, typified by the following extracts from a speech made by its President to the Japan-British Society in Osaka in May 1962:

‘It is certainly not our policy to preserve un-competitive industries as monuments to Britain’s industrial past. We recognise that with constant technological changes, rising labour costs and the growth of production in

other countries, some branches of industry are bound to decline because they are no longer competitive' (quoted in Koerner, 1995, 329).

Also the motorcycle industry was not backed by the Federation of British Industries, who were in favour of increased trade with Japan. Following a visit to Japan, the Director-General actually went out of his way to praise the Japanese motor cycle industry (Koerner, 1995, 330).

The Agreement was signed in mid November 1962. Taking advantage of the interim Agreement, the Japanese had already made a dramatic impact. Their motorcycle imports into the U.K. in 1960 were 464: between January and August 1961 alone they were 1274, at a time when BSA considered the home market to be depressed. (Smith, B, 1981, 19).

The reasons for the industry's failure to secure at least transitional relief from the predictable consequences of the Agreement are to be found in its failure to recognise early enough the potential threat posed by the Japanese and a Trade Association that was reactive and not proactive. The Association should have been arguing its case within the FBI and Board of Trade long before the Interim Agreement was drafted, let alone signed. It should have convinced officials that it had an improvement strategy that would enable it eventually to compete with the Japanese motorcycle companies, given a measure of transitional relief.

How did this crucial failure occur? Lionel Jofeh was Chairman of the Industries Association at the time, so must bear some of the responsibility. That BSA had a combined Chairman/Chief Executive (Jack Sangster to 1961, then Eric Turner), neither of whom had experience in dealing with Whitehall and Westminster or the time to cultivate high level contacts played a part. Equally, the three independent non-Executive Directors, G.G. Phillips, A.J. Quig, and Sir James Young (*Appendix 3*) also did not have the subtle expertise required to ensure that the Association received the vital early warning of the

Government's negotiation of the Interim Agreement. Neither did they have the detailed knowledge of the motorcycle industry needed to stand Department of Industry or FBI cross-examination.

That, subsequent to the Interim Agreement, two industries were able to obtain transitional relief while the motorcycle industry did not, was a major failure. If ever there was a time for BSA's Chairman to lead from the front within the FBI and the Board of Trade, this was it. Furthermore, it does not appear that Birmingham MPs were mobilised at this critical juncture.

Dealing with the CBI, the DTI and DG III (Industry) in Brussels and the organisation and effort required to significantly influence draft Government policy to the advantage of an industry or particular firm, requires a professional approach (Democracy Centre, 2004, 1). This rarely can be achieved on an ad-hoc, reactive basis, as attempted by the Industries Association, led by BSA. The most important requirements are long established high level contacts that can be relied upon to deliver early warnings of EC and Government intentions, to enlist the support of the FBI. (now CBI) and to present thoroughly professional arguments written in the unemotional style and language of the senior Civil Service. None of these requirements were met in this case (Koerner, 1995, 368).

4.2.4 The Impact of McKinsey Consultants.

In 1964, BSA retained the international management consultants, McKinsey, to examine the operation of the motorcycle division. Up to then, and again from 1969 onwards, the Directors had looked to the consulting arm of their auditors, Cooper Bros, to provide them with independent advice (Appendix 5). McKinsey, however, had been consulted by many of the largest industrial companies in the UK, notably ICI Ltd and Vickers Ltd, the heavy engineers (Channon, 1973, 155), and were consummate high level salesmen.

That the Board decided to retain McKinsey was an acknowledgement that, following the retirement of the obstructive Edward Turner, there was an opportunity to integrate the motorcycle business. Unfortunately, McKinsey's reports have not survived but the effect of the detailed changes they instituted lived long in the memory of Ryerson (1980), Cave (2003 and 2004 in Appendix 2) and many others. While the restructuring of the subsidiaries in an industrial group was bread and butter to McKinsey, devising and installing parts and stock control systems (4.2.5, *below*) was not.

McKinsey sold BSA a restructuring package that established functional divisions, with overall control vested in a small executive management team directly responsible to the board for the group's performance. This concept had been successful in the US and underlined the moves already being made towards accountancy based control.

Even after making allowance for the biased and emotional opposition of Hopwood (1981,227) and his engineering colleagues to McKinsey's bureaucratic systems, his subsequent comments were devastating. The new procedures were introduced into the crucial area of the supervision and co-ordination of materials/components supply and motorcycle spares. Hopwood claimed that the longstanding systems had operated reasonably efficiently prior to computerisation but, afterwards:

‘We now had a computerised recording system in our spares department, which ejected miles of paper and was so unreliable as to be useless, such that our dealers gave us up as a bad job and the private spare parts business grew steadily’ (1981, 225).

Of even greater consequence, was the effect of McKinsey's changes to the existing component modification control system.

‘We were never previously seriously at risk either from delays to the production line or high obsolescence factors. Our invasion by accountants had created large teams of product planners and evaluators and we had been ‘sold’ value engineering, a new catch phrase for good design with correct time factors. We seemed to be suffering from a bad attack of management

indigestion for the engineering modification system broke down completely. It comprised a committee of twenty people, most of whom were out of touch. From this activity came chaos, urgent work was lost in the system and our products and reputation were beginning to deteriorate' (Hopwood 1981, 227).

Hopwood (1980, 225) was greatly concerned at the number of high level jobs that were created to implement the McKinsey recommendations and wrote that he had the sense of an 'organisation being reorganised, co-ordinated, charted and paper worked to distraction'. McKinsey, however, do not appear to have addressed the need for major capital investment into the motorcycle division, without which their recommendations were ultimately doomed to failure. All management consultants, however high their reputation, need to be strongly managed and their recommendations, if accepted, need to be sold to those who are going to be involved in their implementation (Author, Personal Experience). It does not appear that this was done.

To be fair to McKinsey, their explanation of the adverse consequences that flowed from the implementation of their recommendations was not available, and, as engineers, neither Cave nor Hopwood were impartial observers of the attempt to institute managerial control over the design engineers, who were the controlling elite at Small Heath and Meriden. As a result of the Board's acceptance of McKinsey's recommendations, BSA lost three experienced senior managers. Bob Fearon, General Manager and Alan Jones, Works Director, Small Heath, resigned in protest as did the Ariel General Manager, Ken Whistance, whose factory was being shut down (Shilton, 1982, 148-149).

4.2.5. Production and Quality Control Problems at Small Heath 1968-71

BSA was ultimately brought to its knees in 1973 (4.2.9) because it ran short of cash and fell under the control of its Bankers, in spite of having had net assets per share of £1-40

and reserves of £12.9m in November 1970 (BSA Accounts, 1970/71) at the start of the company's terminal crisis.

Serious problems appeared in 1968 due to serious deficiencies in the information flow and forecasting systems:

‘There was no formalised information flow and forecasting system within the motorcycle division that was the responsibility of a single senior manager’. Everything was ad hoc and forecasts and short-term business plans were made on inaccurate market and cost information’ (Review, dated 9th August 1971, by Cooper Bros. of the 1971/72 Sales Forecast in MRC/MSS/ 19B/TB-3).

The main reasons for the haemorrhaging of cash that occurred (Cooper Bros, Reports, *Appendix 5*) were design changes and production and quality control problems during 1968/70. Large stocks of BSA motorcycles, which had missed the US selling season, which generated 90% plus of the division's annual income and profits, were brought back from America and had to be sold off at a substantial loss. This was due to late design changes delaying completion of the urgently required motorcycles (Ryerson, 1980,174) and was put down to a collapse of the overloaded engine modification system, due to changes initiated by McKinsey, and to poor morale amongst key staff in the Group Engineering Centre (Hopwood, 1981, 228 and 240).

Although this problem was brought under a degree of control the following year, the motorcycle division ran in to a spate of supplier strikes and material supply problems and output fell 7% in an expanding market. In the US, BSA Inc were unable to meet all the demands of its customers (Annual Report, 1969/70).

1970/71 was also a disaster in both output and quality terms. It was heralded by an upbeat statement by the Chairman, Eric Turner, that referred to ‘the largest number of new machines ever introduced by any motorcycle manufacturer anywhere’ (Report to AGM,

Dec.1970, BSAGN, MSS/MRC/19A/4/60/4). The reality was very different. Only two machines were new models (the identical 350cc Triumph-Bandit and BSA-Fury bikes) and they were a year late. The remainder was updated machines which were also late into production (Hopwood, 1981, 248). In March 1971, Eric Turner conceded that the target dispatch dates would not be met and asked the consulting arm of Coopers to investigate. The motorcycle division had planned a turnover for the year of £40m and had achieved only £26.7m. More importantly, stocks had built up from the previous year's already high £9m to £15.6m and the drain on the cash/overdraft reserves became unsupportable without further support from the company's bankers (1970/71, Annual Accounts).

The consequence was that, in the US market, BSA's overall market-share fell from an estimated 23% in 1968/69 to 10% in 1971/72. The only consolation was that, in a growing market, the large BSA and Triumph bikes retained, for a time, their dominant position (MRC/MSS/19B/3). The fall in BSA's share of the US market was to the advantage of the Japanese motorcycle manufacturers who exported motorcycles to the value of 108,800 US dollars in 1965, \$356,700 in 1975 and \$695,600 in 1975 (Smith B, 1981, Table 6).

How could Eric Turner have got it so wrong? As Chairman he relied on Lionel Jofeh, the MD of the motorcycle division, to brief him. Although Jofeh must have had some inkling of the situation, Turner did not have the engineering and production experience to interrogate him in depth and Jofeh had made it clear from the outset he would not have his decisions and word questioned. Alistair Cave (Small Heath General Manager) could have told him the true score, but he was not asked (Cave, 2003). Furthermore, while the non-Executive Directors will have been aware of the dependence of the whole Group on the outcome of the American selling season there is no evidence that they pressed the Chairman or the Divisional MD on their predictions or deviations from budget.

Could the debacle have been prevented? Two public explanations were forthcoming: a Profit Warning (30th July 1971, MRC/MSS/19B) and a post-event Statement to the Shareholders (7th October 1971, MRC/MSS/19B/TB2). The former put the blame on component shortages and defects, strikes and the inability to recruit the necessary additional labour. The latter said that:

‘The loss was due to the dislocation of production in the motorcycle division, which led to low output prior to the U.S. selling season. This was attributable to delays in completing the design and development of new models. It would be idle to deny that errors in management contributed to this situation. Present indications are that the original estimates of a Group loss of approximately £3m for the year ending 31st July 1971, to which would be added an exceptional provision of £1m in respect of product rationalisation measures, will not be exceeded’.

The cash implications of the delays were horrendous. The statement went on:

‘In terms of cash the shortfall against plan last year in the motorcycle division was £7m. The Group’s bank indebtedness currently amounts to some £10m’. While the cost of disposing 1967 bikes was £729,000, it was even higher, £843,000, for getting rid of the 1970 machines, excluding return transport costs’. (BSA Accounts, 1967/68 and 1970/71).

The engineering effort required to launch the new and updated models was underestimated.

The consequent delays, described above, were compounded by a deterioration in quality that had first become evident in the late 1960s, at a time when the modern concepts of quality assurance and control were being introduced into leading engineering companies, but not into BSA.

4.2.6 Merging of Tools Division into Alfred Herbert Ltd

The events leading up to the decision in August 1966 to merge BSA’s Tools Division with the complementary machine tools interests of Alfred Herbert Ltd and the disastrous outcome, are described in Chapter 3.3.3.

The Tools Division (which five years previously had been significantly expanded by the acquisition of the Churchill Machine Tool Co. Ltd) contributed one third of the Group's turnover (Investors Chronicle, 20th Nov.1964) and earned around 7% gross and 4% after-tax profit (MRC/MSS/19B/TB4), so it was a big decision to dis-invest. It did not signal, however, a withdrawal from the machine tools business, but a belief that future earnings would be more secure coming from BSA's share of the profits of the combined operation. The deal valued Tools Division at some £8.5m.

Years later Smith B. (1983) and Ryerson (1980) criticised the decision, noting that the write off of the investment in 1971 was a major contribution to the final collapse of the BSA Group. Hindsight, however, often distorts analysis. The merger of the two largest machine tool companies in the UK, to form a company to stand up to the technically strong overseas companies that were attacking the UK machine tool market, was supported at the time by the City: 'This move establishes BSA as a large shareholder in an organisation with world-wide pre-eminence in its product ranges and should put the Group in line for considerable long-term benefits' (Chairman's address to the AGM, Investor's Chronicle, 11th Nov.1966). It also fitted the Department of Industry's policy of encouraging the creation of larger industrial groups in each industry sector, thought to be capable of matching those in the European Community, Japan and the US.

Given that the main cause of the demise of the joint company was the collapse of machine tool orders from the home market, it is doubtful if the outcome would have been much different if Tools Division had remained within BSA. The seeds of the collapse had been laid many years previously and were the culmination of the inexorable slide in world market share, the relative lack of investment in R & D and the unwillingness of UK

customers, due to a lack of corporate liquidity and confidence, to invest in re-tooling. ('The Machine Tool Industry'. Report of an Expert Committee. HMSO. March 1969)

Desperately short of cash, and fearful that the value of the trade investment would fall further, BSA sold its stake on the open market on the 25th August 1971 for £1.6m. (Daily Telegraph, 26th August 1971.) It had been a disastrous investment. In five years BSA had lost £6.9m and in four of those years the dividends from the share holding had been lower than expected.

4.2.7 Management Succession Planning.

That, in a period of ten years (1961-71), BSA recruited from outside the company two Group Chairmen (Eric Turner, Lord Shawcross), one Group Managing Director (Brian Eustace), two Managing Directors of the Motorcycle Division (Harry Sturgeon and Lionel Jofeh), one Finance Director (David Probert) and the Head of the Engineering Centre (Mike Nedham), suggests that the company's Senior Management Succession Plan was ineffective or, more likely, did not exist at all. Furthermore, it is difficult to understand why none of these posts were filled by men with motorcycle experience. This is to be compared with IMI Ltd, a comparable Birmingham engineering company, all of whose executive directors had spent most of their working lives in that company (*Chapter 6*).

How did this situation arise? Why did the non-executive directors not insist on a management succession plan being put in place and kept updated as soon as the post-war growth prospects had been assessed? Did the need to go outside the company simply arise from the fact that young men, who earlier had been singled out for promotion to the highest levels, had not developed as well as had been expected? We will never know but Ryerson (1980,164, 171) wrote:

'There were perhaps five men in the company, any one of whom was capable of taking over from Sturgeon as M.D of the motorcycle division in 1967. Al

Cave (Works Manager, Small Heath) had everything that the Cooper philosophy required for the post of MD, commitment, a driving sense of purpose and an ability to drive and dominate. Eric Turner looked round the Boardroom and dismissed the senior managers of BSA without further thought'.

The only discussion on this subject at Board level arose from a paper ' Chief Executive's Notes on Group Policy' presented to the meeting on 25th June 1960 (MRC/MSS/19C/21/Minute 11567), 'There must be recruitment of first-class young people in the operating companies, the best of whom can look forward, in due course, to active subsidiary company Boards and also the parent Board'. Note, however, that nothing was said about the training of employees of high potential for senior management and director appointments.

Earlier, in May/June 1956, there was an embarrassing incident concerning the appointment of a successor to James Leek, MD of the Small Heath Group, which had been announced on 3rd May by authority of Board Minute 10775 (MRC/MSS/19C/20). At the June meeting the Board resolved in Minute 10789:

'That a further internal announcement be made forthwith to deal with the position and that it be left to the Chairman, Mr Leek and Mr Potts to issue an appropriate notice.

Post- meeting Note: The following Notice was subsequently published on 25th June 1956:

'The Board of Directors, on the recommendation of J.Leek and H. Potts,has carefully reconsidered the arrangement announced on May 3rd 1956 (whereby Mr Potts would have succeeded Mr Leek on his retirement from the Small Heath Group) and, as a result, have decided that the arrangement shall be cancelled. Mr Potts will continue as MD of the Tools Group. The appointment of Mr S. A. Roberts as Deputy MD of the Tools Group is confirmed'.

The reasons for the muddle cannot be gathered from the Board Minutes. Whatever they were, the incident must have left the senior staff with the feeling that, if the Board could

not get right one of the most senior management appointments in the company, what could they achieve?

It is ironic that, in the 1971 reorganisation following the production/quality control disasters, Bert Hopwood was belatedly promoted to the Group Board to help repair the damage to the company caused by Lionel Jofeh, the outsider, who five years earlier had been preferred to him, as head of the motorcycle division. Had Hopwood had his chance in 1966, the history of BSA may have been very different.

4.2.8. Dividends, Revenue Reserves and Capital Expenditure

‘The cause of this disaster resulted from a concern for short- term profitability. Management gave priority to dividend payments over capital investment for the sake of company share value’ (Clarke T. 1983, citing BGC, 1975).

‘For many years the Directors have followed a conservative policy in respect of dividends’ (Report to Directors on Balance Sheet, July 1952, in MRC/MSS/321/A).

‘The Company’s dividend policy has invariably been conservative, thus during the 1960s less than half the sums available for distribution have been paid out as dividends’ (Chairman’s Statement, Dec. 1969, in MRC/MSS/19A/60/5).

These are conflicting views that require resolution. As a general proposition related to the decline of UK manufacturing industry, the first statement commands wide support (Owen, 1999, 392) but, as the collapse of BSA illustrates, there are many other factors involved in industrial decline beyond the excess distribution of after-tax profits.

As an alternative to the distribution of net profit as dividends or allocating them to reserves, potential profits can be forgone by holding selling prices down to build market share, the strategy employed so effectively by the Japanese motorcycle manufacturers in their export markets.

Three responsibilities of the Directors of a public company are to set the interim and final dividend payments to the ordinary shareholders, approve the level of capital expenditure

for the year in question and consider the need for additional capital and the way in which it may be raised (IOD,1971). Their starting point is the net profit (after interest and tax) and the growth and cash flow forecasts for the company's products. There are conflicting pressures on the Board when making these decisions, notably between the short term need to satisfy the shareholders and maintain the share price to avoid a take-over bid, and the wish to maintain a long term growth strategy. Internally there are also competing claims from the product divisions for the inevitably limited funds available for capital and research/development expenditure.

The resolution of these conflicting demands is made easier if the Board is agreed on the type of company it is directing (*Chapter 2*) and has medium and longer term strategies in place (*4.2.1 above*). Neither of these conditions was satisfied by BSA after 1945.

The Group Profit/Losses and the Dividends paid on BSA's Ordinary Shares, are tabulated in Appendix 7.1. The Group's post-war Annual Accounts were professionally analysed for Smith B (1983, 30-31) and the outcome is included in Chapter 5.2. During the 1950s, BSA undoubtedly delivered returns that would have enabled the company to invest in new motorcycle production facilities by raising new capital but the lower returns of the 1960s would have made it more difficult to do so. The Directors authorised the payment of dividends (*Appendix 7.1*) to the shareholders which, during the 1950s averaged almost 12% on the ordinary shares of the company and allocated the remaining net profits to revenue reserves. In the 1960's, however, dividends fell to an average of 10.3% which perhaps, should have been lower to fully reflect the fall in profitability.

Balancing the cost of the proposed dividend, the amount to be allocated to reserves, capital expenditure and the need to keep the share price reasonably stable is a matter of commercial judgement (*Table 4.1*). The retrospective criticisms of the Board, quoted

above, was certainly not valid in the 1950s but the proportion of after tax profit allocated to dividends did rise in the 1960s. Nevertheless, only in two financial years (1963/4 and 1967/8) did the sum allocated to dividends exceed the funds allocated to reserves. At the time, however, neither the financial press nor the shareholders raised the issue.

Table 4.1 After-tax Profit Allocated to Dividends, 1945-73

	After Tax Profit Available for Allocation £	Allocated to Dividends £		Allocated to Specific Reserves £	Retained /Carried Forward £
1947/48	610,919	124,704	20.4%	238,219	247,996
1948/49	748,903	124,704	16.6%	343,959	271,662
1949/50	876,268	171,991	19.6%	260,273	443,604
1950/51	1,123,766	155,985	13.8%	251,055	708,638
1951/52	1,507,964	201,122	13.3%	352,351	954,491
1952/53	1,796,401	249,408	13.9%	403,272	1,143,261
1953/54	2,571,949	279,538	10.9%	1,125,898	1,157,935
1954/55	2,693,670	341,680	12.7%	1,300,000	1,051,990
1955/56	1,823,475	276,931	15.2%	500,000	1,046,544
	2,608,889	341,680	13.1%	1,210,000	1,057,209
1957/58	2,085,159	374,055	13.3%	700,000	1,011,104
1958/59	2,416,024	450,179	18.6%	700,000	1,761,024
1959/60	2,974,593	622,607	20.9%	842,243	1,509,743
1960/61	2,882,488	627,232	21.7%	750,000	1,505,256
1961/62	2,284,619	541,018	23.7%	248,541	1,495,015
1962/63	2,189,995	411,696	18.7%	256,921	1,521,078
1963/64	979,291	541,018	55.2%	-	438,273
1964/65	2,690,674	667,787	24.8%	-	2,022,887
1965/66	2,208,319	955,292	43.2%	-	1,253,027
1966/67	1,926,856	1,221,115	33.7%	705,741	0
1967/68	1,794,753	1,221,115	68.0%	573,698	0
1968/69	1,046,027	461,018	44.0%	585,009	0
1969/70	38,150	461,018		(2,847,471)	0
1970/71	0	38,742		(8,203,351)	0
1971/72	0	54,240		(3,351,965)	0
1972/73	(3,227,00)	-		-	-
Year	Available	To Dividends		To Reserves	Retained

Source: BSA Annual Accounts

Notes:

- 1: Reserves include general, capital, revenue and stock reserves and a reserve, above depreciation, for the replacement of plant
2. Italics represent losses or withdrawal from reserves.
3. The percentage figures shown are not to be taken as the return on capital employed. They show the percentage of the after-tax profit allocated to dividends.

In the 1950s the percentage of the after tax profits, allocated to dividends never exceeded 21%. In the 1960s, as profits fell, this percentage varied from 18.7% (1962/63) to 68% (1967/68). Overall, in that decade the dividend allocation can hardly be considered profligate and, as can be seen in Table 4.2 below, the reserves continued to grow. The argument that BSA should have followed the Japanese practice of buying market share, especially in the US, by reducing prices and foregoing profits does not appear to have been considered, as annual operating budgets aimed to maximise profits on a year by year basis.

BSA's reserves were:

Table 4.2 BSA Reserves: 1963-1973

Year	£ Total Reserves as at 30 th August £	Comments
1962/63	8,200, 000	
1964/65	10,600.000	
1967/68	16,938,791	Peak
1968/69	15,722,000	
1969/70	12,875,050	
1970/71	4,675, 000	£8.2m drawn down
1971/72	486, 122	
1972/73	Nil	

Source: BSA Annual Accounts

The use of retained profits is usually the first choice of a Board wishing to finance the capital expenditure required for increased productivity or output. The alternatives are debt finance from clearing/merchant banks or additional equity capital. This is not, however, the place to argue their merits, for much depends on circumstances. (It is usually a matter of balancing the cost of debt, which is a function of the bank rate and the risk premium applied by the banks against shareholder's dividend expectations). Regardless of the choice made, BSA's market capitalisation, which was a function of the share price, would have been an important component should the Board have wished to raise major capital by either route.

If BSA had the ability to raise substantial external capital to re-equip Small Heath and Meriden, or even build a new motorcycle manufacturing facility, why did it not do so? This reluctance was not confined to BSA; it was noted by Bowden (2004, 1.) in the pre-war electrical engineering industry, and the issue is analysed at length in Williams et al (1959, 59-91). Owen, (1999, 397), demonstrated that, in the early post war years, it was relatively easy for established companies to raise finance, without undue scrutiny from banks and shareholders of how the money was to be spent.

Nevertheless, during the period 1950-75 some four fifths of British industrial companies financed investment out of internally generated funds i.e. depreciation provision plus retained profits (Meeks and Whittington, 1977, 31). Williams (1983, 59) makes the same point, that during this period, internal funds were clearly the dominant component of the total funds available to industrial and commercial companies. He noted that the Wilson Committee's evidence (Vol 2.77) showed that from 1964 to 1975 retained earnings averaged 70% of the total funds available. Williams also commented that, up to the mid-

1970s, the banks and the stock exchange supplied roughly equal proportions of the funds externally provided.

The government tried, through the tax system, to encourage capital investment by capital allowances against taxable profits. By 1965, expansion of depreciation and initial and investment allowances removed tax liability on nearly £2,000m of gross trading profits compared with £400m in 1952 (Owen, 1999, 39).

Any decision to invest capital, assuming its availability, has to be based on the Directors having confidence in the company's projected growth of its markets and/or the company's market shares and the ability to earn a return on the additional capital invested. In the 1950s and 60s, the financial press made occasional comments on BSA's need for more working, rather than fixed, capital. These comments implied that there was no reason why BSA could not raise more working capital if the company wished to do so.

1952: 'In view of the higher level of stock established, bank indebtedness is likely to prove an enduring feature. The possibility that the company may be raising more capital before long cannot be ruled out' (Investors' Chronicle, 29th November 1952)

1953: 'Whether or not the Directors will feel obliged to bring forward proposals for increasing the capital will depend on the possibility of reducing the stock figure from its high £9m' (Investors' Chronicle 21st November 1953)

1954 'These good results suggest that the need for new capital, which has been referred to by Sir Bernard in the past, will not now be so pressing' Investors' Chronicle, 22nd November 1954

1964: 'Cash flow would cope with the recent level of spending even after deducting dividends gross. With a growing bank overdraft, however, and bigger capital spending in view BSA, might well make one of its calls on the market for funds' (Investors' Chronicle, 29th November 1964).

The financial press, however, does not appear to have recognised the ageing condition of BSA's plant and equipment and how much their capital employed per man was below that of their competitors.

There are several possible explanations why BSA declined to raise significant additional capital:

- The Board showed extreme caution concerning the forecasts for growth in demand in the medium term. Owen (1999, 397) considers this to be the most important reason for the failure of British industrial companies' to invest significantly.
- The accounting and commercially oriented Directors were unaware of how old BSA's production facilities were and how far they lagged behind those of their competitors and how little the company knew about modern production engineering techniques.
- The Board believed that any funds available for investment should be channelled into a diversification programme that would deliver a higher yield, at less risk, than the motorcycle business.
- As the major growth market was in the U.S., the Board was unwilling to contemplate the greater cash/overdraft implications of a major expansion of motorcycle exports.
- The 'stop-go' nature of the British economy in the latter half of the 1950s and the 1960s, together with the ceding of management control of the Meriden shop floor, led to a loss of confidence within the Board.
- The ban on granting planning permission for new industrial sites on the Birmingham-Coventry axis during the late 50s and 60s (Hawkins, 2006).

Steve Wilson, (Personal Communication, 2005), one of the few surviving people who knew most of the key players, wrote:

- ‘An innate conservatism bred of guaranteed wartime/post-war boom. Commonwealth till 1952: markets for whatever they produced’.
- ‘Sir Bernard and Lady Docker and a Board with some of their relatives, valuing the high life rather than progressive engineering’.
- ‘Sangster installing Edward Turner as Automotive Chief, who in a sense thought small, feeling most at home at Meriden and who was nearing the end of his run’.
- ‘Fifties were uneven- the market hiccuped once post Suez and then in a major way immediately after the 1959 boom’.

In spite of these comments, it will never be known for certain why BSA failed to invest significantly in its core business, but the evidence suggests that it was not due, as claimed, to a pre-occupation with short-term profitability. The building up of reserves, or raising external finance, for capital expenditure is only half the story; the capital has to be used productively and there must be doubts about BSA’s ability to have done this, had they made the investment.

Owen (1999, 397) suggests that, in British industry generally, this did not happen. His point is illustrated by BSA’s ill-fated, 1967, computer controlled assembly information/production and spares programming project at Small Heath (MRC/MSS/19A/4/60/3.; Ryerson, 1980, 163), which actually reduced both efficiency and productivity at a crucial time, when the US motorcycle market was growing strongly.

At Meriden, the solution to meeting the higher production targets for the big 500cc and 650cc bikes was not to invest but to employ more workers. In the financial years 1961-63 Triumph had 1177 employees. By 1964/65 the total had grown to 1,391 and by 1968 there were some 2,235 staff and workers at the factory. The rationale for employing these extra workers was to intensify the division of labour by breaking down the number of ‘stations’

(a location on the manual assembly track), where a particular assembly function was performed, and thus increase the number of bikes assembled. This was in complete contrast to the Japanese approach, which was to invest in high technology production and assembly to reduce the number of production workers required (Koerner, 1990,66-67). Until the mid-sixties, capital investment at Meriden was limited to the replacement of some elderly machine tools. Output did rise (1962/63 –26,132; 1965/66 – 21,000; 1968/69 – 37,059) but not as fast as the number of workers increased, so overall productivity (number of bikes per employee per annum) fell.

BSA's capital expenditure on new plant and machinery (*Appendix 7.4*) during the fifteen relatively good years to 1959/60, was £10.1m, of which only £2.2m (21.2%) was allocated to the motorcycle division. Overall this was 98% of the sum set aside for depreciation.

Due to a change in reporting procedures, the split of the total capital expenditure between the motorcycle division and the rest of the group in the 1960s was not disclosed.

Depreciation was recorded in the accounts, however, and it was possible to determine that, during the following thirteen years 1960-73, in twelve of them capital expenditure exceeded and in one year (1961/62) it was less than depreciation. The significance of not investing at least up to the level of depreciation is that the relative quality of the productive assets falls over time. Also as Williams et al (1983, 59-68) established, the historic cost conventions of UK accounting standards, in force at the time, tended to ignore the effects of the depreciation of assets and hence the need for the replacement costs to be included.

This meant that, in an inflationary period, as were the 1960s, profits tended to be overestimated, which acted against the realisation of the need for restructuring.

Contrast the actual capital expenditure with what would have been needed to match the production capability of the Japanese industry. A hypothetical new factory employing 700

skilled workers, built in 1955 to replace the outdated and rundown Small Heath and Meriden facilities, and to build 100,000 motorcycles p.a. using advanced production engineering techniques, would have cost then around £4.0m plus buildings and infrastructure, say £5m (based on £5000 capital per employee i.e. equal to that of the Japanese industry and a productivity of 150 bikes per man per year i.e. fewer, but larger, bikes than Honda, Kawasaki etc). Surely it would have been within the ability of BSA to have raised the capital needed to build such a factory on the basis of the company's profit record and the cost savings, increased output and greatly increased productivity?

A preliminary study, done in 1973 by the Chief Executive, Brian Eustace, (BSA Archives, Solihull,425) for a factory with an output of 125,000 motorcycles at the productivity levels he thought might be achieved by BSA, but still less than that of the Japanese, suggested a total capital cost of £12.5m, higher than the hypothetical figure above due to significant inflation (1955-73) and 25% greater projected output.

The hypothetical factory, of course, was neither built in the 1950s nor is there any evidence that it was proposed. Revenue reserves steadily increased from £8.2m in 1963 to £10.6m in 1965 to £16.9m in 1968 (*Table 4.2 above*) but, ultimately, were not enough to carry the company through the successive crises that engulfed the motorcycle division. There is no suggestion that the Board was financially imprudent. Far from it, the reverse was the case, hence the criticism of inadequate investment.

One of the key factors inhibiting significant capital expenditure in the 1950s was the level of taxation, both on company profits and on motorcycles at the point of sale and also by combining a high nominal tax rate with low levels of tax deductible *depreciation* (*Chapter 5.4*).

Sir Bernard Docker had repeatedly warned the Government and the shareholders of the consequences:

‘A new factor to hinder progressive companies in their efforts to finance necessary capital expenditure and the expansion of stocks, etc is the new ‘Excess Profits Levy’. The amount required for taxation is two thirds of our profit. This bleeding of industry will ultimately benefit no one, except the country’s foreign competitors’ (Financial Times, 18th December, 1952).

‘Taxation has exacted a heavy toll; about two-thirds of the profits. I can only repeat my warning against the draining of available finance which is badly needed now, and may even more urgently needed in the future, to enable British enterprise to maintain its efficiency and competitive power’ (Financial Times, 21st December 1953).

Notwithstanding Sir Bernard’s warnings, and like successive governments in the 1950s and 1960s (Barnett, 2001, p 45), the Directors of BSA did not fully appreciate the dangers of failing to invest in modern production plant and, in consequence, the company paid a high price in the 1960s. Undoubtedly, the Board was complacent. At the AGM. in December 1955 Sir Bernard Docker, said:

‘Your Board and I are confident that your company is extremely well equipped in personnel, engineering skill and organised capacity to take full advantage of every opportunity which may present itself’ (Investors Chronicle, 9th Dec. 1955).

Were they not aware of the age of the machine tools at Small Heath and, relative to their competitors, the company’s lack of modern production engineering know-how? (BGC, 1975, 57).

Can the Board be blamed for failing to invest, when successive governments had taxed profits to the hilt and given a higher priority to investment in the welfare state and the 1950 re-armament programme, rather than in industrial infrastructure or industrial training? (Barnett, 1986, pp.11-36 and 2001, p.xvi). Perhaps not, but other British firms did invest heavily in new world class production facilities in the 1950s, for example ICI, who

invested £185m in the period 1950-54 (Reader, 1975, 464). Or was BSA the victim of the perceived reluctance of the Banks and the City of London to provide investment funding, as equity or debt, for British industry? The validity of this often repeated charge is increasingly being called into question by recent research (Bowden, 2005 -1) and by respected commentators (Owen, 1999, 459). Either way, economic statistics of the time spell out the consequences. In a study of nine industrial nations, Britain ranked eighth between 1950 and 1962 with respect to investment in capital stock of enterprises and fixed capital alone (Caves et al 248, 271). BSA certainly made a contribution to that dismal comparison.

Throughout the 1950s and 60s BSA was using for diversification available funds which might otherwise have been used by the motorcycle division (*Appendix 7.4*). The one exception to this was the installation, in 1965-68, of a computer (£100k) and an automated motorcycle assembly line (£722k) to enable the factory to produce 1,600 machines per week. While this system moved parts and components around more efficiently, however, it did not address the problem of outdated motorcycle designs or under investment in manufacturing plant. Problems with the computer contributed to the production control problems of 1968 (Ryerson, 1980, 174).

The BSA Board, as BGC (1975) alleged, did not give undue priority in the 1960s to dividend payments, over long term growth. In the 1950s, however, the Board, when it could have done so, declined to raise additional capital either to re-equip the motorcycle division in order to face the inevitable Japanese onslaught, or to significantly increase its manufacturing capacity to enhance its market share in overseas markets.

4.2.9 Fight for Survival

In an attempt to bolster the share price, shortly after the end of the 1969/70 financial year the Chairman increased his holding by 10,000 shares and three other directors bought 14,260 shares between them (Investors Chronicle, 29th November 1970). This often happens at the behest of a company's bankers, when they have become concerned about the security an overdraft. Also, in the Interim Report to Shareholders of 27th May 1971 (MRC/MSS/19B/TB2) it was reported that the directors would reduce their salary by 10%. This, too, may have been at the instruction of the company's bankers. Lionel Jofeh, MD. of the motorcycle division, was dismissed shortly afterwards (Bruce-Gardyne, 1978, 4-5). In the autumn of 1971, with BSA's American bankers becoming restive, the cash position deteriorating and the prospect of having to make public the 1970/71 trading loss of £2.5m (but £8.2m in total), the chairman of BSA, Barclays the company's bankers, Lazard's its merchant bankers and the head of ECGD were involved in tripartite discussions. The outcome was a £10m bank overdraft facility to replace the overdrafts in the US and provide more working capital, with the ECGD providing £4m of export credit guarantees. In return Barclays made it a condition that Eric Turner, who imprudently had taken on the demanding voluntary job of President of the Birmingham Chamber of Commerce and who was in hospital with stress, should resign as Chairman in favour of Lord Shawcross (4.3.2 *below*).

The main issue for the Board was whether production should continue at Small Heath or whether the factory should be closed down and all work transferred to the smaller Meriden plant. Coopers recommended on 27th July 1971 ('Financial Position of BSA', Solihull BSA Archive, Doc. 354) that, to save cash, Small Heath should be closed forthwith but the social arguments against closure weighed heavily with the Directors. The lack of cash

ultimately ruled but it was not until the Director's received a further report from Coopers ('Advice to Board', 6th Oct. 1971, Solihull BSA Archive, Doc.359), warning them they were in grave danger of continuing to trade while insolvent, that decisive action was taken by the decision to reduce the Small Heath payroll from 4,500 to 1500 (Ryerson, 1980, 179).

Lord Shawcross, who took over on 1st November 1971 as non- Executive Chairman, knew there was little time available to save the company. The future strategy was set for him by Coopers (Reorganisation of BSA Board, 3rd December, 1971, Solihull BSA Archive doc. 360) but the immediate priority was to conserve cash.

A new Group Managing Director (Brian Eustace) had been appointed on 7th October 1971 and temporarily doubled up as MD of the Motorcycle Division. The shut down of Small Heath went ahead with more co-operation from the employees and their trade unions than might have been expected (Koerner, 1990). The factory was finally shut down on 14th April 1972. Some of the non-motorcycle subsidiaries were sold (*Appendix 9*). The design of the proposed new modular range of BSA motorcycles was put in hand. On 26th April, however, P.E. Deverall, the relatively new divisional marketing director from the US, resigned after a disagreement with Eustace over future marketing strategy (Financial Times, 27th April 1972) and the City and the Government took notice.

In June 1972, Lord Shawcross wrote to John Davies, the Industry Minister, to warn him that Government help (£5m plus) would be needed if BSA were not to go into liquidation but that the company was prepared to contemplate a merger with the only other British motorcycle manufacturer of substance, Norton Villiers, a subsidiary of Manganese Bronze Ltd. In August 1972, however, BSA lost their merchant bankers, Lazards, and their representative on the Board, John Hatch, who publicly stated their view that the company

might be over concentrating on the expansion of its motorcycle subsidiary (Bruce-Gardyne, 1978, 7). With the renewal of the £10m overdraft facility coming up this was a critical and embarrassing event that further harmed BSA's low credibility within the Department of Industry.

The Company's accounts, covering the period 1 August 1970- 31st July 1972, measure the magnitude of the task faced by the Board.

Year	Trading Profit/Loss £	Extraordinary Items £	Total Loss £
1970-71	(2,477,328)	(5,687,281)	(8,164,609)
1971-72	(397,830)	(2,899,588)	(3,297,725)

Source: BSA Accounts

In 1972, BSA were told by the Department of Industry that help could only be given to the motorcycle industry as a whole, by then only consisting of BSA and the very much smaller Norton Villiers. Nevertheless, BSA pressed forward with their own proposals, based on the acquisition by BSA of Manganese Bronzes's motorcycle interests (Norton Villiers). In return MB would receive BSAs non-motorcycle subsidiaries. Unfortunately BSA's share price collapsed on March 15 1973 (*Chapter 4.3.2*). The subsequent suspension of the company's shares caused these plans to be aborted.

A revised proposal, involving the Department of Industry, was then developed to establish a new company, Norton-Villiers-Triumph Ltd' which would acquire BSA's motorcycle interests and Norton-Villiers Ltd. The objective was to build upon the product lines of Triumph and Norton motorcycles and to create a healthy British motorcycle industry. The Government would subscribe £4.8m cash to purchase 23.5m Preference shares in NVT and £1.37m of Convertible stock. Manganese, in return for its motorcycle interests, were to get half the shares of NVT. The new company was to retain the £1.3m loan made by MB to its motorcycle subsidiary. In return for its loan, Manganese was to be issued with £1.3m

Preference shares in NVT. They would also get BSA's non-motorcycle interests for £3.5m cash, which was to be financed by bank borrowing (NVT Offer Document, 7th June 1973).

The financial press were in agreement on the longer term doubts surrounding the deal:

‘No doubt BSA shareholders will cling to any straw offered them. For Manganese Bronze's part the deal looks a good one and on more favourable terms presumably following the run on BSA's shares. Yet these are early days and Lord Shawcross' remark ‘that more finance will be needed from some source to ensure the viability of the NVT operation, of which I will be Vice-Chairman’, casts doubt about the eventual outcome’ (Financial Times, 9th June 1973)

‘Hapless shareholders in BSA have no real alternative to exchanging their shares for an equal number in the putative NVT motorcycle gamble. The future value of these shares rests with the new management and the £4.8m backing provided by the new Government in the form of part-convertible (10p) preference shares, plus large-scale loan facilities while new machines are being developed. Although sales in export markets are now going well they will not have dented the £2.7m pre-tax loss made in the first half to 31st July 1973. The prospects of a dividend before 1977 are negligible’ (Investor's Chronicle, June 8th 1973, 1225).

The fight for the survival of BSA as an independent company came to an end on 16th July 1973, after 112 years, when the shareholders agreed these terms and the Government confirmed its backing.

The reconstituted Board (4.3.2 and Appendix 5) undoubtedly knew a lot more about the motorcycle business and the ways of Whitehall, and acted more decisively than its predecessor. It came close to creating a BSA led, single UK motorcycle-company with the prospect of a competitive product range, and with a greater chance of survival, than NVT had.

4.3 Corporate Governance

4.3.1 Stakeholders

A stakeholder may be defined as ‘any individual or group that can affect, or be affected by, an organisation's activities’ (SustainAbility@www.sustainability.com). Depending

upon the issue, stakeholders may be in agreement or in conflict and different temporary coalitions may form for, or against, a particular proposition. Notwithstanding their primary duty to maximise the financial return on the assets entrusted to them, chairmen and boards of directors need to engage with stakeholders, other than shareholders, if they wish their company to survive and prosper.

BSA was a public, limited liability company, in which the following groups had a financial or non-financial stake:

- Loyal Customers
- Shareholders (Corporate and Individual)
- Managers
- Employees (Staff and Payroll)
- Trade Unions
- Distributors

How then did the Board relate to them and were there any significant failings in the relationships that affected the standing and worth of the company?

Loyal Customers

BSA and Triumph motorcycles engendered exceptional brand loyalty, exemplified by the following:

‘I am now 52 and, since the age of 19, I have ridden only BSA machines. To my mind there has only been one motorcycle and that was the BSA’. (Daniel Wynne, Letter to Birmingham Evening Mail, 9th October 1971).

Because many customers remained faithful to one marque (Ariel, BSA or Triumph), they felt that their loyalty had somehow ‘earned’ them a stake in the company and a right to have their wider views, expressed in the BSA Owners’ Club Magazine, the Motorcycle Magazines and at the Owners Club Annual Field Day, taken notice of. The motorcycle

division encouraged these clubs and their events but it was open to the criticism that their loyal customers played a greater part in their thinking than the huge potential market, which the Japanese concentrated on, that was made up of those who did not know one end of a bike from the other.

BSA's longstanding and costly involvement in national and international motorcycle sport (Davies, 1991, Chapter 15; Holliday, 1978, Chapter 8 and Appendix A; Ryerson, 1980, Chapter 8) was mainly justified by the performance and success it projected to motorcycle enthusiasts and loyal BSA and Triumph customers. Dennis Hardwicke (ex BSA Competitions Manager), speaking of the 1950s era, said:

‘No competitions department in the history of motorcycle or car sport has a history comparable to BSA in terms of successes gained against entries made. Not the Japanese, not the Germans, not the Ford Motor Company – nobody’ (Ryerson, 1980, p.75).

No rigorous cost benefit analysis, however, appears to have been done to justify BSA's significant expenditure, over many years, in motorcycle sport. The collapse of the company was a blow to its loyal customers. They joined the employees, made redundant from the Small Heath and Meriden factories, in demanding answers about what had gone wrong.

Shareholders (Corporate and Individual)

In 1971, BSA had 18,528 corporate and private individual shareholders (BSA Share Register, Companies House). The attendance at the Annual General Meetings of the Company rarely exceeded 20, that is 0.11% of those eligible to do so. At the AGM in 1955 attendance fell as low as 7 (Investors Chronicle, 4th August 1956, p 463), so that there were less Ordinary shareholders present than Directors. Many shares were held by nominees (a nominee is a company created for the purpose of holding shares on behalf of

investors). A nominee is not the legal owner of the shares and the underlying investors have the beneficial interest in them and are entitled to all income and capital gains. Post-WW1, BSA progressed from being a broadly Birmingham and West Midlands company to a national public company with a diverse shareholding which was reflected in the non-executive directors elected to the later Boards (*Appendix 4*).

In 1972, the company had a Nominal Share Capital of £10,703,150 divided into:

284,410 'A' Cumulative Preference Shares of £1 each

666, 988 'B' Cumulative Preference Shares of £1 each

19,503,504 Ordinary Shares of £0.50 each.

Un-issued capital was Ordinary, in shares of 50p which, when fully paid, would have been converted into stock. 'A' and 'B' Preference Shares ranked in that order for dividend and in a liquidation were entitled, in that order, after paying all capital, to 50% and 25% of amount paid up on each class respectively. Subject to confirmation by the courts, 'B' Preference stock could be paid off at any time for £1.25.

Quotation was granted on the London Stock Exchange in all classes (that is £1 – A and B Preference and 50p Ordinary). The shares were also quoted at the Midlands & Western Stock Exchange (Ordinary and 'B' Preference) and the Scottish Stock Exchange (Ordinary only).

The Voting Rights were: 1 vote per £ 1 'B' Preference and Ordinary or £5 'A' Preference but Preference stockholders could only vote in certain circumstances.

In 1971 the price range of the stock was:	'A' Preference	36 – 22p
	'B' Preference	44 – 23p
	Ordinary	87 – 17p

(Stock Exchange Year Book, 1972).

The largest institutional and private individual ordinary shareholders in 1972 were:

Institutional	Number	Private	Number
Prudential Assurance Co Ltd	420,300	J.D. Bannerman	41,554
Lloyds Bank Branches Nominees	181,977	M.F. Heaton	37,800
Princes Street Nominees	108,600	J.E.Wright	15,000
Norwich Union	100,000	A.S. Edwards	14,000
Scottish Amicable Life	95,000	J.K. Blaby	8,975
Royal Insurance	94,000	M.J.Morrison	6,500

(BSA Share Register, Companies House).

The average private individual shareholding (excluding the six largest shown above) was around 250 shares. The domination of the institutional shareholders is self-evident.

The formal relationship between the company and the shareholders was renewed at successive Annual General Meetings of the Company in early November and, in extraordinary circumstances, by the issue of an information circular from the Chairman.

At an AGM a shareholder could ask the Chairman a pre-approved question and was promised, as well a short verbal answer, a considered written answer. Voting proxies, from shareholders not attending in person, were given to the Chairman.

Up to 1970 the questions asked at the AGMs were petty and often long-winded, typically dealing with Director's fees and salaries, allegations of waste and why a particular decision had been made. Thereafter the questions became more probing as the value of the shares fell and the possibility of a collapse loomed (AGM Minutes 1965-1971).

By today's standards, BSA's shareholders were benign. Eric Turner was allowed to continue in office, despite reporting a fall in pre-tax profit from £3.33m in 1967-68 to £846,000 in 1968/69, a fall in the share price from a high of 42s 6d (£2-13p) in 1967/68 to a low of 9s 9d (46p) immediately after the 1968/69 results were declared and missing the final dividend payment. (Investors Chronicle, 10th October 1969). The City is far less tolerant today. The failure of the shareholders to act decisively in 1969 cost them dearly.

They left Eric Turner in executive charge of their company with net assets per share of 28s 10p (£1-45) and lost most of it in 1973, when the motorcycle business was incorporated into Norton-Villiers- Triumph and the diversified businesses were sold to Manganese Bronze Holdings Ltd at a knock-down price (*Chapter 4.2.9 above*).

Employees

The number of those directly employed by BSA varied from a maximum of 28,000 (in sixty-seven factories and including 20,000 who were temporary war workers) in 1945 (Ryerson, 1980, 64) to 3,700 at the time of the collapse in 1973, which followed a considerable divestment programme that had reduced the head count (BSA Annual Report, 1972/73). Peak employment in the period 1950-73 was 8,500 (BSA Annual Reports), most of whom were permanent employees of BSA, many of whom had served the company for decades and who thus had a genuine stake in the company. For the reasons explained in Koerner (1990,133-135), loyalty at Small Heath was much greater than at Meriden. It is doubtful, however, if BSA even registered on Jessop-Saville's Sheffield sites or in the smaller diversified companies. The reasons for the poor management-worker relations at Meriden are analysed in Koerner (1990). BSA's pension provisions (based on final salary/wage) for both staff and shop floor workers were claimed to be above the average for the U.K. engineering industry (Annual Report, 1959/60). From 1957 onwards, the Chairman communicated to the Group's employees, when necessary, through the columns of the monthly BSA Group News (MRC/MSS/19A/60/1-5), often via an interview by a sympathetic Editor.

Trade Unions

The stake in BSA held by a Trade Union and their official shop stewards, which represented a particular group of employees, was indirect rather than direct but

nevertheless real as their income was dependent upon their members being in employment. The unofficial shop stewards at Meriden, whose aim was to maximise the short term return to their colleagues regardless of the consequences, can also be regarded as stakeholders (Fairclough, 1986).

The popular view, that the Trades Unions were a major contributor to Britain's industrial decline, was expressed by Coates (1994, 32):

‘The belief that the strength of organised work groups in British manufacturing industry effectively blocked the full utilisation of existing technologies and the rapid implementation of new ones and that the legal framework surrounding collective bargaining left managers particularly badly placed to circumvent this defensive industrial conservatism, is widely used to explain many facets of UK economic under performance’.

While this may have been true in the case of BSA Triumph's Meriden factory, it was neither applicable to the large Small Heath factory nor to the factories of the other subsidiary companies (Koerner, 1990).

BSA did not engage with the Trade Unions at Group level. Wages and conditions of service were negotiated at site level, where there often were considerable differences across the Group. There were no union, or shop-steward, co-ordinating committees between sites. Only on one site, Meriden, was a ‘closed shop’ imposed (i.e. a union imposed requirement for all shop floor employees to be a member of a recognised Trade Union).

By 1970 there were nine recognised trade unions active at Meriden and to lesser extent at Small Heath. These were the Transport and General Workers Union (TGWU), the Amalgamated Engineering Union (AEU.), the Electrical, Electronic and Telecommunications Union (EETU), the Plumbing Trades Union (PTU), the Birmingham and Midlands Sheet Metal Workers Society, the National Society of Metal Mechanics and

the National Union of Sheet Metal Workers, Coppersmiths, Heating and Domestic Engineers (Koerner, 1990, 96.). Add to these the National Union of Vehicle Builders, who represented some employees at Small Heath, and the specialist trade unions of the iron and steel industry active in Wm Jessop Ltd and the extent of the union activity within BSA becomes apparent. It is surprising that BSA did not face a joint-Union demand for collective bargaining at Group level or, at least, requests for the removal of pay differentials across the various sites. That this was avoided may have been due to good management or possibly that the status quo (site bargaining) suited the union officials involved.

Relations with the Birmingham- based Trade Union officials and the site shop stewards at Small Heath were on a different plane to those at Meriden. The West Midlands Engineering Employers Association regularly quoted the Small Heath factory as enjoying an industrial relations reputation of the highest order and confirmed, in 1975, that for many years before 1973, the loss of man-hours due to disputes and strikes in this factory was amongst the lowest recorded in the West Midlands (Cave A., Personal Communication, 2003). Between January 1964 and October 1971 no man-hours were lost due to disputes, even during major disruptions to production. During the limited redundancy of 1969 and the major redundancy of October 1971 (5,056 down to 1,500), only 30,698 hours were lost, mainly due to a national token strike involving 1500 employees. Even in 1972 and 1973, as BSA struggled to survive, the number of disputes and loss of man-hours was minimal, in 1972 – 45,180 and in 1973 – 12,125 (Cave, 2003). Given what was happening in the Birmingham and Coventry motor car and components industries at that time, it was a fine achievement reflecting well on the managers, supervisors and shop stewards at Small Heath.

Distributors

While several of the products of the BSA Group were supplied directly to industrial customers across a supply contract (e.g. coal washing plants, iron/steel castings, large machine tools), motorcycles were sold to private and institutional customers via distributors and dealers.

The company's motorcycle distributors were dependent for their living on BSA's motorcycle division delivering them attractive and competitively priced machines that they could sell. They thus had a major stake in the performance of the division, which eventually commanded two seats (one British, one American) on the Board of BSA Ltd (Annual Report, 1971-72). In the period 1968-1973 the motorcycle division stretched the patience and goodwill of both their UK and US distributors, where the market was expanding.

'Post WW2, both BSA and Triumph had two independent, wholly owned motorcycle distribution companies, one covering the eastern states of America, the other the western states, that is four in all. This was a legacy of the delayed and incomplete integration of the BSA and Triumph businesses (*Chapter 4.2.2* above). In 1969 a headquarters, management and marketing research company, The Birmingham Small Arms Company Inc, was established in New Jersey to oversee the BSA Motorcycle Corporation, the Triumph Motorcycle Corporation and Top Gear (Spares and Accessories) Inc, all of California and Maryland. The new head of BSA Inc was Dr Felix Kalinski, an experienced American executive, who also was appointed to the BSA Group Board.' (BCG, pp 237-38).

The Chairman wrote:

'I am confident that this (appointment) will increase the effectiveness of our distribution system and the support that we can give dealers as well as achieving major reductions in marketing expenses. We also hope to make arrangements for one or more banks in the US to provide much of the dealer finance we have undertaken ourselves in recent years, whilst further savings in the use of capital are confidently expected from the planned reductions in working stocks in our UK factories' (Annual Report, 1969/70):

Hopwood, however, thought differently as he understood, better than his chairman, that everything depended on the division supplying the good and reliable motorcycles demanded by the market. He later wrote:

‘He (Kalinsky) was a first class executive with a very clear mind, capable of taking charge of this important part of our operation. Although I admired him and he worked prodigiously, I felt sad that a man of such high qualification, who was every bit a professional, should have, at this stage, such poor material with which to revitalise our weary dealers’ (Hopwood, 1981, 259).

In 1971, everything went wrong (*Chapter 4.2.5*). Following the failure of both BSA and Triumph to deliver motorcycles to plan, the American banks asked for their money back and the dealers became angry. They had committed their businesses to selling BSA and Triumph motorcycles that had not arrived and one of them had gone into liquidation. To make things worse, when the machines did arrive they were far from satisfactory. Barclays bank took over the financing of the US business (Ryerson, 1980, 176) but this only bought time to bring about a long term resolution of BSA’s problems.

4.3.2. Key Events in Corporate Governance

Six episodes in corporate governance, in the period 1950-73, have been researched:

- Dismissal of Sir Bernard Docker in 1956.

The behaviour of Sir Bernard Docker during the latter part of his long tenure of office as Executive Chairman (1940 –56), supports the view of Chandler (1997, 1990) that the persistence of personal forms of control shaped the governance of many UK manufacturing companies in the first half of the 20th century. It was inevitable that, ultimately, Sir Bernard’s autocratic behaviour would be challenged, either by the other directors of the company or directly by the shareholders, notwithstanding the vote of confidence and fulsome praise he received in February 1953 (Board Minute, 10430, 19th February 1953), when charged with currency offences.

The internal charges held against him in 1956 were typical of several other complaints that might have been preferred. Four were put in writing to Sir Bernard and signed by five Directors for the Agenda of the Board meeting on 31st May (MRC/MSS/19C/30):

- His attempt to foist his brother-in-law, Mr R.E.Smith on to the Board.
- His failure to tell the Board he had refused the request of a major institutional shareholder (Prudential Assurance Co) for an independent investigation into the Company's affairs.
- His failure to discuss policy, to provide the Directors with up to date trading figures and to warn them of adverse results in some subsidiaries.
- His attempt to get an official of the company to pay an account for a substantial amount of expensive ladies clothes.

Note, however, that the charges did not relate to the poor financial performance of the company or its share price, the usual reasons for dismissing a CEO.

The attempt to remove Sir Bernard from office started at a Board meeting on 19th January 1956, when Jack Sangster disagreed with the Chairman's speech to the AGM of the Company at the end of November 1955, calling it 'improper and misleading'. In view of the losses made by the motorcycle division, John Rowe, the previous BSA Finance Director, had taken the unprecedented step of sounding the views of the Prudential, BSA's largest shareholder. The outcome of this meeting encouraged Rowe and his colleagues to challenge Docker. The motions, voting and outcome of the successive attempts to censure Sir Bernard at Board meetings on the 2nd and 31st May and at the Extraordinary General Meeting (requisitioned by him) on 1st August 1956, when 1,000 plus shareholders were present, are recorded in the Board and AGM Minute Books (Solihull, S.14) and in Ryerson (1980, 148-150). Prior to the AGM the Investors' Chronicle (21st July, 1956, 262) wrote:

‘The questions, some of them the subject of a direct conflict of testimony, about which shareholders have to make up their mind, are not of a kind best settled in the hurly- burly of what is bound to be one of the most spectacular company meetings of the century. Unhappily, what started out as a Board Room row and should have remained one, first broadened out in to a full-scale company squabble and then became a public circus involving television interviews, radio talks, Lady Docker’s photographic and dress bills. In the running of a large public business, and especially on great occasions, a little forbearance counts’.

The outcome was decisive. 4,608 proxies, representing 2,687,749 Ordinary shares, were cast in favour of the Board. Sir Bernard had the support of 1,506 proxies, representing 683,212 votes. On the floor of the meeting Sir Bernard’s motion, confirming him in office was defeated by 365 to 118, many having left after the announcement of the proxy vote. Sir Bernard had to go.

In retrospect, what was surprising, given the weight of the evidence against Sir Bernard, was how close the voting had been at the meeting of the Board on 2nd May (5-4 with one abstention) and that, even at the next but one meeting on 31st May with the full Board present, the result (in favour of censure 6-3 with one abstention) encouraged Docker to take the issue to the EGM.

This public conflict did great harm to the reputation of BSA, as had the social life and extravagances of the Dockers, which were regularly highlighted by the tabloids (Davenport-Hines, 1984, 231-32). The struggle was about power and the establishment of a defensible system of corporate governance within BSA. There is no evidence that those Directors, who voted against Sir Bernard, had constituted a long-standing pressure group within the Board. The case against him seems ultimately to have been judged by the Directors and the Shareholders on its merits. This seems particularly true of James Leek, who had worked directly for Docker for the previous twelve years and whose partnership with his chairman adorns the company’s history (Chapter 3.1). It also seems unlikely, in

initiating the censure of Docker, that Sangster was making a bid for the chairmanship, for he was already a rich man, whose reputation in the motorcycle industry, and the West Midlands generally, was already assured. H.J.S. Moyses, however, Chairman of BSA Tools Ltd and a strong supporter of Sir Bernard, resigned from the Board.

These events generated considerable broadsheet, as well as tabloid, press cover.

The two page report appearing in the Investors' Chronicle (4th August 1956, p 463) was typical:

‘Three main themes ran through the stockholders’ speeches. First, it was acknowledged that, whatever may be thought of the Dockers’ publicity, it was nowhere near as odious as the actual wrangle itself. From all sides came severe censure of the inept handling of the whole affair. Secondly, a small shareholder, describing himself as ‘an ordinary man in the street’, gave his version of the wider issues involved when ‘the man from the Pru’ began to dictate to companies on their internal affairs. Thirdly, many shareholders stressed that the Board had made no protest over Sir Bernard when it re-elected him chairman the previous December’.

Other significant press comments were articles in the Financial Times, 1st June 1956; 2nd June 1956 and 1st August 1956. After the dismissal, the tabloids lost interest in the company, while the financial press recognised in Jack Sangster a safe pair of hands. He had not invested in to BSA, however, any of the £2.5m he had received from the company in 1951 for his sale of Triumph Engineering Ltd (Bruce-Gardyne, 1978, 4). That he was given a seat on the Board of BSA in 1951, and later elected Chairman in 1956, without making a sizeable investment in the company, did not reflect well on Sir Bernard Docker, who negotiated the Triumph acquisition or the Directors that approved it.

Sangster reorganised the Board, bringing in new and younger non-executive directors and restated that BSA was a Holding Company. His Statement to Shareholders in December 1957, (BSAGN, December 1957) on the outcome of the 1956/57 financial year, certainly was much fuller than those of Docker during the previous decade.

Long after the event, Ryerson (1980, 150) raised an interesting issue of principle. Docker had told the shareholders meeting how shocked he had been that a fellow director had been in touch with a major shareholder about the issue and alleged that this was a betrayal of trust. He raised the allegation with the last BSA Company Secretary, Doug Harwood, who told him that:

‘A Director is in a trustee relationship with the shareholders, despite his loyalty to the Board. If he considered (as John Rowe undoubtedly did) something was being done, or not being done, which adversely affected the interests of those shareholders, it was his duty to take some action to rectify it’.

This, however, was a professional opinion and not the outcome of a legal action for breach of trust.

- Struggle for Control of the Meriden Factory: 1965-73

In the 1960s and 70s unofficial shop stewards committees became a much greater threat to management in the motor and allied industries (Church, 1995), few more so than at Triumph’s Meriden factory.

During the good days of the late 1950s and early 1960s, the local management at the Meriden factory, which built the big 500cc and 650cc twin- cylinder Triumph motorcycles, responded to the management’s incessant calls for higher production by employing more workers. In 1961/62 Triumph had a total of 1,177 employees (both direct and indirect workers and salaried staff). By 1964/65 this had grown to 1,391 and by 1968 to 2,235. Triumph was dependent on the US market that mostly took these machines (24,917 in 1966/67), and was thus vulnerable to any disruption at Meriden due to the short selling season in America and the long machine supply chain.

Koerner (1990) researched the history of labour relations at Meriden. It is a story of local management under pressure to increase production and not to delay shipment of bikes to

the US, struggling to keep control of its production and costs and often being undermined by its MD and Group Chairman opposite shop stewards, seeking to maximise the negotiating advantage the workers had regardless of the longer term consequences. Matters were not improved when the MD of the Motorcycle Division (Harry Sturgeon) was heard to say to his deputy (Bert Hopwood): 'If I want to double the output, I don't care what it costs' (Koerner, 1990, Interview of Hopwood).

Reading Koerner (101 –115) it is clear that, by the late 1960s, both the management and the official trades unions had lost control of the Meriden shop stewards, who implicitly challenged the right of management to manage. Output and quality was almost entirely at their whim. The shop stewards, making full use of their interpretation of the Coventry District 1941 Tool Room Agreement and the CSEU/EEF collective agreement, lifted the earnings of the workers to the highest in the motorcycle industry world wide and the highest in the UK engineering industry (Fairclough, 1986, 227). Furthermore, the shop stewards even demanded compensation for any loss of earnings arising from the disputes they had initiated.

Was such a loss of management control inevitable? The industrial relations laws on the statute books in the 1960s, the location of the factory within an area dominated by the motor industry and its unofficial shop stewards committees, the fact that Triumph was a signatory to the 1941 Coventry Toolroom Agreement and the opportunity to hold the management to ransom provided by the short selling season, gave shop stewards, only interested in short-term gain, an irresistible opportunity to take control.

This does not, however, absolve the management from blame. Managers have a duty to their shareholders to manage. They tried to increase the output of their highly profitable motorcycles by employing a larger workforce rather than in investing in modern machine

tools. The operation of antiquated production technology remained dependent on the expertise of the skilled workers (Fairclough, 1986, 204-10). Management failed to foresee, plan for, or ultimately cope with, the consequences of the policy they adopted. Yet it would be wrong to imply that all the production crises at Meriden were due to unofficial disputes. Fairclough (1986, 216- 226) critically examined the Meriden production processes. He concluded that Meriden operated a batch production process that had inherited its basic organisational components from the pre WW2 period and which, by the 1960s, was forced to try to match the high volume mass production techniques of Triumph's competitors, with inevitable breakdowns and delays.

Fairclough also highlighted three further consequences that flowing from management's ineptitude. Firstly it reinforced the confidence of the shop floor in extending the powers achievable by the existing shop floor procedures. Secondly, in the run-up to closure, what they saw as the lack of interest in motorcycles at the top of the company had the effect of consolidating the workers' view that they should not pay with their jobs for the mistakes of others. And thirdly, they saw the problems at Meriden as having begun with the recruitment to management posts of 'outsiders' with commercial and financial, but no motorcycle experience, for whom they had little respect.

The BSA management were not alone in the Midlands in losing control of their engineering business and who seemed powerless to regain it (Church,1995). It needed major changes in industrial relations law and the brutal demonstration by market forces, that the world did not owe a living to militant shop stewards and workers, before British industrial management, working with the official Trade Unions, regained control of their shop floors. The post-BSA history of NVT and the Meriden Co-operative (Bruce-Gardyne, 1978, Fairclough, 1986), however, is outside the scope of this thesis.

Finally, we have to ask why what happened at Meriden did not happen at Small Heath.

Undoubtedly the paternalism of BSA, and the reciprocal loyalty this engendered, played its part, as did the fact that, due to Small Heath's wider market spread, the opportunities to hold the management to ransom were less. There is no clear answer; perhaps it just came down to the engineering culture in Birmingham and the individualism of its skilled workers being markedly different to that of the relatively new town of Coventry, which was dominated by the motor industry.

- Reconstruction of the Board in 1971

The events, prior to reconstruction of the Board of BSA in 1971, show a progressive informal transfer of control of the company to their consultants Cooper Bros (who were also BSA's auditors) and Barclays (their bankers).

On August 5th 1971 the financial press revealed that BSA's borrowings exceeded £10m and that the Directors were unwilling to make any forecast of future results other than to say 'there is no lack of confidence on our part as to the long-term future of the Group' (Investors Chronicle, 15th October, 1971). The City noted, however, that over that autumn none of the more profitable companies in the engineering industry were prepared to come forward with a bid and that the shares continued to drift downwards.

Faced with a rapidly worsening cash situation, in late October Barclays insisted that Eric Turner should resign as Executive Chairman, to be replaced on the 1st November by Lord Shawcross as non-Executive Chairman, supported by a Group Chief Executive from outside the company (Brian Eustace).

The further surrender, by the Board, of control of the company can be tracked by successive formal letters and reports (*Appendix 5*) from Cooper Bros to the Board (but latterly to the Chairman only). Coopers, before recommending major changes,

undoubtedly would have discussed their proposals with BSA's merchant bankers (Lazards) and bankers (Barclays). The reconstruction of the Board 'requested' by Lord Shawcross was handled by Coopers' Senior Partner, Sir Henry Benson. A senior accountant (David Probert) from Coopers had already been installed as BSA's Finance Director. Barclays bought time by advancing further cash to the stricken company. An over-riding influence on the options open to the Directors during the crisis was the Companies Act (1948) stating that it was a criminal offence for the directors to allow a company to continue to trade when insolvent, an issue on which they took frequent advice.

The most significant of the letters/reports from Coopers was their letter of 3rd December 1971, headed 'Reconstruction of the Board' (Appendix D). This dealt with the :

- Role and Tasks of the Board
- Objectives of the Company
- Executive or Non-Executive Board?
- Summary History of the Company
- Present Needs
- The Board – What is Required
- Non-Executive Directors

The letter confirmed the strong advice given to the Directors by Sir Henry Benson on 5th October 1971 (*Appendix 5*):

- (a) 'they must recognise that, in future, BSA would be a motorcycle company with associated activities of relatively minor importance'
- (b) 'if BSA was to remain in business it must do so because it believed it could make and sell motorcycles profitably'

(c) ‘the reconstruction of the Board must be aimed to provide the best possible team to achieve this objective’

In other words, BSA should no longer be a holding company with the motorcycle division being one of a number of subsidiaries but revert to being, after disposal of the remaining subsidiaries, a business dedicated to motorcycle production. Although there is no record, it is presumed that Lord Shawcross, or Sir Henry Benson acting on his behalf, sought and obtained the support of BSA’s largest institutional shareholders for this proposal.

Cooper’s letter then spelt out the nature of proposed new Board:

‘Chairman (non-executive)	Of unquestioned integrity and credibility
Chief Executive	He must have leadership and successful experience
Group Financial Director	He must have outstanding financial and accounting ability
Non-Executive Directors	Apart from the Chairman, there are at present four non-executive directors, but none of them has specific knowledge of motorcycle design or marketing generally. In particular, therefore new appointments should be made of (a) a man with proven knowledge and reputation in motorcycle design (b) a man with proven knowledge and reputation in marketing (preferably of motorcycles)

Coopers also proposed that the previous Board be culled to allow the above recommendations to be implemented. Implicit in this paper is that the new Board would provide strong corporate leadership stemming from their mastery of the motorcycle business.

Coopers could not bring themselves to recommend that Bert Hopwood (1981), whose design flair and engineering experience was essential to the survival of the company, should be promoted to the Board. The new financial and marketing directors, however,

were dependent upon Hopwood coming up with a competitive range of new motorcycles. Thankfully, Lord Shawcross saw the folly of not having the most important man in the company at his side. (The culture and attitudes that led Coopers to make such a crucial error, are explored in Chapter 7).

The Board accepted Coopers' recommendations in principle at their meeting on 6th December (Minute 13584), but the record of their prior discussion was placed in the Private Minute Book. A Circular to all shareholders the following day later said: 'Your Directors are in no doubt that the recommendations in the report must be accepted in full and implemented immediately' (Circular to Shareholders, 7th October 1971, in MRC/MSS/19B/TB2).

In the event, David Probert remained Finance Director, Brian Eustace was confirmed as Chief Executive Officer, with the full time assistance of Mr A.Boggon of Coopers. Bert Hopwood was promoted with executive responsibility for motorcycle engineering and two distinguished engineers (albeit with little motorcycle experience) were recruited by Coopers as non-executive directors (Sir Humphrey Brown and General Sir Charles Richardson). An American, Dr Felix Kalinski, President of BSA's North American Marketing Corporation, and Mr R. Fenton, a respected motorcycle distributor, were brought on to the Board to provide motorcycle marketing expertise. Mr J.W. Hatch was retained as a non-executive director for his banking knowledge and connections but resigned in August 1972 (*Appendix 4*).

The new Board retained the Merchant Bankers, Kleinwort Benson (in place of Lazards), to advise them, in conjunction with Coopers, on the Company's need for more risk capital. Lazards had resigned in August 1972 because of a fundamental disagreement over future policy; they felt unable to support Coopers recommendation, accepted by the Board, that

BSA should revert to being a motor cycle company. The Board reorganisation was not seen as affecting the company's future prospects one way or another. What mattered to the City were the horrendous figures (losses of £2.8m in 1970-71, £485,000 in the year to 31st July 1972 and, even worse, no prospect of breaking even in 1972/73). The shares fell to 26½p (Investors Chronicle, 27th October 1972).

In spite of the Board publicly declaring that they had accepted Cooper's recommendation, that BSA should revert to being a motorcycle company and the remaining subsidiaries sold off other than minor associated activities, less than two years later the new Finance Director, in a paper to the Chief Executive on a proposed new structure for the company, wrote:

‘The Company structure should be changed to protect BSA shareholder's interests in the non-motorcycle subsidiaries. The Birmingham Small Arms Company Ltd would be a holding company only – not carrying on any trade in its own right but owning the share capital of the direct subsidiary operating companies, BSA Ltd and Triumph Engineering Company Ltd’ (Memo, D.H. Probert, Capital Structure Strategy, 7th August, 1972, in Solihull, 399).

It is assumed that the dichotomy this memo reveals was not resolved before the ultimate collapse ten months later. Note also the perpetuation of the ‘Triumph Engineering Co. Ltd’.

It is interesting to consider whether, throughout the consultancy and reconstruction periods, Coopers may have been acting as what are now defined as ‘shadow directors’ of BSA, i.e. ‘a person in accordance with whose instructions the directors of a company are accustomed to act’ (Companies Act, 1985). Had this legal concept been on the Statute Book at the time, it may have been possible for disgruntled shareholders to sue Coopers (who had both substantial assets and professional liability insurance) for their losses.

- Company-Shareholder Relations

Although there had been a trend towards institutional share ownership of industrial firms and away from family control for several decades, it was not until the 1980s that the financial institutions became dominant. By the end of the 1960s the spread of institutional ownership was only just beginning to assert itself. In 1957 individual persons controlled 65.8% of equity in British quoted companies, compared with 8.8% by Insurance Companies, the largest institutional category (Toms and Wilson, 2003, p.14).

The issued capital of BSA is listed and the mix of the shareholders is analysed in 4.3.1 above. Present thinking on company-shareholder relations stresses the need for a dialogue based on a mutual understanding of objectives. The Directors of today's public companies are required to keep in touch with shareholder opinion, in whatever ways are most practical and efficient, and the Chairman should discuss governance and strategy with major shareholders and ensure that their views are known to the Board as a whole (Combined Code, 2003, pp 18-20).

In the 1950s and 60s there was little guidance available but most Boards of large companies (including, latterly, BSA) had at least one non-executive director, who had high level, personal contacts in the City. This was even more important for BSA, who for eleven crucial years had, in Eric Turner, an executive chairman with no City experience, or time, to develop the necessary relationships with City grandees.

Up to 1966, post WW2 BSA Boards did not have the City contacts and high level influence of the quality that Dudley Docker, a Director of the Midland Bank, (Davenport-Hines, 1984, p.47), wielded on their behalf between 1906 and 1939. For a long period BSA's Stockbrokers were Lazards, whose Senior Partner (J W. Hatch) sat on the Board from 1966 to 71. Kleinwert Benson replaced them in 1971, presumably because the Board

thought they were better suited to raising the extra working capital needed to finance the reorganised company.

Communication with the shareholders took place via the Company's Interim and Final Reports and Questions/Answers at the Company's AGM and by the issue of formal Circulars to Stockholders. BSA issued the following Circulars:

9 th Sept. '69	Stockholders	Rumours re Company's Financial Strength
27 th May '71	Ordinary Stockholders:	Statement to Stock Exchange re Interim Report 1970-71
30 th July '71	Preference and Ordinary Stockholders:	Explanation for Losses in the Motorcycle Division
7 th Oct. '71	Preference and Ordinary Stockholders:	Implementation of Recommendations from Cooper Bros.

Circulars of this type usually spell trouble ahead and are written as much for the financial press (Economist, Financial Times, Investors Chronical etc) as the shareholders. The shareholders' response to these unexpected circulars was reflected in movements in the company's share price during the week after issue.

There was one earlier major lapse in communications between the company and the shareholders that attracted criticism from the financial press. In July 1955 the Board commissioned a joint report from Lazards and Deloitte, Plender Griffiths 'on the structure and organisation of the Group' (Investors Chronicle, 22nd December 1956). The City were only given limited information on the outcome:

'The structure of the Group will be rearranged so that the Parent Company becomes a Holding Company with a series of wholly owned operating subsidiaries' (Investors Chronicle, 22nd December 1956, quoting J.Sangster, Chairman)

The Investors Chronicle of 29th November 1957, however, wrote:

‘The advice given and the suggestions made after this exhausting examination, the shareholders are told ‘were not of a nature that could be embodied in any formal report however condensed’. While it may well be true that its publication would be ‘inimical to the interests of the business’ and would be ‘quite contrary to the terms of reference accepted by Lazards and Deloitte’ shareholders may not agree that ‘such a course would at any time be likely to undermine the sole responsibility of the board to the stockholders for the conduct and administration of the group’s affairs’.

As always in these circumstances, the criticism was negated by good end year results (profits sharply up, dividend increased). Shareholders will forgive directors almost anything, within the law, provided they deliver rising profits and increased dividends.

- Response to a Take-over Bid

In July 1971, a Dr Daniel McDonald, the owner of a private Company called Vision Ltd and a former Chairman of BSR Record Changes Ltd, offered £5.5m (i.e.55p per ordinary share) for 60% of the BSA equity, that is a potential controlling share (Financial Times, 13th July 1971). The bid valued the company at £9.25m, a far cry from the capitalisation of £20m achieved in 1968. There were, however, unconfirmed doubts about Dr McDonald’s ability to raise the cash necessary to finance the partial bid.

Dr McDonald did not reveal his backers or any plans he might have had to improve the performance of BSA and the directors treated the offer with disdain, declining to meet him. Nevertheless, the shares rose to 26.5p in anticipation of an announcement. After the bid was withdrawn on 11th August 1971 the shares fell back to 18p, equivalent to a market capitalisation of only £3m (Financial Times, 12th August 1971. See also Financial Times, 13th July 1971, Behind the Bid for BSA.

- Speculation in BSA Shares

While the institutions, at the heart of this event, certainly had a decisive, negative influence on BSA shareholder’s return, speculators are not usually considered in any

discussion of corporate governance. Nevertheless, what happened merits analysis as a pivotal event in the history of the British motorcycle industry.

BSA was brought down by a group of institutional speculators, not previously shareholders, known as a 'concert party', motivated only by financial gain and taking advantage of highly critical comments about the Board made by a retired Director (Edward Turner). On 14th March, amid unfounded rumours that BSA was insolvent, the speculators staged a 'bear' raid (that is, sold BSA shares it did not own in the hope they would fall and enable them to buy at a lower price before Settlement Day), and the shares fell from 18 to 5p. The company's shares were suspended by the Stock Exchange at the request of Lord Shawcross (The Times 15th March 1973) and suppliers stopped deliveries. BSA were thus unable to proceed with the purchase of Norton Villiers Ltd and the Department for Industry's proposed reorganisation of the British motorcycle industry had to be restructured with MBH in the lead. That the 'concert party' was able to succeed and subvert the wishes of the Board, the shareholders, the company's bankers and the Department of Industry, was due to BSA's fundamental financial weakness and the speculators' disregard for any consequences of their action, other than profit to themselves. That a subsequent Stock Exchange enquiry exonerated the speculators from insider dealing, or any other breach of Stock Exchange Regulations, was of no comfort to BSA's shareholders but merely a re-assertion of the primacy of the market and the right of anyone in a capitalist society to deal in it, at their own risk. It was a devastating blow to BSA's reconstituted Board and the company's long suffering shareholders. (Ryerson, 1980, 181; *Chapter 3.2.9.*).

Edward Turner's comment to the financial press (Daily Telegraph, 7th March, 1973)

a week before the bear raid, had been particularly damaging. He placed the then plight of the Group entirely on poor management and went on to say:

‘ Lord Shawcross is a distinguished lawyer, but this does not mean he is an expert on motorcycles. Machines sell on the whim of fashionable young men. These fads are constantly changing. BSA Triumph are still trying to flog off the stuff I designed thirty years and more ago. I can visualise machines that would make even the Japanese super-bikes look old-fashioned’

Whatever the truth of Turner’s comments may have been, to have gone public, at that crucial time, was a stab in the back of the company he had served for over thirty years. It also ultimately cost him a lot of money because, in retirement, he was still a substantial shareholder in BSA.

This cataclysmic event demonstrated the general rule that, once a Board of Directors allows a company’s share price to fall significantly, relative to that of others in its sector within the FTSE Index, as did BSA’s, its future becomes uncertain. The City rumour mill goes into overdrive and it becomes vulnerable, if not to a take-over bid then a ‘bear’ raid, as did BSA. It is doubtful that the Board could have done anything to prevent it. The City, however, did not know that in March the trading surplus for the Motorcycle Division alone was £ 390,000, (equivalent to £ 4,680,000 p.a), the labour force was in balance, there were no industrial disputes and the demand for the Division’s motorcycles was buoyant. The new Board so nearly succeeded in saving the company and taking the lead in the reorganisation of the British motorcycle industry.

These six examples differ widely but, together, give an insight into the way in which the Board of BSA handled issues of corporate governance. While it is easy to criticise with the benefit of hindsight there is little doubt the Directors handled governance issues somewhat better than they did the severe management problems discussed in Chapter 3.

As a result, right up to the final collapse, BSA in Birmingham (particularly) and Britain as

a whole, retained its reputation as a fine, long established company and good employer. This well-earned reputation made it all the more difficult for the stakeholders in the company to come to terms with the collapse, previously seen as unthinkable.

CHAPTER 5

FINANCIAL PERFORMANCE, CAPITAL EXPENDITURE AND THE MOTORCYCLES – v- DIVERSIFICATION ANALYSIS

5.1 Introduction

This Chapter examines BSA's financial performance from 1945/46 until 1972/73 so far as the available accounts and supporting papers allow.

5.2 BSA's Accounts

The way in which BSA structured its balance sheet, and the changes that occurred to it during the period 1953-57 (chosen as an illustrative period), is shown in Appendix 7.7.

The Group's accounts did not show the profit and loss accounts of the subsidiaries and this information was also excluded from the Annual Returns to Companies House. The Group was able to do this because, from 1947, the subsidiaries acted as agents for the parent company. BSA carried out business as a principal, but used an appropriately named subsidiary as its agent, but did not remunerate it. In this arrangement the customer dealt with the subsidiary but, in law, contracted with the parent. BSA booked all the contracts but the subsidiary, as an unremunerated agent, was able to file dormant company accounts which consisted of a balance sheet only, which was the same each year. This was quite reputable and enabled a holding group to reduce transaction costs by minimising the number of active companies, while ensuring that the valuable business names were still used. It was also convenient to BSA as the readers of the accounts (e.g. competitors, customers, employees, trade unions) could not see how profitable, or otherwise, was a particular subsidiary. Had BSA not been able to keep the losses of Daimler secret, shareholder pressure to eliminate them undoubtedly would have come on the Board to do so.

That BSA were able to do this, and as the archives contain only one full year's trading accounts (1966/67), meant that the motorcycles v diversification analysis had to rely on the qualitative profit/loss statements of successive Chairmen in their annual reports and speeches, rather than audited figures.

Robert Holgate, a Chartered Accountant, reviewed for the author BSA's accounts for four consecutive years, 1955-59 (*Appendix 7.2*).

His conclusions were:

- During the period reviewed BSA appropriated significant sums to General Reserve to protect its capital base. The General Reserve was not used for dividend payments.
- There was a cash crisis in the spring/summer of 1956, mainly due to a large (£3m) increase in working capital and debtors, that was pulled back the following year with the help of the proceeds from the sale of BSA Cycles Ltd, which both raised cash and reduced the need for working capital.
- BSA wrote off acquisition goodwill immediately, leaving the cost of investment in subsidiaries equal to their net tangible asset value.
- As at 31st July 1956, the subsidiaries had lent their BSA parent over £1m, a figure which fell over the next two years and then increased to £1.5m in 1959. Thus, in some years, the subsidiaries were lending to the parent out of their own capital. Furthermore, BSA must have stripped as much as possible out of the subsidiaries, as their reserves were low. Holgate reported that 'both these practices were not uncommon at the time in both quoted and unquoted companies but weakened the subsidiaries financially, to the benefit of the parent'.
- Dividend levels in the period 1955-59 were modest. In Holgate's view, it would not be fair to criticise the Board for over distributing.

- The tax take off the gross profit, over the four years, averaged 62%.
- The investment in fixed assets was low and *declining* (see 5.3 below and Appendix 7.4). In 1958/59, the investment in fixed assets was less than the depreciation charge, which is never a good long- term sign'

(Holgate, R., Personal Communications, 20th/21st May 2005).

5.3 Financial Performance: 1946-73

The pre-tax profits/losses of the Group from 1945/46 to 1972/73 are tabulated in Appendix

7.1. Four broad periods can be recognised:

- 1945/46 to 1949/50. Adjustment from a war to a peace time economy.
- 1950/51 to 1959/60. The relatively good years. (Pre-tax profit up to £3.4m).
- 1961/62 to 1969/70. Declining profitability at the start and end of the decade but four years of stable profits in between.
- 1970/71 to 1972/73. Heavy losses and the fight for survival.

The key test of the performance of the directors and senior managers of a public company is not so much the profits delivered, as the rate of return the company has earned on the shareholders funds and the increase, and potential for future increases, in the market price of the company's ordinary shares, which is linked to it. BSA Chairmen, however, rarely reported on the rate of return the Group had earned and described the performance of the subsidiary companies in mainly qualitative terms, for example:

'The fall in profits (not stated) of 6% in the Motorcycle Division was more severe than would appear to be warranted by the overall reduction in turnover' (not stated). (Annual Report, 1969/70)

'During the financial year the Metal Components Division again achieved increases in turnover (not stated) and profits' (not stated). (Annual Report, 1967/68).

Eric Turner responded to shareholder criticism of the company's failure to report the profits/losses of the subsidiary companies thus:

‘I am fully aware that there have been suggestions that a breakdown of the Group's profits should be published. These suggestions have been given the most careful consideration but I have to report that it is the Board's decision is that it would be seriously detrimental to the commercial interests of the Group to do so. We will provide, however, turnover percentages in relation to total group turnover, but note that profitability is not directly related to turnover’.
(Speech to AGM 10th November 1966)

In 1973. Smith, B., (1983, 30-31) commissioned a chartered accountant's analysis of BSA's profitability. This showed that the Group's average consolidated rate of return, (i.e. trading profit before tax excluding any balance carried forward from the previous year) on capital employed (shares and debentures plus reserves, excluding depreciation) averaged 22.4% between 1949/50 and 1959/60, and 12.4% between 1960/61 and 1967/68 (with a peak return of 29.9% in 1953/54). Thereafter, as competition to the motorcycle business intensified, returns fell sharply and were only 5.2% in the period 1968/69 to 1969/70. These falling returns, from 1960-68, were broadly in line with the 'all manufacturing' returns over the same period (Ellis, 1996) but significantly worse in the final five years up to the collapse. This supports the assertion in Chapter 4.2.8. that any significant investment into the motorcycle business would have to have been financed on the back of the good earnings of the 1950s.

This analysis was checked for the author by Holgate (Appendix 7.2) who did not understand the logic of the definition of the capital used in the calculation, particularly the deduction of the Fixed Asset Replacement Reserve (£1,400,000 in 1953/54) which originated from earned profits from previous years. This was a technical analysis, which also examined the variability of the profit carried forward into reserves. His conclusion was that while the trends highlighted by Smith B's accountant make sense in the light of

events, the detail of his financial analysis is difficult to understand and could mislead by overstating the percentage return.

It is pointless using these figures to compare BSA's financial returns with those of other engineering and manufacturing companies unless the basis of the calculation is known in both cases; a very rare event. The dissatisfaction with this ratio explains why, today, the performance measure used in UK statutory accounts is 'earnings per share' rather than return on capital employed.

In 1967, quantitative information on the performance of some subsidiaries was released:

‘The average capital employed in the Steel and Tools Divisions at book values in the last three years (1965/66, 1965/66, 1966/67) has been more than £15 m, on which the profits in the same period averaged about 7% before tax and 4% after corporation tax. It is therefore clear that, for sometime, a large proportion of the Group's assets has not been producing an adequate return’.
(Annual Report, 1966-67).

The financial performance of BSA should not be considered in isolation. Ideally it should be compared with the performance of other UK motorcycle companies and similar industrial sectors such as motor car manufacturers, engineering equipment manufacturers and engineering component manufacturers, and also with different sectors, such as chemicals and electronics. This data, however, is not available. Appendix 7.6, however, compares the pre-tax profit margins earned in 1963 and 1968 by those industry sectors within which BSA's subsidiary companies operated. They were broadly in line with the performance of the engineering industry, which was somewhat lower than that delivered by other sectors chosen for comparison, i.e. Radio & Telecommunications, Paper Products, Cement and Chemicals.

5.3.1 Sales/Profits/Losses: 1966/67 and 1971/72

An analysis of the sources of BSA's sales and profits could only be done for the financial year 1966/67 (*Appendix 7.3*, 'Report to Directors on Group Accounts to 31st July 1967', in MRC/MSS/19C). They were the last set before the production control/quality problems in the motorcycle division began to significantly influence the company's results.

5.3.2 Consolidated Profit and Loss Account: 1966/67

	£
Gross Profit for the year ending 31 st July 1967	3,695,746
Less interest costs	<u>(414,610)</u>
Group Profit (after all charges, but before taxation) which includes losses attributable to minority interests of	3,281,136
	<u>30,659</u>
Leaving Profit, before tax, attributable to the Company	3,250,477
Budgeted Profit	5,224,000
Compared with a Profit for the Previous Year of	3,656,834

The actual profit was only 63% of that budgeted. There is no evidence that BSA issued a profits warning to the City, probably because the company had not given a formal profits forecast. The Chairman's Statement to the AGM in November 1967 merely noted that profits were down by 10% on the previous year. Even by the tolerant standards of the late 1960s this was a poor management performance and shows that the Board's control was inadequate.

The table below compares the achieved with the budgeted profit in the four years 1965-68.

Table 5.1 Actual Profit –v- Budgeted Profit: 1965-68

Year Ending	Budgeted Profit £	Actual Profit £	% Difference
31 st July 1965	3,160,118	3,317,037	+ 5.0
31 st July 1966	5,538,090	3,656,834	- 34.0
31 st July 1967	5,244,500	3,250,477	- 37.9
31 st July 1968	3,233,400	3,330,921	+ 3.3

Source: BSA Annual Accounts. *Appendix 7.3*

To miss a public company's profit forecast by over thirty percent for two consecutive years is now unacceptable to the City. The Managing and Finance Directors have to go, no matter how good are their excuses. Even in the more forgiving days of forty years ago, it is surprising that the non-executive directors of did not demand that heads should roll.

5.3.3 Divisional/ Subsidiary Sales and Profits/Losses: 1966/67

The following table summarises the contribution made by each operating division and the trade investment in Alfred Herbert Ltd (ex BSA Tools Ltd), to the company's profits, before charging interest and taxation.

Table 5.2 Divisional/ Subsidiary Company Contribution to Profits/Losses: 1966/67

Division/ Company	Sales £	Profit (before interest and tax) £	%	Budget Profit £	Profit Margin %
Motorcycle *	31,513,000	2,513, 293	70.0	4,966,100	8.0
Heating Equipment	3,264,000	108, 148	3.0	269,400	3.3
Steel	3,128,571	218, 965	6.0	356,000	7.0
Metal Components	2,256,000	222,002	6.0	307, 900	9.8
Car Bodies	594,000	48,584	1.3	137,500	8.2
Birtley	1,774,000	58,734	1.6	35,100	3.3
Alfred Herbert Ltd					
(Dividends)		633, 602	18.0	600,000	
Contingencies			-	(1,092,000	
Total		3,587,032	100	5,580,000	

* Inter-Group plus External Sales, which were £21,561,000

(Note: The difference between the £3,587,032 in this table and the profit, before interest and taxation, attributable to the company of £3,321,136, quoted above, is due to accounting adjustments and other trade investment income. Interest charges were £411,220, giving a net profit before tax of £2,909,916).

The table, which includes the contribution to profit made by the old BSA Tools Division after being integrated into Alfred Herbert Ltd, shows how much, in the late 1960's, BSA was dependent on the motorcycle division for the majority of its profits.

Source and Analysis of Profits:

Motorcycle Division: 1966-67

Profit:

The division earned a pre- interest trading profit of £2,513,293
which fell below budget by (49%) £2,452,807
and below the April '67 forecast by (24%) £ 794,000

That the divisional management and finance departments together could not forecast, accurately in April the end financial year position three and a half months ahead illustrates the lack of control of the business.

Sales:

Sales (including inter-group) £35,513,000
which fell short of the budget by (26%) £12,500,000
and exceeded those of the previous year 18% £ 5,373,000
External sales were £ 21,561,000
which fell short of the budget by (31%) £ 9,843,000
and exceeded those of the previous year by 9% £ 1,749,000

These figures again highlight the errors made in forecasting external sales fifteen months ahead which was due, in part, to the lack of a professional market analysis unit, referred to in Cooper Bros reports to the Board of 9th August and 3rd December 1971. (*Appendix 5*).

Steel Division: 1966/67

Jessop- Saville Ltd made high-grade steels and zirconium and titanium alloys. 1966/67 was the company's last year under BSA's control before it was split and sold to IMI Ltd and Thomas Firth/John Brown Ltd.

6 Sales for the year were: £3,128,571

The trading profit for the year was: £ 218,965

This included three special credits:

Bad debts provision written back £ 33,000

Proceeds on sale of goodwill of the foundry £ 25,000

Furnace re-build provision written back £ 5,000

£ 63,000

Heating Equipment Division: 1966/67

This division was made up of Harford Heating Ltd, manufacturers of central heating equipment and their UK and European sales organisations. Poor economic conditions in the UK and Europe led to a fall in turnover compared with 1965/66 of 18%.

The external sales were: £3,264,000

which fell short of budget by: (29%) £1,307,000

which were lower than last year's sales (18%) £ 694,000

There was a pre-interest trading loss of: £ (138,807)

compared with a budgeted profit of £ 289,900

compared with a profit in 1966/67 of £ 300,365

This represents a profit-to-loss swing of £ (439,172); a disastrous performance. This division was the nearest BSA got to the domestic consumer market which needs a fast reacting management; not a characteristic of the Group.

Metal Components Division: 1966/67

This division was made up of Metal Powders Ltd, Sintered Components Ltd, Precision Castings Ltd, Foundries Ltd and Monochrome Ltd. The division made an overall profit of

£222,002, against a budgeted profit of £307,000, a shortfall of 27.5%. In absolute terms, however, the division managed to increase both turnover and profits, in marked contrast to the rest of the Group.

BSA Metal Powders Ltd

Pre-alloyed metal powders for sintering and metal spraying

Sales for the year at		£327,000
exceeded those of the previous year by	(21%)	£ 56,000

but, owing to price reductions to the main customer of £13,000 in the year and increases in the cost of nickel, not recoverable from customers the trading profit increased

only marginally by	(8%)	£ 4,530
to		£63,497

BSA Sintered Components Ltd

Engineering components produced by powder metallurgy

Sales for the year of		£658,000
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fell short of those for the previous year by	(13%)	£ 96,000
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due to the recession in the motor industry.

The company did well to achieve a trading profit of		£56,406
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compared with that of the previous year of		£74,896
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which is a reduction of only	(25%)	£18,580
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Precision Castings Ltd

Steel and non-ferrous metals castings produced by the 'lost wax' method.

With sales for the year of		£371,000
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An increase over the previous year of	(34%)	£ 94,000
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The company achieved a record trading profit of		£ 23,139
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Compared with that of the previous year of		£ 1,117
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Foundries Ltd

The sales for the year of		£706,000
exceeded those of the previous year by	(16%)	£ 99,000
and gave rise to a trading profit of		£ 66,193
exceeding the budgeted trading profit by	(53%)	£ 22,793
and the profit of the previous year by	(242%)	£ 46, 845

7 Monochrome Ltd

Specialised Industrial Plating

Despite only a marginal fall in sales from 65/66		£194,000
to 66/67		£191,000
the trading profit fell by	(34%)	£ 6,524
due to increased research and maintenance expenditure		

Carbodies Ltd: 1966/67

Complete motor vehicle bodies.

Although sales for the year fell by	(28%)	£594,000
cost reductions and o/h control resulted in		
a trading profit of		£ 48,584

Birtley Engineering and Birtley Manufacturing Ltd

Sales increased marginally during the year to:	£1,774,000
Profits increased from £14,830 in 1965/66 to	£ 58,734

Trade Investments: 1966/67

These comprised:

	1966/67	1965/66
	£	+/- £
Alfred Herbert	633,602	-
High Speed Steel Alloys	95,145	73,680
ABMTM	-	8,302
Ucan Holdings	<u>3,335</u>	<u>2,000</u>
	£732, 082	£83,982

Bank and Debenture Interest

There was a substantial charge, which mainly arose from the need to finance the short-selling season of the motorcycle business in the US.

Table 5.3 Bank and Debenture Interest: 1965/66 and 1966/67

Financial Year	1966/67	1965/66
U.K.Bank and Loan interest	238,922	238,027
Overseas Bank interest	175,101	85,103
Debenture Interest	587	2,792
Total	£ 414,610	£325,922

The above analysis reveals a great deal about BSA at the end of the 1960s. The sale of both Daimler and BSA Cycles, in 1957, significantly reduced the size and importance of the non-motorcycle components in the Group with the motorcycle division contributing 70% of the profits in 1966/67. The remaining diversified companies, whatever their potential may have been, were small by comparison with the motorcycle division. The largest of them was Jessop-Saville Ltd, with sales of £5m, which was sold at the end of the financial year, leaving the Heating Division, itself made up of modest sized companies, as the largest non-motorcycle business.

Most revealing are the margins earned on sales and the source of all profits. None of BSA's businesses earned a 10% margin and the lowest was only 3.3%. Industrial margins are a function of the economic climate (poor for 1966/67), the number and quality of competing firms in the market and the degree of control the management exerts on

production costs. No evidence was found of BSA's executive directors exerting pressure on divisional managers to increase margins, while at least maintaining sales. This inability of BSA to earn decent margins on sales was endemic and, as Cooper Bros noted (*Appendix 5, letter to Directors, 6th October 1971*), was shown by the subsequently improved performance of businesses sold by BSA to companies with a more demanding management and a willingness to invest in modern production equipment.

In fairness to the management, the profits earned in 1966/67 delivered a 12.8% return on the assets employed in the business (Investor's Chronicle, November 10th 1967), This reflects the relatively low investment over many years (Appendix 7.4) in the plant/equipment of the Group.

If the split between the trading divisions of the total assets employed by the Group had been available it would have been possible to see whether the diversified non-motorcycle companies had fared better or worse than the motorcycle division. This key information was not provided to the non-executive directors (Board Agendas/Minutes) and it appears that they meekly accepted that they were being denied the information necessary to make a full assessment of the Company's performance.

5.3.4 Losses for the Year Ended 31st July 1972

Summarised below is the group profit and loss account for 1971/72, the last financial year before the collapse in the share price precipitated the end of BSA. This should be read in conjunction with Chapter 4.2.9, Fight for Survival. The company traded profitably (before interest) throughout the year, which was a tribute to the new management team. The huge losses arose from the consequences of the management failures of the previous year (*Chapter 4.2.9*).

	Profits £000	Losses £000
Trading profit	236	
Interest received	15	
Interest paid to banks		674
Losses on Investment in Round Oak steel works		42
Shell-Mex/BP share of losses incurred by Harford Unical	105	
Costs incurred reorganising factories/products in M/C Division		2,769
Losses incurred in selling subsidiaries		131
Taxes payable in the US.		38
Dividends payable to preference shareholders		<u>54</u>
	356	<u>3,708</u>
Amount by which shareholders investment was reduced		<u>£3,352,000</u>

Note that:

- Sales for the year 1971/72 were £34,064,000.
- Costs incurred in reorganising factories/products in 1971 was £(5,094,000).
- At 31st July 1970 the company's borrowings were £1.9m. During the 1970-71 financial year, these borrowings increased to £9.1m. In addition, amounts owing to suppliers were increased by £3.9m.
- During the 1971-72 financial year the company reduced its net borrowings to £6m and amounts owing to suppliers were also reduced by £3.4m. These reductions were made possible by the sale of investments and subsidiary companies which, in total realised £4m and by reducing amounts owing to customers by £3.4m.
- The company urgently needed more risk capital, hence the approach to the DTI.

Source: 1971/72 Annual Report and Accounts.

5.4. Capital Expenditure and Depreciation: 1945-1973

Lamfalussy (1959 and 1963) asked why the UK obtained far less output growth from each percent of investment in the 1950s and drew the conclusion that far more of the investment in Europe was in wholly additional plant to manufacture new products, using state of the art technology. He defined this as ‘enterprise investment’. In his judgement UK investment more often took the form of piecemeal additions to the existing structure of capital, which he termed ‘defensive investment’. This is profitable because the addition of new and superior plant in an existing capital structure permits reductions in labour costs and raises productivity, but it is not associated with the same increases in total capacity and output as the (then) enterprise investment of France and West Germany. Lamfalussy concluded that, in the 1950s and early 1960s UK manufacturing investment made a smaller contribution to the growth of output, per unit of gross investment. The analysis of BSA’s capital investment programme in Appendix 7.4.1 covering both the motorcycle and diversified businesses, supports this view. In the period 1945-72 BSA made no significant greenfield site investment, nor made a major (as opposed to incremental) investment in increased production capacity, while the investment in the manufacture of new products was modest and soon cut back (e.g. turbochargers and alloy steels for gas turbine blades). While the amount set aside for depreciation is recorded in the annual accounts, establishing the annual capital expenditure was more difficult. In most years, the only information provided was the value of sanctioned expenditure outstanding at the end of the year. The Board Minutes briefly recorded the expenditure approved and, occasionally, the Chairman mentioned one of the larger projects in his report. The available data, (which is better for the years 1945-59 than 1960-72) is set out in Appendix 7.4, Capital Expenditure, in four tables:

7.4.1 Detail 1945-72

7.4.2 Summary 1945-72

7.4.3 As a Percentage of Sales

7.4.4 Compared with Depreciation.

Although there are some gaps in these series there is enough data to draw firm conclusions:

Conventionally, prior approval of even relatively small sums of capital expenditure is reserved for the directors of public companies (as in BSA) and recorded in the Board Minutes. Whether, however, BSA's Directors had sufficient detailed knowledge of the operating divisions/ subsidiary companies to make informed decisions on requests for capital expenditure is open to question.

As a minimum, capital expenditure should match the sums set aside for depreciation in each defined business. If a business' capital expenditure is less than its depreciation, in effect, it is reducing its investment. Depending on the rate of change of the technology employed in the business the annual rate of depreciation on plant and equipment in manufacturing industry lies in the range 7-15% (a write off period of between 5 and 15 years). 'My gut feeling is that, even in the 1950s, an engineering company would have needed to spend twice the depreciation charge to stand still and more than that to enable it to grow' (R.Holgate, Personal Communication, 21st May 2005). Another useful comparative ratio is capital expenditure as a percentage of sales (*Appendix 7.4. 3.*)

Investment decisions were significantly influenced by the tax system. In the 1950's the tax system discriminated against capital expenditure on plant and industrial buildings by coupling both a high nominal tax rate with low levels of tax deductible depreciation. In the 1960's there was a progressive policy change towards using the tax system as incentive to invest. By the time BSA collapsed in 1973 government held to a high corporation tax rate

(52%), mitigated by accelerated tax write-offs for plant and equipment (capital allowances) which were raised to 60% and then 100%. This meant, at the 100% rate, the whole of the capital expenditure on plant could be written off for tax in year one. In addition tax losses arising from such capital allowances could be carried back for up to three years (R.

Holgate, Personal Communication, 21st May 2005)

It was not until November 1965 that the Chairman formally stated BSA's policy on capital expenditure:

‘.....since we envisage substantial spending on the capital account during the next year or so. It is essential to the wellbeing of the company to increase our investment in up-to-date equipment and facilities where these will give us an adequate return on our money.....’
(BSA Annual Report 1964/65)

True, indeed, but fifteen years too late! Eric Turner did not define what the Board considered to be an adequate return and, in the Board minutes sanctioning capital expenditure, no reference was made to expected returns, although the proposals from the divisions/subsidiaries (not available) may have done so.

Four conclusions may be drawn from the available data:

- In the period 1945-60 BSA invested £10,123k, which was split between the motorcycle division (£ 2,151k, (21.2%)) and the diversified businesses (£7,974k (78.8%).
- In the same period, 1945-60, the capital invested was 98% of the depreciation charge, i.e. nowhere near enough to secure the long term viability of the Group.
- In the following period, 1961-72, the rate of capital investment increased from an average of £ 719k per annum in the 1950s to an estimated £ 945k per annum. Much of this increase arose from inflation, which was endemic in the 1960s.

- The split of investment in the 1960s between the motorcycle division (40%)and the diversified businesses (60 %) could only be estimated. It does not appear that ratio of capital investment to depreciation changed much between the two decades.

5.5 Investment-v-Diversification

The charge, by Ryerson (1980); Smith, (1981) and Boston (1975), that BSA's motorcycle division was starved of both investment and the close attention of the Board, by its pre-occupation with the acquisition and disposal of the diversified companies and their often severe management problems demands analysis.

There are several reasons for pursuing a diversification policy; a belief that the diversified companies will produce a significantly higher return on the shareholders capital they employ than the existing businesses (BSA's primary motivation) and/or they operate in counter cyclic markets to the core businesses and thus smooth the Group's annual profits. Companies also may be acquired for their potential growth, for established profitability, for the cash that they generate or for their synergy with companies already in the group.

5.5.1. Diversification: Costs and Proceeds

Chapter 2.2.4 introduced BSA's diversification policy, if it can be called that, in the context of the company's overall strategy. After 1945, while retaining its guns and motorcycles businesses and the subsidiaries from the earlier diversification into motor vehicles and alloy steels, BSA further diversified into products of which the management had no previous experience, such as turbochargers, coal washing, and central heating systems. It is difficult, however, to discern a coherent policy that drove the acquisition policy, indeed it gives the impression of opportunism in the search for companies to acquire solely on the grounds that they might deliver a better return on capital than the existing businesses.

It was hoped that it would be possible to determine:

- How much the diversified companies cost BSA and, for those companies that were subsequently disposed of, what were the capital gains/losses incurred?
- What were the trading profits delivered to the Group by these companies and what rate of return on capital employed was achieved?
- Subjectively, how demanding of the Director's time and energy were these diversified companies?

The available financial information, however, did not allow the first two of these questions to be answered in full. Nevertheless, in spite of the gaps it was judged that, by making some reasonable assumptions, there was sufficient data on which to base some broad conclusions.

Appendix 1 tabulates all the companies purchased and disposed of by BSA during the period 1910-1973, excluding those companies sold in April 1973 to Manganese Bronze Ltd as a job-lot, after the collapse of the Group. On the grounds of commercial confidentiality, BSA did not report the cost of acquiring new, or disposing of existing, subsidiaries unless the scale of the transactions had a significant impact on the company's Balance Sheet.

The purchase costs/sale proceeds of the major, non-motorcycle, subsidiaries that were not included in the post collapse sale to Manganese Bronze were:

Table 5.4: Purchase Costs & Sale Proceeds of Major Non-Motorcycle Subsidiaries

Company	Purchase Date	Cost £	Sale Date	Proceeds £
Daimler/ L'chester	1910/31	626,000	1960	3,400,000 (to Jaguar)
Jessop- Saville	1919/29	1,400,000	1967	5,700,000 (to IMI/ TF-JB)
Churchill	1960	8,500,000	1971	1,600,000 (sale of shares)

Sources: BSA Annual Reports: Investors Chronicle.

The book value of each subsidiary at the time of each sale and how much was paid for the good will of Daimler, and Jessop/Saville, which were going concerns, is not available.

The forced, post-collapse, sale of subsidiaries to Manganese Bronze (*Chapter 4.2.9*) included:

Carbodies Ltd

Birtley Ltd

BSA Heating Ltd

Metal Components Division

BSA Guns Ltd

These businesses had achieved a pre-tax profit of £ 576,000 for the seven month period ending 22nd February 1973 and were confidently expected to exceed the pre-tax profit forecast of £1,053,000 for the twelve month period (Hopwood,1981,.295). Manganese Bronze offered £3.5m which, assuming the following year's profit remained at the same level under their management, would have delivered a 30% return on their investment. In the open market, an opening valuation of £7m (giving a15% return) would have been an attractive proposition to many engineering companies struggling to deliver even 10% return on their capital.

5.5.2 Profitability and Return on Capital Invested

To analyse the financial performance of the diversified subsidiaries they were split into two groups; the large (in relation to the size of the motorcycle business) and the relatively smaller companies.

The larger, non-motorcycle, companies/divisions/ business groups were:

Company	Sales
Daimler Co. Ltd	£ 3,000,000 (1959/60) (assumed)

acquisition of Saville in 1929. No financial information was released on the performance of the company until 1967 when it was revealed that the pre-tax trading profit for the previous two years had been £532,00 in 1964/65 and £226,000 in 1965/66, giving an average of 5.3% on capital employed of £6,050,000 (Annual Report, 1966/67). Pre-tax profits fell again in 1966/67 to £191,000 giving a return of little more than 3%. This is significantly lower than the returns earned by the motorcycle business during most of the same decade, which were somewhat greater than the average (12.4%) for the BSA Group.

BSA Tools Division

After the acquisition of the Churchill Machine Tool Company Ltd in 1960 this Division incorporated:

BSA Tools (Canada) Ltd	Burton Griffiths and Company Ltd
BG Machinery Ltd	BSA Broach Company Ltd
BSA Small Tools Ltd	Jessop-Saville (Small Tools) Ltd
Automation Jigs and Tools Ltd	
Churchill Machine Tool Company Ltd	

The turnover and net profit for the Division for each of the years 1961-1966 was:

Table 5.5 Profitability of BSA Tools Division: 1961- 1966.

Year	Turnover** £000	Net Profit* £000
1961/62	10,206	787
1962/63	9,816	580
1963/64	9,938	748
1964/65	11,445	1,068
1965/66	12,510	592

Overall, this represented a 7% margin on sales over the five years.

*after charging interest, but before taxation

** includes divisional inter-company trading. With Churchill on board Tools Division became No.2 to Alfred Herbert Ltd in the UK machine tool market. AH were the largest machine tool manufacturers in the world, with a turnover over twice that of BSA (Investors Chronicle, 24th November 1961).

Source: Cooper Bros Report to Directors of Alfred Herbert in MRC/MSS/19B/TB4.

Post- WW2 the machine tool industry experienced five-year cycles in its levels of activity. Late 1962 and 1963 was a period of low activity but a recovery occurred in 1964, which continued into 1965 and 1966. Churchill, with its wide range of specialised grinding machines, was able to avoid the worst effects of this cycle; their export sales increased rapidly in the four years to 31st July 1965, followed by a rapid fall. Export sales from the other companies of the division fell steadily throughout the five year period, in retrospect an early sign of the international competitive forces that were to bring the industry to its knees at the end of the decade (DTI, 1970). Churchill and Tools contributed over 50% of the total turnover and profits of the Division, though their respective profit records were dissimilar. The profits on machine tools reflected the industry cycle while those of Churchill were more consistent, thus smoothing the divisional results, until the financial year 1965/66 when the profits from both fell alarmingly. The weakness of the division was its high dependence on the motor manufacturing and motor components industry which took 55-60% of the machine tools sold (Roberts,1959).

Churchill was seen (The Investors Chronicle 18th November 1961) at the time to be a good investment to reinforce BSA's most successful non-motorcycle business:

‘The acquisition of Churchill Machine Tool represents a far-reaching development. Many of Churchill's products complement those of BSA's other subsidiaries and the tools field offers a logical scope for expansion’

In 1960s no one, inside or outside the company, forecast the near collapse of the whole of the UK machine tool industry at the end of the decade. That they failed to do was an example of the widespread ignorance of the speed with which continental and latterly, Japanese machine tool manufacturers were developing advanced designs and increasing their productivity. In the meantime, Churchill's consistent profits transformed Tools Division and strengthened BSA's hand in the 1966 merger negotiations with Alfred Herbert Ltd, which led to a valuation of £8.5m (paid in A-H shares).

The twelve smaller companies of the division, excluding Tools and Churchill, which contributed around 45% of its turnover and profits, nevertheless represented a sizeable proportion of BSA's assets. Only one of these companies, Small Tools, had emerged from within BSA; the remainder had been purchased at some stage (*Appendix 1*). The contribution made, in 1959/60, by the four largest of these companies, to the profits of the division, and thus the group, were modest:

Table 5.6. Turnover/Profit in 1959/60 of four Largest Companies in Tools Division

Company	Turnover £000	Net Profit £000
BSA (Small Tools) Ltd	810	227
BSA Broach Company Ltd	340	58
Burton Griffiths and Company Ltd	1654	107
BG Machinery Ltd	<u>288</u>	<u>34</u>
	£3,092	£426

Source: Cooper Bros Report to Directors of Alfred Herbert in MRC/MSS/19B/TB4

Overall, this represents a respectable 13.8% margin on sales, much higher than the average 7% for the whole tools business, for the six years 1961-66. Only limited information on the capital employed by the Division was available:

‘The average capital employed in the Steel and Tools Divisions at book values in the last three years (1965/66, 1965/66, 1966/67) has been more than £15.5 m,

on which the profits in the same period averaged about 7% before tax and 4% after corporation tax. It is therefore clear that, for sometime, a large proportion of the Group's assets has not been producing an adequate return'.

(Annual Report 1966/67)

Metal Components Division

In 1966/67 the net profit of this Division was £ 217,262, which was achieved on sales of £2,253, 000 at a margin of 9.6%.

This was made up of:

Table 5.7 Metal Components Division: Sales and Profits: 1966/67

Company	Sales £	Net Profit £
BSA Metal Powders	327,000	63,500
BSA Sintered Components	658,000	56,406
BSA Precision Castings	371,000	23,139
BSA Foundries	706,000	66,193
BSA Monochrome	191,000	6,524

Source: 1966/67 Accounts

Heating Equipment Companies

In 1966/67 these were: BSA Harford Heating Ltd, BSA Harford Pumps Ltd (75% owned), and BSA Harford Pumpen GmbH.

In 1966/67 the net loss of these businesses was £(138,807) which was achieved on sales of £3,264,000 at a loss margin of 4.3% (the profit in 1965/66 was £300,365).

Summarising the key outcomes:

- Daimler made a cumulative loss during the 1930s and a further loss of almost £7m during the period 1946-1960.
- Jessop-Saville made an unsatisfactory 7% pre-tax profit before tax in the same period.

- The Tools business also only made 7% pre-tax profit in the years 1965-67 and its capital value of £8.5 m in 1961 was reduced to £1.6m (a loss of £6.9m) in 1971 (Daily Telegraph, 26th August 1971).
- The sales and profits of the remaining subsidiaries were modest compared with the motorcycle division and the three major subsidiaries (Daimler, Jessop-Saville and Tools.

These individually and collectively are a devastating indictment of BSA's management. The figures were bad enough: it is the time that the Board took to come to grips with the major underlying problems they were presented with. The purchase, in 1960, of Churchill by BSA for £8.5m, rather than investing the available cash in the motorcycle division was seen by earlier commentators (Hopwood, 1981, 185-186; Smith, 1983, 37) as epitomising the diversification debate; they argued that the purchase denied the motorcycle business of much needed capital investment at a crucial time, for an investment that had to be written off at a cost of £6.9m.

It was not a stark choice between investing in motorcycles or the diversification programme, as BSA had the resources to invest in both if it wished to do so. When reporting on BSA's record profits in the financial year 1959/60 (immediately before the purchase of Churchill) the Investors Chronicle (November 15th 1959) wrote 'the direction of future development is a matter of conjecture at present but there are ample funds available for expansion and diversification'. Even after financing the Churchill acquisition, in 1961, BSA was in a strong financial position, viz:

Net current assets	£ 9,250,007
Net equity assets	£18,094,341
Dividend yield	5.875%

Earnings yield	12%
Net cash flow	£1,473,747

(BSA Annual Report, 1960/61)

On these figures, BSA could have raised even more than the £8.5m it spent on Churchill to invest in the motorcycle business, had it had the determination to do so.

The sales and profit figures above are based on the limited information available and relate to the 1960s. A partial comparison, however, can be made with the estimated profits for the financial year 1972/73 of the remaining subsidiaries, which were sold to Manganese Bronze.

Table 5.8 Profits Earned by Subsidiaries sold to Manganese Bronze in 1973.

Subsidiary	1966/67	1972/73
	£	£
Carbodies	48,584	300,000*
Metal Components	218,000	425,000*
BSA Guns	10,050	15,000*
Birtley	58,750	85,000*
BSA Heating	(138,807)	275, 000*
Total	196,577	1,000,000

* Estimated

Source: Offer Document

The significant improvement in the level of profits over the six-year period was due to inflation, the economic cycle and a turnaround in the fortunes of the central heating business.

Overall, it can be concluded that BSA's diversification programme was unsuccessful for four reasons:

- The modest size and profitability of the diversified businesses (other than Tools Division) relative to the Motorcycle Division. Whatever their longer-term profit potential may have been, the diversified companies were too small to decisively shift the balance of BSA away from motorcycles.
- Their limited growth of the diversified companies when managed by BSA.
- The demands they made on the funds available for capital investment.
- Their poor return they delivered on their investment and the working capital they employed.
- The demands they made, relative to their returns, on senior management time.

The diversification strategy undoubtedly harmed the motorcycle business. It led to the appointment of non-executive directors (*Appendices 3 and 4*) who were, allegedly, expert in recognising good investment opportunities, rather than directing an international motorcycle business, and who failed to deliver.

While the gaps in the available financial information were frustrating, they did not prevent some further useful conclusions being drawn.

- The financial performance of BSA's Divisions/ Subsidiaries against their budgets was poor, as was the tolerance shown to Divisional/Company Managing Directors who failed, often by large margins to meet their budgets. (Weinstock's ground-breaking letter to GEC Managing Directors on their personal responsibility for the performance of their businesses, which set industry standards in this area, was not issued until 29th November 1968 (Brummer, 1998, 137-138)).
- The appointment, in 1964, of an administrator (Laurie Beeson), who was not a chartered accountant, to head up the Group Finance Department was undoubtedly a

mistake, especially since he had no automobile or motorcycle experience. It was on his watch that losses went out of control in the period 1969-72.

- In common with most of the British manufacturing industry, BSA's returns on capital employed were significantly higher in the 1950s than they were in the 1960s, and were minimal in the four years leading up to the collapse of the company in 1973.
- While BSA's policy of concealing key financial information (for example the scale of the losses in Daimler) from their shareholders and the financial press may have led to a quiet life for the Directors in the longer term, it harmed the company in that informed and penetrating public criticism acts as a spur to action and the removal of failing Directors.

5.6 Supplementary Information

In the course of the above financial analysis the following helpful information became available on the performance of the motorcycle division in 1966/67 and the pre WW2 profits/losses of Daimler.

Table 5.9 Export, Home and Total Motorcycle and Scooter Dispatches: 1966/67

1966/67	BSA	Triumph	Scooters	Total	%
USA	23,302	24,604	-	47,906	65
Other Exports	<u>7,200</u>	<u>5,917</u>	<u>21</u>	<u>13,138</u>	<u>18</u>
Exports Total	30,502	30,521	21	61,044	83
Home	<u>9,933</u>	<u>1623</u>	<u>607</u>	<u>12,163</u>	<u>17</u>
Total Dispatches	40,435	32,144	628	73,207	100
Budgeted Dispatches	<u>62,900</u>	<u>39,200</u>	<u>3,500</u>	<u>105,600</u>	
% of Budget	64%	82%	18%	69%	
<i>1965/66 Comparison</i>					
8 USA	<i>17,543</i>	<i>18,376</i>	<i>1</i>	<i>35,920</i>	<i>53</i>
9 Other Exports	<u><i>6,007</i></u>	<u><i>3,415</i></u>	<u><i>200</i></u>	<u><i>9,622</i></u>	<u><i>14</i></u>
10 Exports Total	<i>23,550</i>	<i>21,791</i>	<i>201</i>	<i>45,542</i>	<i>67</i>
11 Home	<u><i>14,496</i></u>	<u><i>4,016</i></u>	<u><i>3549</i></u>	<u><i>22,061</i></u>	<u><i>33</i></u>
<i>Total Dispatches</i>	<i>38,046</i>	<i>25,807</i>	<i>3750</i>	<i>67,603</i>	<i>100</i>

There was a drastic fall of 45 % in sales to the home market compared with 1965/66, more than compensated by a 34% increase in dispatches to the export markets, giving an overall increase in sales for the year of 8.3%. The latter was recognised by the award of a Queen's Award to Industry for Export Achievement (1967). Overall this was a credible achievement, masked by a 31% shortfall against forecast.

4. Daimler: Profits/Losses. The Daimler profits/losses in the nine years prior to the second world war are shown in the following table:

Table 5.10 Daimler: Sales, Profits and Losses: 1930-38

Year	Net Sales £	Net Profit/(Loss) £
1930	55,000	-
1931	31,000	(4,500)
1932	60,000	(3,000)
1933	137,000	7,800
1934	145,000	3000
1935	176,000	(2,800)
1936	185,000	5000
1937	130,000	9,500
1938	80,000	500
1931-38	Margin on Sales: 1.55%	Total Profit: £15,550

Source: Davenport-Hines, 1984, p.225

A margin of 1.55% on sales is a very poor performance, even when judged by low margins generally achieved in the engineering industry during the post WW1 years.

CHAPTER 6

EDUCATION AND VOCATIONAL TRAINING

6.1 Introduction

‘The Englishman has yet to learn that an extended and systematic education is now a necessary preliminary to the fullest development of industry’. (1882, XXIX Royal Commission on Technical Instruction, p.525, quoted in Sanderson, 1999, 1)

‘Education is fundamental and essential for the promotion of economic growth’ (Szfeter, 1997, p.5)

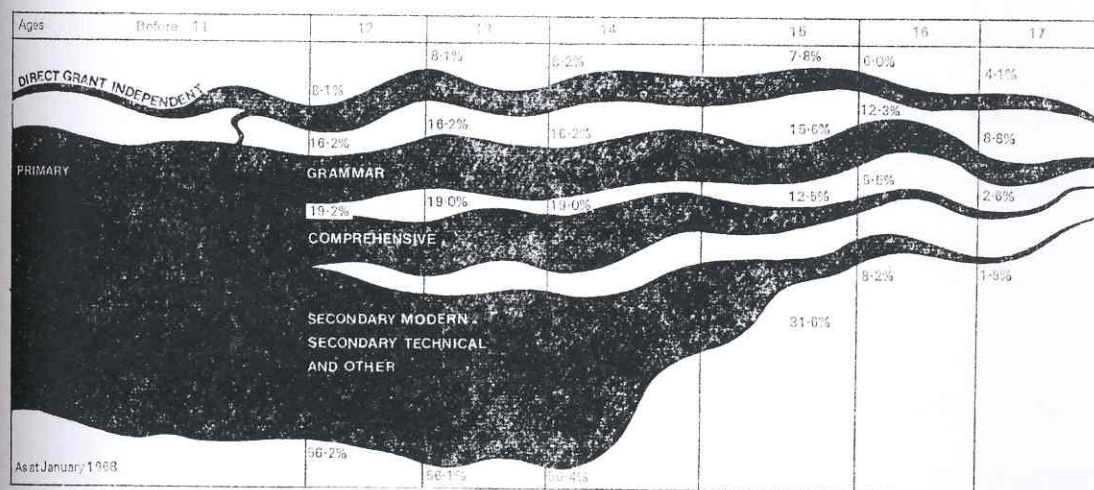
This chapter assesses the validity of one of the key tenets of the cultural critique, i.e. that, up to 1975, the British education system failed to produce young men and women, entering industry, who were educated to the standards reached by Britain’s major competitor nations and that, with some honourable exceptions, British educationalists and companies failed to provide skills, technical and management training at the levels achieved in America, Germany and Japan. (Barnett, 2001, 445-481).

The relationship between education, training and relative industrial performance, at the national, industrial sector and company levels, has attracted the keen interest of academics, the directors of industry, industrial journalists and politicians and has spawned a sizeable literature. It also lies at the heart of the studies of the relative decline of the UK economy and successive reports from the Department of Trade and Industry on competitiveness issues, industrial productivity and shortages of skills (e.g. Board of Trade, 1952; DTI, 1994; Trade and Industry Select Committee, 2002; Leitch, 2006).

This chapter examines the education and vocational training of BSA's managers, supervisors, craftsmen and operators and compares them with those of their contemporaries in the Japanese motorcycle companies that competed so effectively with BSA.

In Appendix 10, education and training qualifications are placed in two streams, the supervisory/ managerial stream and the craftsman/designer technical stream, within the hierarchy of jobs in a typical engineering company, such as BSA, operating in the 1960s.

Organisation and performance in six educational sectors were considered and in each sector a comparison was made between Britain and Japan. Fig. 6.1 shows the proportions of each age group in 1968 at different types of schools in the UK.



THE STREAMS OF SCHOOLS: Proportions of each age-group in 1968 at different types of school.

Copied from:
 Sampson, A., *The New Anatomy of Britain*
 London etc: Hodder and Stoughton, 1971

Fig. 6.1 The Streams of Schools

The five sectors considered were:

- Secondary Education
- Craft Training
- Supervisor Training
- Technical Education
- Management Education and Training

Japan's education system is established to meet the needs of the state and, in particular, the industrial sector. It is meritocratic and egalitarian but is essentially a one-shot system. An individual can obtain qualifications later in life but the internal labour market, operated by the many large employers, provides few opportunities for late starters. (BIM/MSC/NEDC, 1987, 84)

Compared to an income per head, in 1950, of \$131 (less than one-tenth that of the US), by 1987 the average Japanese had the highest income in the industrialised world of \$20,100.

The average annual growth rate for manufacturing output between 1960 and 1987 was 8.8%; comparative figures for the UK and the US were 1.6% and 2.5% respectively. Japan has consistently produced higher gross rates of return on capital employed in manufacturing, than other OECD countries, as well as a higher increase in productivity.

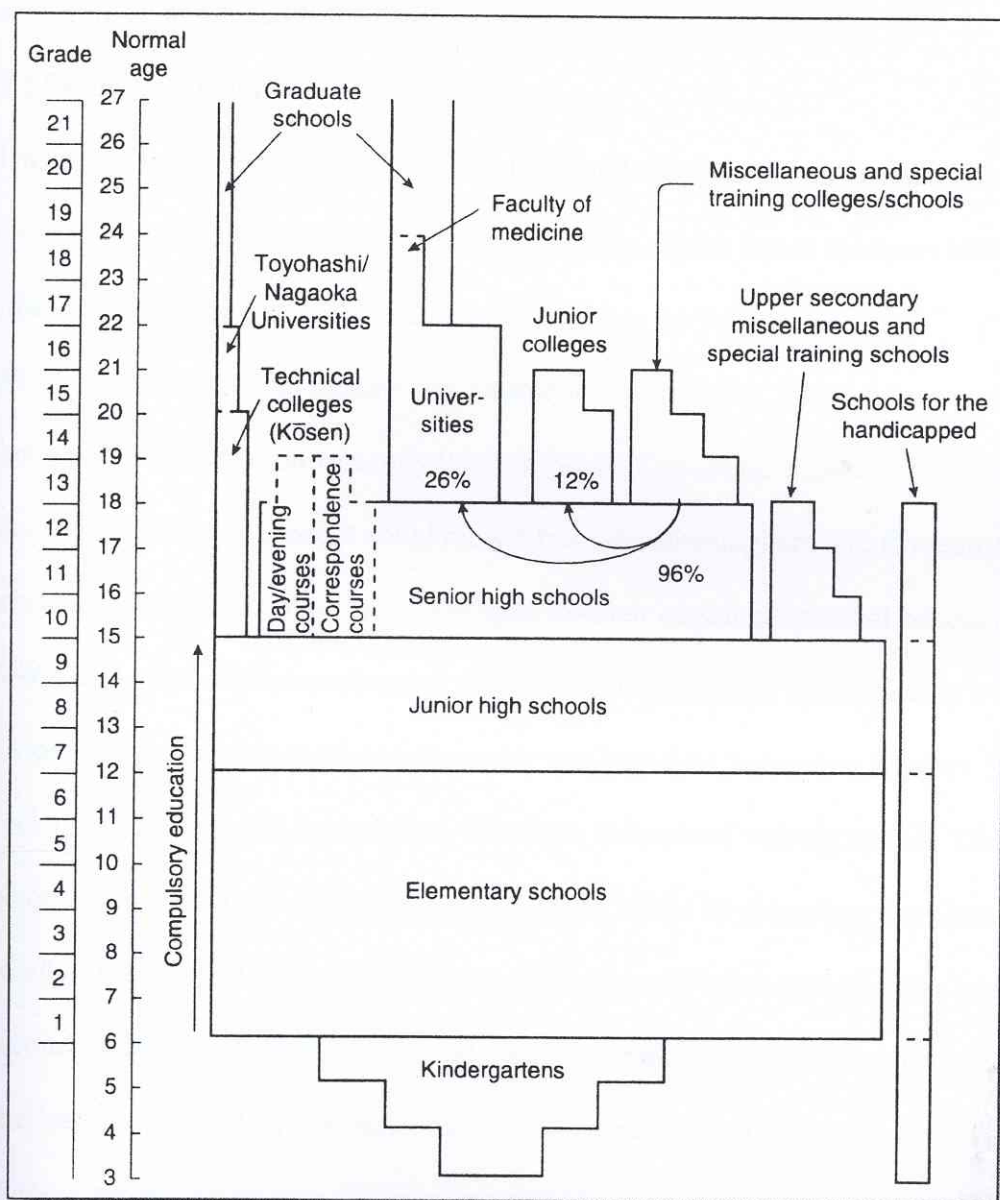
One reason is that the average annual investment in fixed assets by Japanese companies between 1960 and 1985 was 27% of gross profits; this was twice the 14% of the U.S. and considerably higher than the 20% average figure for firms in the EU (Lorrinan, 1994, 3).

To achieve such spectacular results in such a comparatively short time Japan must have had available a work force, at all levels, that was very well educated and trained to levels above that in the other countries of the OECD. Such a skilled workforce could not have been created without a major and continuing investment in education and training. In the

1970s, 95% stayed on in full time schooling, in contrast to the 32% of the 16-18 year olds in England in full time schooling (Prias, 1987, 1).

Japan is well known for its pressure-cooker school system, the '*shiken-jigoku*' (the examination hell). Lorrinan (1994, 46-47) examined to what extent this international image was correct. They concluded that it was tolerated because status in Japanese society is largely determined by which university one has attended. Just in case there is any hesitation or backsliding on the part of any pupil, behind every one of them stands the '*kyoikumana*', the school minded mother, whose ambition for her children knows no bounds. Lorrinan also concluded that the Confucian ethic of respect for learning lies at the heart of the national obsession for education.

In the 1960s and 70s the Japanese educational system was composed of six years of elementary education, three years of junior high school education, four years of senior education and five years of graduate education. There were also five-year technical colleges, which students enter after finishing junior high-schools, and two-year junior colleges after senior high schools.



Organization of the Japanese educational system. Source: Modified by the authors from: Ministry of Education (1993). *Statistical Abstract of Education, Science, and Culture*, p. 6. The Ministry, Tokyo.

Copied from:
Lorriman, J., and Kenjo, T., *Japan's Winning Margins*,
Oxford: O.U.P., 1994

Fig. 6.2 The Japanese Education System

Universities in Japan are classified into three categories, national, public, and private. They were all established on the basis of the government standard of education, so the academic level of each is the same.

6.2 Secondary Education

This section compares the post-1945 state secondary education in Britain and Japan. The influence of the public schools on British industry, which lies at the heart of the ‘cultural critique’, is considered in Chapter 7.

BSA’s main motorcycle factory was located in Small Heath, Birmingham and the Meriden factory of BSA/Triumph was only 9 miles away. The Group’s motorcycle business was thus dependent upon those it could recruit from the Birmingham and Coventry secondary schools and for the local technical colleges for their ongoing technical education. Post WW2, and up to the comprehensive reorganisation of the late 1960s and early 1970s, Birmingham’s secondary education system was based on Secondary Modern Schools, Technical/ Commercial Schools and Grammar Schools of varying status. The eleven-plus examination dominated (Hopkins, 2001, p.158). While boys leaving the Grammar Schools usually had a School Certificate to present to prospective employees, those leaving the Secondary Modern Schools had no externally verified certificate of educational attainment. The Japanese secondary education system was completely overhauled, by the Americans, after the second world-war. There was a complete curriculum revision, decentralisation of controls and a major replacement of teaching personnel (Levine, 1980). The percentage of national income expended on education was increased to 5% and increased to 6% in 1975. As shown in Fig 6.2, compulsory education starts at the age of six and a pupil spends six years at Elementary School. Then follow three years at Lower Secondary School, with compulsory education finishing at the age of 15. 95%, however, go on to Upper Secondary

School, Technical Colleges, or Special Training Schools/Colleges for three years. The curriculum is relatively standard throughout the country and is based on the 'course of study' laid down by the Ministry of Education.

Prias (1987, 40 - 41), examined the mathematical attainments of typical 13-14 year old pupils in England and Japan, as reported by the International Association of Educational Achievement (IEA). In 1964, soon after the successful Japanese attack on the British motorcycle market began, the IEA ran a series of mathematical tests in a dozen countries done by a representative samples of pupils with an average age of 13 ½. 3,200 pupils in England and 2,050 in Japan took these tests. The English pupils obtained an average correct score of 19.3 and the Japanese pupils an average of 31.2. In an attempt to determine the number of years it would take for the average English pupil to reach the Japanese level, Prias referred to a parallel sample of English pupils who were ten months older on average than the test sample. They obtained an average score of 23.8, that is 4.5 points higher. At that rate of progress, if it could be maintained, it would take English pupils about two years' extra schooling, that is until they were nearly 16 years old, before they reached the average score of the 13 ½ year old Japanese pupils.

Bearing in mind that the Japanese start compulsory schooling over a year later than the English, what Japanese pupils learnt of mathematics in their first seven years of schooling (between the ages of 6 and 13) would have required nearly eleven years in England (between the ages of 5 and 16).

The available data also showed that there were fewer very low achievers in Japan. Only about 8% of Japanese pupils attained scores below those reached by the lowest quarter of English pupils.

What these tests (which were repeated in 1984 and showed that the gap between English and Japanese pupils had widened) do not indicate, however, is the absolute standard of English pupils at 16 on entering vocational training or higher education i.e. the information of greatest interest to a prospective employer.

A similar outcome arose from the parallel tests in science. Keys, (1996, 66) in his summary of the 1964 and 1980 studies, included in the introduction to his report on the Third International Mathematics and Science Study wrote, ‘The mean overall science scores of students in Britain in the 1970s and 1980s were appreciably lower than those of students in Japan’.

To provide a broader perspective, Prias (1987, 42-44) attempted the difficult task of comparing the public examinations, taken at ages 15-16 at the end of compulsory schooling, in both countries. His tentative conclusion was that ‘the Prefectural tests, which are taken by virtually all Japanese pupils, are directed on the whole to a higher level of attainment than O-level exams, which are directed approximately to our top quarter of pupils’.

It is concluded that the education in mathematics and science of BSA’s semi-skilled and skilled workers, who entered BSA in the period 1945-73 from a secondary modern school, was of a lower standard than that of their counterparts in the motorcycle companies of Japan. Notwithstanding, A. G. Cave, former BSA/Small Heath Production Manager, (Cave, Interview, 2003), considered that, whatever the deficiencies in their education may have been, they were internally well trained for the jobs required of them and that many of the so-called semi-skilled workers were up to the standards of the skilled workers. This view was supported by an ex-Instructor in the Small Heath Apprentice Training School (Cardall, Interview, 2003), but both Cave and Cardall are not impartial commentators.

This conclusion is not valid, however, in the case of the few boys who joined BSA from a Grammar School with a School Certificate. Unfortunately, not many of these boys took up a BSA Apprenticeship. (Interviews: Cardall, 2003, Godfrey, 2003, Sands, 2003, Taft, 2003).

6.3 Craft and Supervisor Training

Up to 1986, vocational training in the U.K. was a complex mis-match.

‘There was no clear, readily understandable, pattern of provision and there were significant gaps. Arrangements for progression and transfer were often not well defined or practicable. There were many barriers to access arising from attendance, entry requirements for courses and the assessments carried out by many bodies did not adequately reflect the competence required in employment. There was insufficient recognition of learning acquired in non-formal situations and there was often an insufficiently rapid response to ever changing needs’. (DeVille, 1986, p 10).

The training of engineering craftsmen, as opposed to semi-skilled workers and operatives, was undertaken within a five year, on the job, apprenticeship during the years 15-21, in which the Trade Unions took a controlling interest. As no one who had not completed an apprenticeship was allowed to practice a particular trade, the craft unions effectively regulated the supply of craftsmen. No school qualifications were necessary and, in marked contrast to the German and Japanese systems, the only requirement was regular attendance to work alongside a craftsman who provided the bulk of the training one-to-one. Some of the better employers though, such as BSA, provided apprentice training schools to give basic skills training and part-time day release to attend a technical college.

The courses offered by the Birmingham technical colleges led to the appropriate Certificate of the City and Guilds of London Institute. The completion, however, of these courses by craftsmen working in industry and BSA in particular, rather than working on their own account, was low (Interview, Cardall, 2003).

(It is interesting to note that, thirty plus years after the collapse of BSA, the concerns about the level of craft skills and the availability of good craftsmen had intensified to the extent that H.M. Treasury felt it necessary to commission a major review (Leitch, 2006) of the deficiencies, which recommended that the UK must urgently raise achievements at all levels and aim to become a world leader in skills by 2020)

Much of the information that follows about vocational training within BSA has been derived from interviews with ex-Instructors from the Company's Apprentice Training School or craftsmen/engineers who had passed through it (Interviews: Godfrey, 2003, Cardall, 2003, Tallboys, 2003, Taft, 2003).

BSA followed the established practices of the UK engineering industry which were based on a sharp distinction between craftsmen and technicians (who were usually members of the craft Trade Unions) and the semi-skilled and unskilled workers (who were members of the Transport and General Workers Union). Other than during 1939-45, when wartime 'dilution' was allowed by the craft unions, it was not possible to become a 'craftsman' other than by serving a craft apprenticeship between the ages of 15-20. This rule prevented a semi-skilled worker from being upgraded, regardless of the skills and potential he may have demonstrated (Author, Personal Experience).

BSA trained craft and latterly graduate apprentices. The vocational training of the craft apprentices was supplemented by part-time day release to take the appropriate City and Guilds course at a local technical college. Those destined for the drawing office and ultimately a professional engineering career, were entered for the part-time Ordinary National Certificate in Mechanical Engineering. Graduate apprentices, who started with BSA at age 21-22, having taken a degree in mechanical engineering at University or

College of Advanced Technology, only spent a few weeks in the Apprentice Training School, gaining an appreciation of craft skills as part of the Graduate Training requirements of the Institution of Mechanical Engineers. (Interview, Cardall, 2003). Apprentices were selected by Personal/Training Department; the Instructors in the Apprentice Training School were not involved. The demand for places exceeded the number of places available. The apprentices were organised into eight groups: fitting (two), lathes/capston lathes (three), horizontal mills, vertical mills and welding and each group was periodically rotated. The apprentices did not always start in the Training Centre e.g. an ex- apprentice wrote: 'I spent my first five months in the Works Engineer's (maintenance) office where I made the tea, delivered post etc throughout the factory and took meter readings – in short a general dogs body'. (*Appendix 2*).

From 1960 onwards, the syllabus in the Apprentice Training School was laid down by the E.I.T.B. (Engineering Industry Training Board). This prescribed stage tests, which could be retaken but, crucially, passing the tests was not a condition of satisfactorily completing an apprenticeship. This meant that a boy could become a recognised craftsman at 21 without ever having to take a go/no-go examination or practical test on which his future depended. The possession of a relevant City and Guilds certificate, however, was seen by the craft unions as an add-on extra, not a pre-condition, of becoming a craftsman. One ex-Instructor argued that the standard of work reached by the apprentices was so high that the tests were redundant. (Cardell, Interview, September 2003. *Appendix 2*). The apprentices attended a local Technical College on part-time day release. In the subsequent years of their apprenticeship, the boys were further trained on-the-job in various works or office locations by senior craftsmen or draughtsmen, who regularly reported progress to Personnel/Training Department, which organised the rotation between jobs every 3 to 9

months. An ex-trainee, however, who was a BSA apprentice 1952-56, was not impressed with this part of his training and left the Small Heath factory immediately after completing his apprenticeship. (Taft, Interview, 2003).

Apprentices would become skilled craftsmen in the toolroom, tool setters on production, quality inspectors or draughtsmen. An ex-apprentice wrote: 'I was not aware of any reason why semi-skilled, non apprentices, could not progress to similar positions, other than, perhaps, there was a pool of ex-apprentices ready to fill these posts' (Godfrey, Interview,). In 1950, BSA established an endowment fund to provide Scholarships and Bursaries to give practical encouragement to youths, whose aptitude appeared to merit a more advanced education. (BSA Annual Report, 1949/50, p.5). This was the first indication that the Directors recognised the need to make good use of the academic talents of their apprentices.

Whilst the same training principles applied at the Meridan factory, John Cardall, who moved from Small Heath in 1969 to become a Training Officer there, was critical of the discipline of the apprentices in the works (Interview, 2003). This reflected the poor industrial relations, the power of the shop stewards and the many unofficial disputes occurring at Meriden at that time. (Koerner,1990).

The semi-skilled workers who assembled the motorbikes had minimum training on-the-job. 'watch me.... and then do it yourself'.....' (Cardall, Interview, September 2003)

The intensity and standards of Japanese industrial training, based on initially better educational achievements, were significantly higher than those in Birmingham generally and BSA in particular. Lorrinan (1994, 106-34) describes Japanese vocational training and their belief that this lies at the heart of Japan's economic success. They stress the commitment of Japanese companies and individual managers to exceptionally high quality

in-house training, and the benefits it brings, not least the productivity improvements that flow from suggestions from a committed workforce (p. 88). Two quotations direct from Japanese authorities add weight these assertions:

‘Only by drawing on the combined brainpower of all its employees can a firm face the turbulence and constraints of today’s environment. This is why our large companies give their employees three to four times more training than yours. That is why they foster within the firm such intensive exchange and communication. This is why they constantly seek everybody’s suggestions and why they demand from the educational system increasing numbers of graduates, as well as a bright and well educated generalists, because these are the life blood of industry’.](Konosuka Matsushita, President, Matsushita, speaking to a delegation of American and European Managers, in 1979).

‘At the start of every calendar year, a questionnaire is sent to our engineers to self-appraise their levels of technology. A superior reviews each completed questionnaire and discusses it with the engineer concerned. As a result, an objective assessment of the levels of technology for each engineer is obtained. Based on this, each engineer is expected to plan a year-long self-tutoring schedule and to report the results to a superior at the end of the year. Under this system each engineer is urged to become an engineer with balanced technological knowledge’. (Kishida, S. et al, 127).

Levine (1980) shows that the above were not isolated examples and concludes that the private sector in Japan has played the preponderant role in human resource development for modern industry. This is in marked contrast with the UK.

Supervisors are the key link between operators and craftsmen and production management. Whilst the importance of ensuring that first line supervisors in industry are properly trained for their difficult job is now recognised in the UK, this has not always been so. For a long time supervisory training took a back seat and was limited to short courses and whatever in-house training the employer might provide.

Latterly, technical colleges began to offer courses leading to the award of the Certificate in Foremanship and Works Supervision, based on the effective war time Training Within Industry (TWI) programme, but it is not thought that this course attracted many part-time

students or was particularly valued by employers, other than the large companies in the chemical and electrical industries (Wheeler, Private Communication, 2003).

The attitude to supervisor selection and training in Japan is markedly different to that in Britain. Rigorous in-house assessment and training are the norm and ensure competence in the role.(NEDC/MSC, 1984; MSC/NEDC/BIM, 1987).

It is concluded that, as with secondary education, the standard of vocational training of BSA's craftsmen and supervisors was of a lower standard than that received by their counterparts in Japan. Due to the less technically demanding motorcycle production/assembly processes employed by BSA (BCG, 1975, 56). Fairclough, 1986, p.214), compared with those used in Japan (BCG,1975, 59), the demands made on the skilled workers at Small Heath and Meriden were less than those at Honda, where the ability to set up and maintain highly automated manufacturing and motorcycle assembly lines required electronic, mechanical and metrological skills of the highest order. In comparison, BSA had general purpose machine tools, 60% of which were more than twenty years old (BCG, 1975, 57).

6.4 Professional Engineering

In the UK, and similarly in the US and the EU, a Chartered Engineer is defined as one who is competent by virtue of his fundamental education and training to apply the scientific method and outlook to the solution of problems and to assume personal responsibility for the development and application of engineering techniques especially in research, designing, manufacturing, superintending and managing. His/her work is predominantly intellectual and varied, and not of a routine or physical character, but requires the exercise of original thought and, if necessary, the responsibility for supervising the technical and administrative work of others.

His/her education will have been such as to make him/her capable of closely and continuously following all progress in his/her branch of engineering science by consulting newly published work on a world-wide basis, assimilating this information and applying it independently. He/she must be able to make contributions to the development of engineering science and its application.

By virtue of his/her education he/she will have acquired a broad and general appreciation of the engineering science as well as a thorough insight into the special features of his/her own branch (e.g. mechanical or production engineering) with the result that, in due time, he/she can give authoritative advice, or be responsible for the direction of important tasks in his/her branch. (Institution of Mechanical Engineers, 1956).

The status of a chartered mechanical engineer was marked by his/her membership of 'The Institution of Mechanical Engineers' (Rolt, 1967, 130). Up to 1980 the successive levels of membership were Student, Graduate, Associate Member, Member and Fellow.

Although the Institution had its own three part examination for entry, in the majority of cases its educational requirements were met by exemption by taking an Honours Degree, a Higher National Diploma or Higher National Certificate (endorsed), all in mechanical or production engineering. As well as the educational requirements, applicants were required to have completed a practical training programme arranged in-house by their employer.

Most of BSA's senior engineers were Members of the Institution having qualified for membership via the HNC/HND route. The company did not seriously recruit engineers from universities until 1962 (Hopwood, 1981, Ryerson, 1980, Wright 1992) but thereafter Eric Turner was able to report: 'during recent years it has been our policy to recruit a substantial number of University graduates' (Annual Report, 1964-65)

While the term ‘Engineering Technician’ was not in vogue in the 1960s , it has come to mean those who provide technical support to professional engineers e.g. designers, experimental and development engineers, laboratory and research workers and test-rig engineers. Typically an engineering technician would have a National Certificate, a Higher National Certificate without endorsement, or an Intermediate BSc(Eng) (Author, Personal Experience).

Just before WW2 production engineering began to be acknowledged as a separate branch of engineering and not just an aspect of mechanical engineering recognised by a HND/HNC endorsement. The Institution of Production Engineers was also given an enhanced status alongside the senior chartered engineering institutions.

‘A professional production engineer is one who is competent by reason of education, industrial training and experience in technology and management to determine the factors involved in the manufacture of a product; to specify the means by which manufacture is to be achieved and to direct the processes of production so that the co-ordination of men, machines and materials is the most efficient with regard to quantity, quality and cost’ (Birmingham Central Technical College, Prospectus,1964-65).

Production engineering is thus concerned with design for economic production and the efficient translation of functional designs into actual products, whether they be capital goods such as machinery or consumable products. The Government’s 1980 enquiry into the Engineering Profession took the view that production management is the most difficult work in industry, needing greater ability than any other work therein. It is also the least glamorous: those in production work in less pleasant physical conditions than their colleagues: they are in the front line in dealing with industrial relations problems and, in Britain, they tend not to carry much weight in strategic decision making, despite their central responsibilities. (Finneston,1980, p 30). This was true within BSA and lies at the heart of the Company’s demise.

Education for production engineers, which previously had been at the engineering technician, draughtsman and craft levels, was uplifted and National/Higher National Certificates in Production Engineering and specialist short courses began to become available after the war in the leading Technical Colleges. Little similar movement took place in the mechanical engineering departments of the Universities and University Colleges, but there was, at Birmingham University, a post-graduate course in Production Engineering, run by the Mechanical Engineering Department. The late arrival of production engineering on the British academic scene, and the initially low status given to it, was an important factor in the demise of BSA.

Mechanical engineering degree courses in the then relatively few Universities (as opposed to the University Colleges which taught B.Sc.(Eng) London as an external degree) were different from the HND/HNC courses taught by the then Technical Colleges, in that they were conceptual, intellectual and mathematical, rather than design orientated and practical. By international standards the internal university engineering degree courses would have been better described as 'engineering science' as the emphasis was more on analysis than prescription. (Author: Personal Experience). The B.Sc (Eng.)London, degree was taught by the external University Colleges as well as the colleges of London University. It was also offered, both full and part time, by the larger Technical Colleges, e.g. Birmingham Central Technical College.

From 1950-65 a few Technical State Scholarships were awarded on the results of the National and Higher National Certificates, to enable the most able students to transfer from a Technical College to a University Engineering Department.

BSA was an engineering company that stood or fell on the quality of its engineering. Its engineers, designers, design draughtsmen and production/works engineers were uniformly

apprentice trained in parallel with part-time technical education in a Birmingham Technical College. The well-established route was an Ordinary and then Higher National Certificate in Mechanical, or latterly, Production Engineering, followed by the Endorsements necessary to enter the Institution of Mechanical Engineers. (Author, Personal Experience). One of the BSA apprentices who took an ONC transferred on to the external BSc (Eng), London, course (Interview. P. Oppenheimer, 2003) but, so far as can be ascertained, no BSA engineers were awarded a Technical State Scholarship. Those destined to become design draughtsmen finished their technical education at the ONC level, designers went on to take HNC and managers qualified for professional status i.e. as an Associate Member, and then, hopefully, as a Member of the Institution of Mechanical Engineers. (Author: Personal Experience).

An alternative potential source of high grade engineering talent to BSA was the mechanical and production engineering graduates of (particularly) Birmingham and other Universities but up to the creation of the Colleges of Advanced Technology and the expansion of the Universities in the mid-sixties these were relatively few in number. Anyway, BSA, like many other engineering and motor vehicle companies in the UK, had a strong preference for apprentice-trained engineers and managers. It was not until 1962 that the Company started to recruit graduate engineers from universities on a systematic basis. The social and professional status of British engineers, however, was less than those in Germany, and Japan which inhibited the recruitment of high quality people (Hutton, 1981; Miller, 1979, p.63).

Japanese engineers and engineering technicians joined their company from a highly pressurised environment starting in primary schools (Lorrinan, 1994, pp. 46-47) and lived and worked in a very different cultural environment to that of the US and Western Europe.

Japanese universities were more theoretical and academic than many employers liked. Employers complained that they had to train new graduates from scratch. Entrance examinations demanded a high level of skills across a wide range of subjects including compulsory mathematics, Japanese and a foreign language, after which the first two years of a four-year engineering course remained general with specialisation deferred until the third year. Unlike the academic nature of the teaching syllabus, research in Japanese universities was skewed towards applications rather than the fundamental research of most British university engineering departments. (BIM/MSC/NEDC, 1987, 85).

The relationship between annual growth rates of GNP and number of university students per 1000 primary school students in industrialised nations, was examined by Kaser (1966). Japan topped the table (7% pa growth: 48 students) while England & Wales were at the bottom (2% growth: 20 students). Note, however, that economic growth could be as much a cause as a consequence of a high or a low ranking in the provision of higher education. The Japanese engineer and engineering technician may have graduated with less detailed engineering knowledge than his counterparts in Western Europe but it was when he/she started his induction and training that he began to forge ahead (Lorriman, 1994, 106-133). He/she maintained, or even extended this lead, as throughout his/her career, to whatever level he/she may rise, will be working for a chief who is committed to his professional development. 'The most important responsibility of a Japanese manager is the development of his staff' (Lorriman 1994, p112).

A distinction has to be made between the work of the design or production engineer and overall design and system management, which is the responsibility of senior technical management. There is also a key difference between design based on sound engineering training and experience, and the innate 'flair' of the individual design engineer. BSA was

blessed by several engineers with real flair e.g. Edward Turner, as an engineer not manager, (Hopwood1981,16), or Bert Hopwood (Ryerson,1980,177). But the weakness of BSA's motorcycle division was in design management and the failure to integrate marketing with conceptual design and production engineering with detailed design. There is little evidence that the education and training of BSA's detailed design engineers (generally to HNC standard) was inadequate for their role or that they were significantly less well educated and trained than their Japanese counterparts.

It was in the adoption of the then rapidly evolving discipline of Production Engineering that the biggest differences between BSA and Honda/Kawasaki/Suzuki occurred (BCG,1975, p 59). The contrast between the motorcycle production and assembly systems at Honda (BCG, 1975, p 60) and BSA/Triumph (Fairclough,1986, p 214) was stark.

Although Birmingham University and Birmingham College of Advanced Technology were in the lead in the UK in production engineering, the country as a whole, academically and in practice, was well behind Japan (and Germany) in this vital area.

6.5. Management Education and Training

The poor standards of post-war management in UK manufacturing industries (with the exception of the chemical industry) is described in Barnett (1986, pp 293-294). The weaknesses of British management education and training at that time are described in Franks,(1963) and Wilson, J.(1995). Helpful comments on the training and culture of U.K. managers are also made by Coates (1994).

There are several routes to a career in industrial management, including promotion from the shop floor, entry as trainee managers from universities and specialists (notably accountants and professional engineers) who move into general management positions. Academic qualifications, however, are not the sole criterion for successful management:

the ability to apply knowledge and personal qualities of motivation, leadership, drive and stamina are equally important. (Author, Personal Experience).

The passing of the Industrial Training Act, 1964, and the inclusion of managers and management training within the scope of the Act, represented the Government's belief that, mid-decade, the situation in this area was unsatisfactory. It was estimated that less than one per cent of managers in British industry received any form of external management training (PE P, 1965, p.234).

Mechanical engineers, including several senior engineers in BSA, who had taken National and Higher Certificates (with endorsements) and who wished to obtain membership of the Institution of Mechanical Engineers, were required to take a 'Part C' paper in Industrial Administration. The syllabus for this paper dealt with management practices in the engineering industry and was very basic (Author, Personal Experience). Some of the young engineers in manufacturing industry also went on to take an additional part-time course in works accounting and the examinations of the then Institute of Cost and Works Accountants (Wheeler, 2003, Private Communication).

The Universities made only a modest contribution to management education in this period. Apart from some undergraduate courses in business and commercial studies, notably at Birmingham and Manchester, only a handful of universities and university colleges established either full-time or part-time (post experience) courses in management. These were not well supported, not least because of the strong academic orientation of the curricula on offer (Aldcroft, 1992, p.110).

British directors and senior managers gradually accepted that good structured training for operators, craftsmen, supervisors, technicians and engineers was highly desirable, if not essential, for survival. The notion, however, that managers and directors also needed high

quality education, training, and development was anathema to most industrial directors outside the few British international engineering companies and those working in large multinational companies (MSC/NEDC/BIM, 1987, p 13).

It also became appreciated that Britain lacked technical or vocational institutions such as MIT or Cal Tech in the USA, the Grand Ecoles in France, or the Technische Hochschulen in Germany. In particular:

Operational research, linear programming, resource allocation, strategic and business planning, decision theory and its applications were established subjects of research and graduate teaching in most major universities in the U.S. and in some universities of Western Europe. British universities had failed to develop these technological subjects on any comparable scale, with the result that the U.K. was lagging behind and in danger of becoming seriously out of touch with modern developments' (Franks, 1963, para 25).

Thus, following two major reports, (Robbins, 1963); Franks, 1963), both of which supported expansion of management education, two post-graduate business schools, financed jointly by the state and private enterprise and modelled on Harvard, were set up in London and Manchester. Thereafter a large number of other institutions jumped on to the business education bandwagon, offering a variety of courses in management and business studies of varying quality. Unfortunately, this upsurge came too late for BSA, a company that had been in great need of able and well-trained managers.

As well as education, social and cultural factors had a major influence on the performance of UK management. The social profile of British management for most of the 20th century was a uniquely divided one: lower class and with few formal qualifications at the bottom: at the top, heavily and disproportionately drawn from upper-middle class circles and Oxbridge. It was more open to talent in retailing and the chemical/oil industries than in engineering and more exclusive in its recruitment patterns at the powerful end of the economic chain – banking and finance.

‘In that way the broad recruitment pattern was programmed to reproduce industrial conservatism and status anxiety in the middle ranks of the managerial hierarchy; denying middle managers the protection of formal qualifications and professional standing, yet subordinating them to senior strata who were visibly the scions of wider patterns of privilege and status’. (Fidler, 1981, pp 181- 6).

In Japan the management cadre was dominated by university graduates, but there was an almost complete absence of post-graduate business degrees. There was also a limited range of professional associations awarding their own qualifications for use in a business context. In a business environment, attuned to low inter-firm mobility, it was logical that that business should not place a high value on external qualifications (Lorriman, 1994, pp 70-71).

Within large Japanese companies, management training started with an intensive and rigorous selection process with a lot of attention paid to personality characteristics. There was keen competition, between large firms, to attract the best graduates from the prestigious universities. Thereafter, the responsibility for the training of the individual, however high in the hierarchy he/she may stand, lay with his/her manager, backed by periodic rigorous assessment.

The key feature of Japanese supervisory and management training was OJT i.e. ‘on-the-job-training’, defined as ‘someone who possesses knowledge teaching one who lacks that knowledge’, which depends heavily on acceptance by Japanese managers and supervisors, that teaching and development of their subordinates is a key part of their role.

A set of characteristic elements of OJT for Japanese management and supervisors was issued soon after WW2 by the Japan Industrial and Vocational Training Association and regularly revised thereafter:

- Setting guidelines for development Coaching for achieving objectives

- | | |
|---------------------------------------|-------------------------------------|
| • Designing plans for development | Promotion of small group activities |
| • Thoroughness of follow through | Evaluation of effectiveness |
| • Fixed period interview and guidance | Delegation of authority |
| • Improving job assignment | Assignment of specific tasks |
| • Conducting problem-solving meetings | Encouraging self control. |
| • Job redesign. | (JVTA, 1985). |

In the absence of Harvard style Business Schools the majority of off-site management training in Japan was organised by a range of management and training organisations such as the Japan Management Association, the Nippon Administrative Management Association, the Japan Productivity Association and the Japan Industrial and Vocational and Training Organisation. They inherited, developed and expanded a set of training programmes, originally introduced by the Americans during the occupation (1945-52). These programmes included the Civil Communications Section Management Programme, the Management Training Programme and Training Within Industry (TWI), designed for supervisor training in Britain and the US during the war. By 1954, 340,000 Japanese had attended the TWI course (BIM/MSD/NEDC, 1987, p.93). In contrast, TWI fell into disuse in the UK after 1945 (J Wheeler, Personal Communication, 2003).

The conclusions that may be drawn from the above overall comparative analysis are:

- The education and vocational training post WW2 of the operators, semi-skilled men, skilled men and their supervisors in BSA fell significantly short of the attainments of those in their motorcycle competitor firms in Japan.
- The engineering standards reached by BSA's motorcycle design engineers and draughtsmen approached that attained by those by their motorcycle competitor firms in Japan.

- The professional engineering standards reached by BSAs's engineering managers and works managers, responsible for motorcycle design and production short of those in the Japanese motorcycle firms, particularly so in the field of production engineering. These deficiencies were partly compensated by design flair.
- The educational, professional and managerial standards of the Group's Directors responsible for overseeing the performance of the motor cycle division fell significantly short of those in the Japanese motorcycle companies.

How did the weaknesses of the British education and training system (relative to the Japanese) influence the competitive position of BSA? There are several examples:

- The intellectual effort required to analyse the behaviour of global market for motorcycles and understand the greater importance of market share over a single year's profits, was beyond the management of the company. This was undoubtedly available in the UK but certainly not within BSA or its motorcycle division
- the inability of BSA to apply the new (1960s) thinking on quality assurance and quality control and the concept of 'zero defects', to motorcycle manufacture, to ensure the reliability of their machines.
- the lack of understanding of modern production engineering techniques such that no proposal to match Japanese manufacturing technology (*Appendix G*) was ever put before the Group Board
- the installation in 1967 of a computer controlled motorcycle production and spares programming system at Small Heath that failed to perform (Hopwood, 1981), and precipitated the 1968 production crisis.

In each of these cases a lack of professional capability, which is function of education, training and hard experience, was the basic problem.

6.6 Education of BSA Chairmen and Directors

Appendix 3 tabulates the education and training of the Chairmen, Managing Directors and Directors (both Executive and Non-Executive) of the BSA Group from the mid-1930s on and the post-war Managing Directors of the Motorcycle Division.

All but one of the Chairmen were educated at an English Public School or Scottish day school equivalent and the exception (Eric Turner, 1963-71) had been at a good Grammar School. Only one of the Chairmen, (Sangster, 1956-63), had an engineering background or any knowledge of motor cycles. Only one of the post-war Chairmen (the stop-gap Lord Shawcross, 1971-73) had attended university. Three were professionally qualified (Sangster, Chartered Engineer; Turner, Chartered Accountant and Shawcross, Barrister), but the longest serving, Docker (1940-56), had no qualifications.

Due to the long standing BSA practice of an Executive Chairman acting as his own Managing Director there was only one Group MD as such, Brian Eustace (1971-73), with Lord Shawcross as his Non- Executive Chairman.

In the 110 years life of BSA, no company employee made it to Chairman. James Leek, a grammar school boy, and a production engineer, was MD of the Motorcycle Division (1945- 56) and, tellingly, of all the Group and Divisional Directors, he was held in the greatest respect (Wright, 1992, 49; Hopwood, 1981, 95; Ryerson, 1980, 143).

Six (out of thirteen) of the non-executive directors were educated at public school. None of the executive directors but ten out of the thirteen non-executive directors, had been to university but only one of them had a higher degree. This is partially explained by a much lower proportion of school leavers going to university up to 1950 than nowadays and the fact that the majority of trainee accountants, and a significant proportion of trainee solicitors, at that time, took Articles on leaving school after taking a School or Higher

School Certificate. These figures may usefully be compared with the results of a 1952 survey by Barnett (2001, 285) which determined that of 1243 Directors in 445 large joint – stock companies, 58% had been educated at a public school and 20% were Oxbridge graduates.

Overall, the management of BSA in the 1960's conformed with the analysis of the cultural critique i.e. that the commanding heights were the preserve of those educated at public schools, (Sampson, 1971, inset p.590) that grammar school boys could reach the boardroom, but generally manned the ranks of senior management and secondary school boys, who had served an apprenticeship were kept down to middle management and below unless they were of quite exceptional drive and ability (Barnett, 2001, 285-289).

Engineers were different. With the exception of a few enlightened firms (e.g. Rolls Royce Ltd), the UK engineering industry believed, up until about 1960, that the only training for a mechanical engineer of any merit was a craft or student apprenticeship coupled with the ONC/HNC route to corporate membership of the Institution of Mechanical Engineers (Author, Personal Experience). The first graduate engineers from the universities joined BSA in 1962, sixty years after Brunner Mond Ltd, with their German antecedents, recruited from this source (Reader, 1970, 93).

Whether the class structure in England had an effect on how BSA was managed in a competitive international industry is an important issue. Perhaps the most significant effect was the lack of motorcycle product knowledge in the higher reaches of the Company after Jack Sangster stood down as Chairman in 1960. The Eric Turner/ Harry Sturgeon (1964-67), Eric Turner/Lionel Jofeh (1967-71) and Lord Shawcross/ Brian Eustace (1971-73) directing teams meant that for the last thirteen years of BSA's existence it was being

driven by men who had never previously worked for the Company or knew anything about motorcycles.

Three times the Company had the opportunity to put this right, but each time they went outside and recruited Sturgeon (1964), Jofeh (1967) and Eustace (1971). One cannot think of more de-motivating signals to have sent to BSA's aspiring senior and middle managers (BSA Annual Reports).

Making the reasonable assumption that they followed their national norm and corporate practice, the contrast between the directors and senior managers of BSA and their major overseas competitor companies (BMW, Honda, Moto-Guzzi etc) could hardly be greater. Within the UK, it was possible to make the following direct comparison between the Directors of BSA and those of Imperial Metals Industries Ltd in 1966.

6.7 BSA vv IMI: Education and Experience of Directors

It is instructive to compare the education, training and experience of the Directors of BSA with the Directors of another Birmingham company, IMI Ltd, which was floated as a public company out of ICI.'s Metals Division in 1966.

The headquarters and principal manufacturing site of both companies were two miles apart in Birmingham. BSA were at Small Heath and IMI were at Witton; they thus recruited their labour force from the inner city area. The two companies had a similar product range (excluding motorcycles) and exported a significant proportion of their output. BSA had been an independent public company for the previous eighty years but between 1926 and 1966 IMI had been managed as a subsidiary of a large chemical company. IMI was the larger company, but not to the extent that would invalidate meaningful comparisons.

Appendix 12 tabulates the education, training and professional experience of the directors of both BSA and ICI's Metal's Division (IMI Ltd) in 1966. The impression gained from

this table is of the relative (to BSA) ‘quality’ of IMI.’s Directors, judged by the highest non-industry professional standards, and the time they had worked in the business. There were two other major differences between the two companies. IMI’s executive directors were exclusively concerned with running their company but only one of BSA’s directors, Harry Sturgeon, was concerned with the core business full time and he had only two years experience of motorcycle design and manufacture. The implications for BSA of the latter are examined in Chapter 2.1.1, as is their practice of having an Executive Chairman who was his own Managing Director, as opposed to I.M.I.’s Non Executive Chairman/Executive M.D. set up.

Given that the motorcycle business was the largest division and biggest profit earner it is extraordinary that the BSA Board allowed itself to become so short of knowledge and experience of motorcycle design, manufacture, and sales. The only Executive Directors, in 1966, with motor cycle experience were:

Eric Turner,	Exec-Chairman 6 years	(but only as Chairman of the Group).
H.G.Sturgeon	Executive	2 years

but they did have the support of:

J.Y. Sangster	Non-Executive	30 plus years
Edward Turner	Non-Executive	30 plus years

Both were close to final retirement and far less than objective when considering strategy for the Triumph marque and Meriden factory compared with BSA/Small Heath.

Contrast this with the directors of IMI. The four executive directors had spent almost all their professional life in the business. One (Michael Clapham) of the non-executive directors, and the chairman and two of the other non- executive directors had several years of strategic oversight of the business by virtue of being directors of the parent company.

The educational standards and experience of the IMI directors far exceeded those of the counterparts at BSA. The Chairman, Peter Menzies, who was a mathematician, had come high in the examination for the Senior Civil Service and entered the Inland Revenue; the Managing Director, St John Elstub, had a First in Mechanical Engineering and had been part of the UK's contribution to the atomic bomb project. Bill Lake was a distinguished metallurgist, who had taken his PhD at Birmingham University. Michael Clapham, destined to become President of the CBI, was a classical scholar who had run Kynoch, one of ICI's core businesses and Metals Division itself, before being promoted to the ICI. Main Board (Who's Who, 1967: B'ham Post & Mail Year Book, 1996.).

This management team was in the tradition of ICI Ltd which can be traced back to Brunner Mond Ltd and back even further to Dr Ludwig Mond who brought from Germany in 1862 the belief that technology-based companies should be managed by highly qualified scientists and engineers. (Reader, 1970, pp 37-39). It could be argued that ICI and Metals Division/IMI disproved the 'cultural critique' as its Directors were, in the main, drawn from the public schools (Marlborough, Oundle, Rugby, Taunton) and were outstandingly successful in a technically advanced industry. This example, however, would support Rubenstein (1993, p.136) that not all of the most able public school boys, including classicists, shunned industry, as also demonstrated by the responses to the questionnaire in Chapter 7. A more objective conclusion, is therefore, that BSA's Board fell far short of the combination of intellectual ability, technical mastery of its main product (i.e. motorcycles) and its manufacturing processes, and the long experience of the business and markets necessary to prosper against strong international competition. IMI prospered mightily, while BSA collapsed in ignominy.

While the above comparison almost uniformly favours IMI, the profit and turnover per employee in 1966 (for IMI) and 1966/67 (for BSA) are in favour of BSA (*Appendix 12*).

Financial Year	BSA 1996/67	IMI 1966
Profit per employee	£387	£330
Turnover per employee	£5470	£4198

In 1967/68, while BSA maintained its profitability, thereafter it went into free fall as the problems of the motorcycle division (by far the largest contributor to profits) multiplied. ICI, and later IMI, demonstrated that the British education system could produce potential world-class industrial managers. Nationally they were few in number and had to be convinced that manufacturing could offer a career that matched, in terms of interest, responsibility and reward the glittering prizes offered by the Foreign Office, the BBC and the City. This issue is examined further in Chapter 7.

6.8 Conclusions

This chapter has shown the significant advantages that the Japanese education and vocational training systems brought to their motorcycle companies, which were reinforced by their superb in-house training and personnel development schemes.

Whatever the defects of British education may have been, there is ample evidence of the apathy of employers over more than a century towards education and vocational training (Sanderson, 1999, 105-106), paralleled with frequent complaints about skills shortages (BSA Annual Reports, 1946-54) and the poor quality of recruits. The Industrial Training Act of 1964, which imposed a financial incentive to provide high quality training, was opposed by employers, who welcomed its demise. BSA, however, by the mid-sixties were ultimately convinced of the value of good training and invested in well equipped.

Apprentice Training Schools. The quality (relative to Japan and Germany) of the products of these schools, however, was limited by the sub-standard (in international terms) education of their entry and Trade Union objections to skills testing.

CHAPTER 7

THE CULTURE OF ENGLISH PUBLIC SCHOOLS AND CAREER CHOICE

7.1 Literature on Public Schools

Chapter 6 compared the British education and vocational training systems with those in Japan, tabulated the education and training of BSA's Directors and compared their education, training and experience with those of a similar Birmingham engineering company, IMI Ltd. This chapter examines a further feature of education in Britain highlighted by the 'cultural critique' (*Chapter 1*); the culture of the public (i.e. independent) schools, their influence on the attitudes and career choice of their most able boys and how this may have affected the performance of manufacturing industry in the twentieth century, particularly BSA.

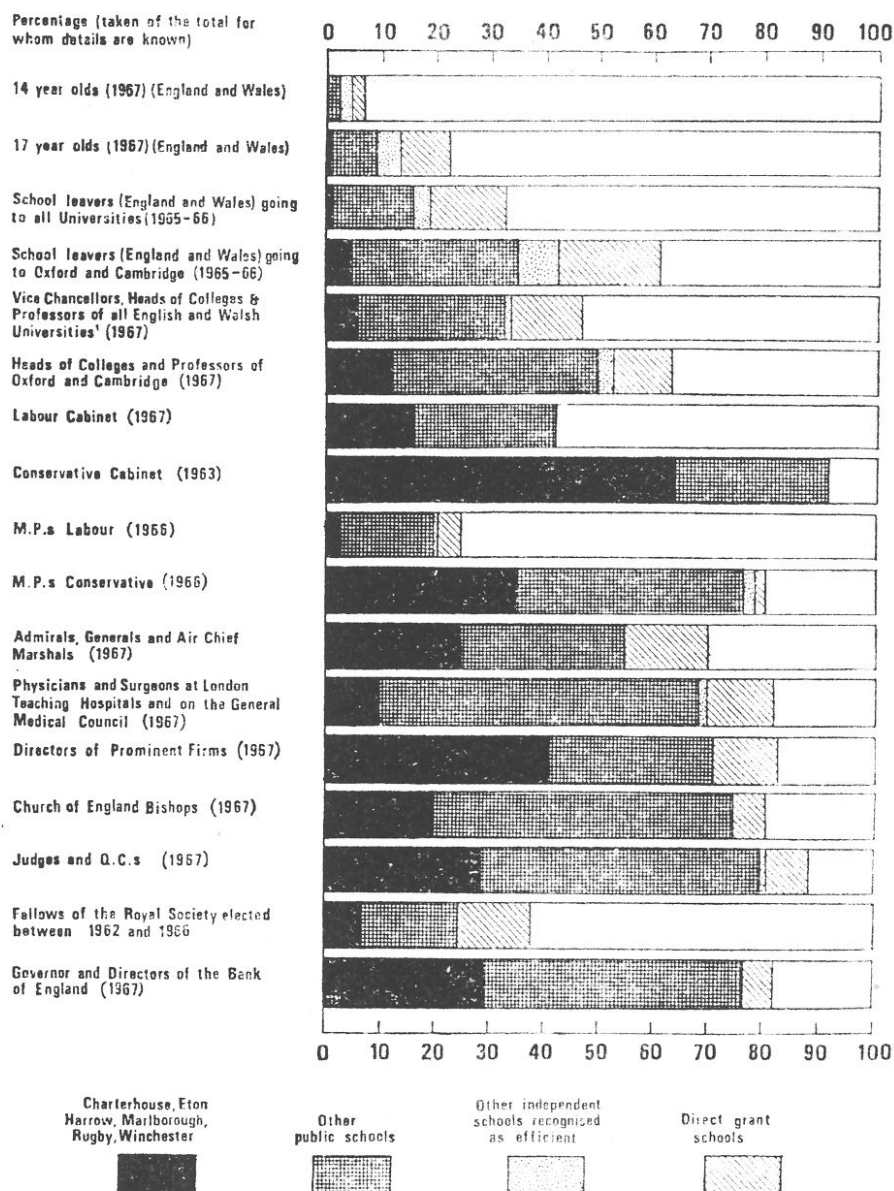
During the nineteenth and much of the twentieth century, the growing number of public schools dominated secondary education in Britain. They became the preserve of those who held a certain position in society or who could obtain entry by paying the fees. They attracted many of the best teachers and dominated the entry into Oxford and Cambridge (Newsom, 1968, 17). Fig. 7.1 shows the extent of this domination in 1968 by charting the proportions of independent and direct grant school pupils at various stages of education compared with the proportions from those schools in a selection of professions and positions. (Sampson, 1971, 131). They still have a major impact, not least in terms of entrance to Oxbridge and the Russell Group of Universities.

The literature on the history, ethos and achievements of the public schools is extensive (e.g. Newsom (1968); Ward (1967); Gardner (1973); Lawson (1987); Mathieson and Berbaum (1988); Rae (1982); Sanderson (1999); Walker (1955); Weinberg (1967)); as

well as the authors of the cultural critique Wiener (1981), Barnett (1986) and Sampson (1971) and their detractor Rubenstein (1993). Rubenstein summarised Weiner's assertions that an anti- industrial spirit permeated every sphere of British life and that the chief agent for transmitting this anti-business culture was the educational system, particularly the public schools (1981,138), whilst Mathieson and Berbaum asserted that an arts based Christian notion of gentlemanliness, which excluded and even opposed science, technology and commerce came to dominate British high status educational institutions in the nineteenth century (1988, 128). A consequence of this was the second- rate status it conferred on vocational, technical and commercial training for a living.

The public schools are those schools whose Heads are members of the Headmasters' Conference (HMC). In 1960 212 independent, selective, fee-paying schools were members of HMC. (Whitaker's Almanac, 1960, pp.370 and 420). The English membership included the Headmasters of both traditional boarding schools and prestigious inner-city grammar schools. In 1967, 3.4% of secondary school pupils were being educated in public schools (Newsom, 1968, 42).

THE PROPORTIONS OF INDEPENDENT AND DIRECT GRANT SCHOOL PUPILS AT VARIOUS STAGES OF EDUCATION COMPARED WITH THE PROPORTIONS FROM THOSE SCHOOLS IN A SELECTION OF PROFESSIONS AND POSITIONS



Notes

1. In this and the following professions or positions former pupils of Scottish schools are included. Pupils at Scottish schools have not, however, been included in the totals of those at present receiving education because the categories of school in Scotland do not come within the same definitions as those in England and Wales. Inclusion of Scottish figures would not in any case significantly alter the diagram.

Copied from:
 Sampson, A., *The New Anatomy of Britain*
 London etc: Hodder and Stoughton, 1971

Fig. 7.1 Domination of Public Schools

The academic and social status of each school varied considerably. At the core were the nine schools considered by the Clarendon Commission (Clarendon, 1864), Eton, Winchester, Westminster, Charterhouse, St Paul's, Merchant Taylor's, Harrow, Rugby and Shrewsbury. Then there were the schools that came into prominence in the 19th century, such as Cheltenham, Clifton, Marlborough, Oundle, Repton, Wellington, and Uppingham. The great city direct-grant grammar schools, such as King Edward's School Birmingham, Manchester Grammar School and Bradford Grammar School are also members of the Headmasters' Conference.

From 1945 onwards, during post war reconstruction and the emergence of the welfare state, the public schools came under criticism concerning their alleged influence on British society and for being at the heart of a cycle of privilege whereby those in influential, elite positions in society, ensured that their sons would also enjoy the advantages of high status occupations. As the criticism mounted, in 1962 HMC drew up a 'Programme for Action' to dispel what they termed 'ten popular myths that needed to be scotched' (Rae, 1982, p 31) These allegations were that public schools:

- were a refuge for the brainless and the philistine.
- were dedicated to Latin and taught no science.
- were uninterested in sending boys to the new and redbrick Universities.
- had privileged access to Oxbridge places, for example through closed scholarships.
- monopolised the City, Whitehall, the Bar and Dartmouth/Sandhurst.
- did not send boys into industry and were disdainful of modern technology.
- fostered bullying and sadism, particularly through corporal punishment and fagging.
- had barbaric living conditions.
- enjoyed an unfairly high staff-pupil ratio.

- promoted homosexuality.

While HMC accepted that some of these criticisms were valid for a few schools in the nineteenth century, they forcibly argued that as general statements in the early 1960s they were a travesty. In independently judging the validity of these criticisms, it should be noted that the public schools offered an expensive product to demanding customers, in a very competitive market, who were unlikely to have sent their sons to schools were they as the critics claimed. The numbers attending HMC schools post-war, however, increased steadily and most of the increase came from non-public school parents (Sanderson, 1999, 103). It is difficult to believe that this would have occurred had the alleged criticisms been generally valid, or that old boys would demonstrate in later life the strong loyalty to their school that is characteristic of the public schools (Annan, 1982, p.12). The increase was not only a product of the perceived advantages of conferred social status associated with attending a public school but also an outcome of real concern among middle class parents that state schools were failing to provide a decent education.

There was one other criticism of the public schools up to 1960, however, that is of particular relevance to this study. All the post-war Chairmen and most of the Directors of BSA were educated in such schools (*Appendix 3*). It was claimed that they restricted their intake to a narrow social class and reinforced privilege and inequality of opportunity, and that their concept of leadership excluded those very qualities - imagination, vision, a willingness to innovate and awareness of the importance of technological change - that were needed to make leadership effective. The public schools, the critics argued, produced loyal, reliable, conformist and admirable men to police a far flung empire though not suitable for holding key positions in commerce and industry in a century of rapid change (Rea, 1982, 30). Whatever their suitability may have been for the jobs they held, however,

public school men did hold a substantial majority of such posts. Fidler (1981, 89-90), reviewed the findings of eight studies undertaken between 1955 and 1975 of the educational background of directors of large commercial and industrial firms. An average of 59% had attended public school and this was exactly in line with his own study in 1980.. For City firms the figure rose to 82%, with 35% having attended Eton, while for BSA it was 100% of the Chairmen and 46% of the non-executive Directors (Appendix 3). A word picture of the boardroom of a major British company (Courtaulds) immediately prior to and after WW2 is provided by Keeble:

‘There was a deliberate and much-lauded gentleman’s club atmosphere in the boardroom between the 1930s and the 1950s. The atmosphere, according to the proud chairman, permeated the business – a business which the board of predominantly public-school men was slowly, but surely, leading downhill. The chairman who presided in the 1950s knew little or nothing about production technology, despised technical men, remained ignorant of science and were wholly indifferent to industrial relations’ (1992, p.50):

While it is not suggested that the BSA directors at that time were quite as reactionary as those sitting on the Courtaulds board, the firsthand evidence in Chapters 3 and 4 of this thesis suggests that the style of the boardroom presided over by Eric Turner (1961-71) was not unlike that at Courtaulds.

Traditionally the public schools educated pupils from across the ability range (Newsom, 1968) but soon after the war, reflecting parent’s wishes, many strove for high academic attainment. The character, ethos and alleged divisiveness and anti-industry bias of the public schools, and the extent that these may have contributed to the relative decline of the UK economy, is a controversial subject. While there is continued criticism of social divisiveness and a belief by some, that the public schools perpetuate the same elites and buy privilege with money, in the 1960s most public schools significantly changed their attitude to business, industry and science (Sanderson, 1999, 102), in what has come to be known as

‘the public school revolution’. A study of fifteen public schools in the 1960s found that businessmen comprised the largest group of parents and that a consistent 46-53% of the output of all public schools was entering careers in industry and commerce. (Weinberg, 1967, 149, 161). This is matched by Rubenstein (1986), who found that 57% of existing businessmen were ex-public schoolboys. The change was profound; by 1980 half the public school boys going to university were studying engineering, science or medicine and engineering had become the single most popular career for them (Rae, 1982, 160-61). In consequence, the grounds for criticism of contemporary public schools shifted from those that applied before 1960. Critics now admit to the quality of the schools but believe them to be symptomatic of a society that sees education as a private privilege, rather than an investment in national economic competitiveness. Moreover by educating a high proportion of the future leaders of society it is claimed they perpetuate this attitude. An alternative view, however, is that ‘the public schools, for some, represent a precedence of libertarian individualism over a concern for national education as a component in economic performance’ (Szreter 1997; Sanderson 1999, 104). Overall, the public school revolution was a notable success with the schools, substantial businesses in their own right, reacting flexibly to market opportunity and political threat.

Historically, the elite public and grammar schools taught a minority of their pupils to the highest school academic levels in their seventh term, scholarship sixth forms preparing selected 18-19 year olds for open Oxford and Cambridge entrance scholarships, which were abolished in the early 1980s. The specialisation this entailed, however, drew criticism from those who believed that schools should provide a broad pre-university education (Prias 1985).

To determine its validity to the BSA Board, Wiener's proposition that the chief agent for the transmission of the alleged anti-business culture was the educational system and particularly the public schools (1981,138) was tested by an attitude survey and questionnaire, sent to a sample of sixty high achieving men who left public schools during the period 1940-60. These men were the near contemporaries of the directors of BSA, non of whom are still alive, in the years leading up to the collapse of the company in 1973. The questionnaire, however, was not sent to anyone who had attended a state school. This does not imply that no one educated in the state sector was capable of reaching the commanding heights but merely reflects the fact that the cultural critique concentrates its fire on the public schools only.

The objectives of this research were:

- To determine the extent to which those who responded agreed with the main propositions of the cultural critique.
- To find out if there were, in the school and university they attended, either an implicit or explicit anti-business culture and, if so, how they responded to it.
- To understand the way in which they made their career choice.
- To find out whether they had ever given serious consideration to a career in manufacturing industry.

Original research was required because this detailed information, which was essential to any examination of the validity of the cultural critique and in understanding the BSA Board, was not available from any other source.

The sample was made up of men who had spent successful careers in the professions and industry in both the public and private sectors, including the direction and management of manufacturing industry (*Appendix 11, Annex 1*). It represented public school leavers who,

up to the choice of their HSC or 'A' level subjects were, at 16, by virtue of their later academic performance and career success, potential directors or senior managers of major manufacturing companies such as BSA. The research question concerned the forces at work in their fifth and sixth forms which ensured that most of them did not follow a career in manufacturing industry.

By virtue of the chosen age group (that is those that left school between 1940 and 1960) those selected were either retired or approaching retirement. They brought a lifetime's experience to the issues raised by the attitude survey and questionnaire. The response rate (92%) was high (*Appendix 11, Section 4*). The questions were mostly answered fully and one third of those responding wrote additionally offering their own thoughts on the relative decline of Britain's manufacturing industry. That they did so is indicative of the strength of feeling engendered by this subject in men of their generation.

It does not appear that any comparable study has been undertaken of able boys who left state Grammar and Secondary-Modern Schools over the same period, 1940-60. It was much harder for such boys, compared with their public school counterparts, to rise to the Board of many major British company as evidenced by the experience of Hopwood (1981) in BSA.

7.2 Attitude Survey

The attitude survey, which was undertaken as part of this research, required those included in the sample to give their opinion, on a five point scale (Strongly Agree to Strongly Disagree), on the validity of four statements from the literature of economic decline which encapsulate the 'cultural critique'. 'There is no proof, however, that this model of a linear continuum is necessarily correct, though it makes things easier for measurement purposes' (Oppenheim, 1966, 107).

Rather than compose attitude statements for this purpose it was decided to select stimulating, even provocative, statements from the literature by taking Oppenheim's advice 'that they should be meaningful and interesting, even exciting, to the respondents' and noting his comments that:

'Those conducting an attitude survey should be aware of the tendency to reply to attitude-scale items in a particular way, almost independent of content. One such set has been termed 'social desirability', or the tendency to reply 'Agree' to items the respondent believes reflect socially desirable attitudes. A second has been described as 'acquiescence', a general tendency towards assent rather than dissent, especially when the statements are in the form of plausible generalities. Some aspects of rigidity, dogmatism and authoritarianism may lead to other response tendencies. Unfortunately, there is no easy way of either detecting the influencing of these tendencies or of neutralising them' (1996, pp.113, 117).

While the behavioural approach to the attitude survey and questionnaire has been explained here, the statistical methodology and the analysis of the responses are set out in Appendix H. The latter was done using the test for statistical independence known as the Chi-Square, which facilitates generalisation from a sample to a population by chance. The outcome was:

S.1. From the mid-Victorian period onwards, the 'anti industrial' spirit permeated every sphere of British life, from the world of high culture, to middle-class popular culture, with its emphasis on suburban domesticity, fiction and popular entertainment which disguised Britain's industrial past, to the political sphere where the left and right united in opposing laissez-faire capitalistic materialism. Even within the business world itself, the gentrification of the industrialist produced a continuing bias against dynamic entrepreneurship as well as a conservative managerial culture which held back growth. (Rubenstein, 1993, p. 22).

Based on a plus/minus 12% margin of error, between 43% and 67% of the defined population agree with the above statement (*Appendix H, Section 3*) and it is a statistically significant result. The Chi-Square value of 12.9 is above the value (9.2) required for statistical significance at the one in a hundred (1%) level.

S.2. *The chief agent for transmitting the anti-business culture was the educational system, particularly the Public Schools.* (Wiener, 1981,138.)

Based on a plus/minus 12% margin of error, although between 26% and 50% of the defined population agree (*Appendix H, Annex 3, p. 14*) with the above statement it is not a statistically significant result due to the distribution of those who disagreed or were uncertain about its validity. The Chi-Square value of 0.7, corresponding to two degrees of freedom, which is below the value, (4.6) required for statistical significance at the 1 in 10 level (10% level) confirms this. Uncertainty reigns.

S.3.....*our deficiency is not merely a deficiency in technical education but in general intelligence, and unless we remedy this want we shall gradually but surely find that our undeniable superiority in wealth and perhaps in energy will not save us from decline*(Royal Commission on Schools, 1868.)

Based on a plus or minus 12% margin of error, between 42% and 66% of the defined population agree and between 20% and 44% disagree (*Appendix 11, Annex 3*). As, however, the Chi-Square value of 38.1 is above the requirement, with two degrees of freedom, for statistical significance at the one in a thousand (0.1%) level, agreement to the proposition by the levels stated can be confirmed.

S.4. *The industrial interests, the interests of the humble toiler who produces wealth, have been sacrificed to all other interests. The financiers, the minor capitalists, the bankers, the merchants, the international traders, all have been admitted to a voice in the direct government of the country before any of the industrial class were admitted to its secret councils. That is the reason for decay in British industry*
Dintenfass (1992, 59).

Based on a plus/minus 12% margin of error the agree/uncertain/ disagree responses were similar. Between 30% and 54% agreed, between 15% and 39% were uncertain and between 20% and 44% disagreed (*Appendix H, Annex 3*). The Chi- Square value of 19.5, however, is greater than the requirement, with two degrees of freedom for statistical

significance at the one in a thousand level. It can be concluded, therefore, that there is marginal agreement to the proposition in the midst of both opposition to it and uncertainty.

7.3 Questionnaire

The questionnaire arose from the second, third and fourth research objectives set out in 7.1 above, i.e. existence or otherwise of an anti-business culture, career choice and consideration of manufacturing as a career. A successful questionnaire has to reflect the aims of the study, has to be of sufficient interest to ensure that there are sufficient returns to ensure a statistically significant result and has to be piloted (Youngman, 1978, 4-27).

The excellent response, and the quality of the replies from both the pilot and main questionnaires, gave confidence that these criteria had been met and that, without exception, the respondents had seriously engaged with the questions. The answers, and the supplementary information provided, were undoubtedly 'texts' and, as such, it might be thought that they should be formally analysed especially since Titscher et al (2000, 32 -33), state that 'content analysis should always be used if the communicative content of the text is of the greatest importance'. Nevertheless after considering the methodology and applications of content analysis (Titscher et al, 2000 pp 66-67, 231) it was decided not to proceed, as it was thought that the outcome would not add value to the thesis.

There were six questions and an analysis of the replies is set out below. The answers (*Appendix H, Section 4*) were supported, in several cases, with additional comments about their school, university and subsequent career.

Clear patterns emerged from the answers:

Among the sixty men who responded, there were:

7 Oxbridge Scholars

23 Who attended London/Provincial Univ.

10 With a PhD

3 State Scholars

15 Who did not attend university. 22 Who attended Oxbridge (incl. Scholars)

Q.1 On what basis did you select your HSC/A-Level main subject and thus make a choice between the Arts, Classics, History, Languages, Mathematics and Science?

12 Had you decided, at that stage, on the broad direction of your future career?

Seven broad groups were discerned from a first reading of the answers provided, three of which (B, C and E) reflected pressures from outside the school, while one (A) was a function of inherent aptitude, parental stimulation and interest generated by good teaching. While the possibility of overlap, i.e. there being two or even three reasons for a boys choice, was recognised, none of the responses gave supplementary reasons for their choice. While other answer coding schemes may have been used as a basis for analysis, the one chosen proved to be both simple and robust and enabled the key issues raised in this chapter to be brought out.

Table 7.1 Analysis of Questionnaire Answers

Group No.	13 Basis of Selection	14 No. in Group	% of Sample
A	15 Aptitude/Great Interest	25	41.7 1st
16 B	17 Early Vocation	10	16.7 2nd
18 C	19 Pressure/Advice from Parents	7	11.6 3rd
20 D	21 Pressure/Advice from School	5	8.3 4 th =
22 E	23 H.S.C./ 'A' level not taken	5	8.3 4 th =
24 F	25 Cannot Remember	5	8.3 4 th =
26 G	27 Easiest for Sport or Oxbridge entry	3	5.0 7 th =

17 (28.3%) of those who responded had effectively ruled themselves out of a possible career in industry at sixteen, either by declaring a vocation or accepting that parental

pressure would ensure that they would enter the family business or follow in their father's career footsteps.

There may be, however, more people in the selected sample, who declared an early vocation for medicine and the church but less boys who were destined for the family business, than might be in a random sample of the defined population, but this does not invalidate the conclusions drawn later.

Group A. Aptitude/Great Interest.

(25/60, 41.6%)

This was the largest group who, by the age of 16, knew what their aptitudes and main interests were and chose their H.S.C. or 'A' level subjects on this basis. Typical of the explanations given were:

Greater aptitude and interest for number, logic, systems, perception etc. than for language, literature, history and culture led easily to the choice of pure and applied mathematics. Nuclear Design Engineer. Wolverhampton Grammar School, Exhibition in Mathematics, Emmanuel College, Cambridge.

My choice of subjects for H.S.C. was based purely on what I enjoyed most and found easy, i.e. History and French. I considered that I had no great aptitude for scientific subjects. Company Chairman. Uppingham, Open Scholarship in History to St John's College Cambridge.

From a very early age (eight or nine) I had always been very interested in physical science and I was often buying and being given books and inventions. These interests automatically led to the choice of science and Mathematics at 'A' Level. Director of Corporate Engineering. Westminster. PhD in Metallurgy at Imperial College.

I chose Mathematics because that was the subject I liked best, Physics for knowledge and French because, for me, it was a doddle. Solihull School, Provost of a Cathedral.

Group B. Early Vocation.

(10/60 16.7%)

This group is the most straightforward in that the HSC or 'A' Level subjects chosen were dictated by the entry requirements of Medical Colleges or University Theology Departments. The former required Biology and other sciences and the latter Latin, Greek and History.

I chose science through aptitude, interest and a particular fascination with the biological sciences. Nuneaton Grammar School, Consultant Vascular Surgeon

I knew from age 13 that I wanted to be a doctor. Newcastle R.G.S. G.P.

Only one of the consultants, doctors and clergymen regretted the early specialism these entry requirements implied.

I took Biology, Chemistry and Physics at 'A' level as they were required for entry to Medical School. Sadly I had no choice. Morpeth Grammar School, Consultant Surgeon.

Group C. Pressure/Advice from Parents

(06/60 10%)

This group splits into two sub-groups, regardless of where their aptitude and interests lay:

- boys told they would be required to enter the family's business.
- boys strongly advised to prepare to follow their father's career.

Typical of the comments made were:

I think the truth is that my Father had great, and I think single minded, to the exclusion of everything else, ambitions for me to become a Chartered Accountant thus following his career. I don't recall having any discussion with him about subject choices at all, nor do I remember any discussion of 'A' level options at school. I took and passed in English and French. Chartered Accountant. Uppingham.

At 16 I had probably decided/agreed that I would join the family stockbroking business so Economics was an obvious choice. Stockbroker. Oundle.

I was never going to do anything but go into the family Jewellery business. I took languages and mathematics at 'A' level. Company Chairman/M.D. Rugby.

My family background was in Civil Engineering and I became interested in it. I chose Maths and the Sciences as I thought these were the subjects most likely to secure me a place at a good university. Management Consultant. Solihull School, Exhibition to Christ's College Cambridge.

It was expected that I would end up in a profession, probably teaching, like my Father and Grandfather before me. I disliked Maths and liked History so took the latter.

C. of E. Bishop. Eton, Minor Scholarship in History, Trinity College Oxford.

Parental pressure. Future family business involvement was 'expected', as was the case with many of my peers. This was to prove disastrous to many with the collapse of family businesses when change/re-education became difficult. Chairman/M.D. Building Company, Oundle.

We had a family Brewery and my academic and career counselling all came from my Father. Together we decided I should follow a career in the Brewing industry and the first step would be to acquire a degree in brewing. My 'A' level choices followed from this decision. Director, Bass p.l.c. Repton.

Group D Pressure/Advice from School,

(05/60 8.3%)

This group, as well as their parents, allowed the choice to be made by the school. In a situation, however, where some boys were found it difficult to come to a decision strong advice may have been welcome. None of those responding suggested that they regretted taking the school's advice.

Typical of the comments made were:

In truth I did not select my 'A' level subjects. The teaching staff made a judgement of my best subjects on the basis of my School Certificate results, with the concurrence of my parents. I thus was placed in the Science Sixth and took Maths, Physics and Chemistry as a basis from which I could take the

Entrance Examination into the Royal Naval College Dartmouth. Patent Agent. Taunton School.

Every boy who was bright was steered towards the classics. C.of E. Bishop. Marlborough, Open Scholarship in Classics, Queen's College Cambridge.

After School Certificate the school placed me in the Classical Sixth but I insisted that I should be moved into the Modern Languages Department. Eventually I was able to take English, French, Latin and Spanish at A-Level. Chief Cashier. King Edwards School, Birmingham.

The headmaster, anxious to maintain the school's high achievements in classics, encouraged me to take Latin and Greek at 'A' and 'S' levels. Chairman of the Commission for Racial Equality. University College School, London.

28 Group E: HSC/ 'A' Level Not Taken:

29 (05/60 8.4%)

At the time the boys in this sample were taking School Certificate or GCE 'O' levels (introduced in 1958). The then usual (but not exclusive) entry into Chartered Accountancy or the Law (Solicitor) was to leave school at 16 and to be Articled to a Partner in a professional office. A few other boys, or their parents, believed that the head start provided by an early entry into business or industry was worth more in the long run than HSC/ 'A' level, followed by a degree. (This was the erroneous view of the Author's parents in 1948.)

Typical of the explanations given were:

The School was neutral..... but the brighter and more interesting teachers were on the Arts side. Company Chairman. Wycliffe College.

I think that I belonged to the last generation of whom it was assumed that classics was the normal training for anyone of intellectual ability, whatever their future career might be. It was assumed that a literary and philosophical culture was the one culture. Bishop, Oxford Classics Scholar, Marlborough.

Others who reported there was a bias towards classics included:

An Assistant Secretary of State in the Home Civil Service, cited on page 7, who in 1960 was awarded an Open Scholarship from Manchester Grammar School to St John's College Cambridge and subsequently took a Double First in Classics and Theology. He wrote: *I chose classics because it was well taught, I was good at it and to excel at classics had a prestige value in a school like MGS* (notwithstanding the fact that, at that time, MGS had probably the most outstanding mathematics scholarship sixth form in England (Sampson, 1971, 144)

A Senior Industrial Manager and latterly a Professor of Chemical Engineering, who was at King's School, Chester wrote: *The brightest pupils chose classics or moderns and so there was a sort of feeling, never articulated, that these subjects had a higher academic status.*

An Old Etonian wrote about *the implicit assumptions underlying an Eton education before WW2. These were that Classics and the Arts were the best foundation for all round development and the ability to think clearly and in forming a strong character.* He also commented on *lingering ideas about the superiority of land and farming and the ideal of the 'English Gentleman'* and recalls that *almost all members of staff came from a Classical/Arts background as there were few science teachers in the school.* Bishop, Oxford Scholar, Eton.

Almost all of those who responded said that what motivated their school was the desire to achieve high academic results which were defined as Oxbridge open scholarships and exhibitions, entry to Oxbridge the number of A grades achieved. The award to a boy of a State Scholarship to a university other than Oxford or Cambridge was not seen as having the same cachet as an Oxbridge award.

Q.3 On what basis did you choose which subject to read at University, or not to attend?

This question implicitly raises the issue of possible career choice, which influenced some boys in their choice of degree course. For those who had already chosen their future career e.g. medicine or engineering, the only further choice to be made was which Medical School or University Engineering Department to apply to. For those who remained

undecided about their future career there were many options open but they were often circumscribed by the subjects taken for H.S.C. or at 'A' level e.g. boys could not take engineering without Mathematics, Chemistry without supporting Sciences, Modern Languages without French and German etc.

The usual reasons for not going to University were to enter the family business or to take a professional, vocational route as an Articled Clerk in a Solicitor's office or in a firm of Chartered Accountant's office. Premium Apprenticeships, however on the railways, shipbuilding and major engineering companies had fallen out of fashion in the nineteen thirties (Cotgrave, 1958, p.202).

The answers to this question can be grouped:

Group V.	Oxbridge Scholars	7/59	11.7%
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All those who had been awarded a Scholarship or Exhibition at Oxford or Cambridge elected to read the subject of their award, even though this was not obligatory. One classical scholar, however, took theology in the second part of the Tripos.

Group W.	Vocation	10/59	17%
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All those medics and clergymen who had chosen their HSC or 'A' level subjects to meet the entry requirements of a Medical School or Theological College, sustained their vocation throughout their time at University and into their lifelong careers.

Group X	Aptitude/Interest	29/59	47.7%
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The students who had chosen their HSC/'A' level subjects on the basis of their interests and aptitude followed it up into their choice of subject to read at University.

Group Y.	Widening of Education	03/59	5%
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Three boys in the sample made a deliberate decision to widen their education beyond the narrow confines of their HSC/A level subjects.

I wanted to read a subject which was wide ranging and challenging. Politics, Philosophy and Economics (PPE.) seemed to fit the bill rather than a single specialist subject.

Company Chairman. Oxford.

30

31 *I had originally intended to read Latin, Greek and Ancient History i.e. Greats, but after my National Service break English Literature seemed more attractive (and perhaps less academically demanding).*

Former Chairman of the Commission for Racial Equality. Oxford.

Group Z.	Did not attend University	14/60	23.3%
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This group includes both those who left school at 16 after School Certificate/ GCE 'O' level and those who knew they would not be going to University after taking HSC/'A' level. There were three main reasons for not doing so; pressure to enter the family business, a decision to enter either the legal or accountancy professions at 16 or 18 and a belief that early entry into commerce or industry was more advantageous in the medium term than spending three years at University.

Q4. Did you have any formal careers guidance at school and, if so, was it implied that certain careers were more appropriate than others for Old Boys to follow.

Formal careers guidance was patchy and few that consulted the school careers advisor found the discussion of value. Several reported that it was implicit in their school that, unless they were entering their family's business, the brighter the boy the more certain it was that it was assumed, both by teachers and other boys that they would enter one of the learned professions i.e. medicine, the law, the church, university don etc. A Patent Agent, who was at Taunton, wrote: *I think it would be true to say that the more academic students were guided towards the professions and academia rather than business and industry.*

A Director of Corporate Engineering wrote: *None. In fact, when my Mother talked to the Headmaster (of Downside) about it she said he confessed himself baffled where Mathematics could lead, perhaps an Accountant or Actuary!*

Q.5 When at school or university did any teacher, tutor or careers guidance officer seriously suggest you should consider a career in manufacturing industry? If so, what was your response?

None of those that responded reported that manufacturing industry had been suggested to them at school as a possible career. The senior Civil Servant from Manchester Grammar School, wrote: *When asked by my sixth form master what I intended to do after university I said that I assumed I would have a private sector industrial career. This was treated with derision by the master who thought it would be demeaning, as did most boys in the form.*

A Managing Director of a Building firm, however, wrote: *Oundle had a very strong engineering background and industrial partnerships were being developed. In this sense the school was clearly pro-industry but I do not recall this being carried through in a structured way towards promoting careers in manufacturing* (Oundle was well known for ensuring that all its boys, including the classicists, had a good grounding in workshop technology and basic engineering science (Walker 1955, pp 486 and 492). Two of Oundle's past Headmasters had worked in the chemical industry.

In their last year at University several consulted their University Appointments Board and went to see public organisations and private firms who participated in the universities' recruitment 'milk round'. Manufacturing firms were in a minority; the only ones mentioned by those in the sample were ICI, Shell, BP and Cadbury, that is firms that had a track record of recruiting ex-public school boys.

Supporting the above is a comment from Sir Christopher Bland, Chairman B.T., ex Chairman of BBC Governors, Sedbergh and Oxford: *All my contemporaries at university in the 1950s wanted to go into the BBC or journalism or the Foreign Office or law. Business was absolutely the last resort* (The Times, 28th June 2004, p.22).

Q.6 When at school or university did you ever hear strong anti-industry views expressed, e.g. on environmental issues, alleged exploitation of workers, excess profits, manufacture of armaments? If so, how did you respond?

Nearly all those who responded explained that the period considered by the questionnaire, i.e. 1940-60, covered the war and post war rebuilding when the need for heavy manufacturing was self-evident. They stressed that the environment had ‘not been invented then’ and that anti capitalist views were not heard until well into the 1960s. Up to the end of the war in 1945, school leavers and university students were pre-occupied by the chances of survival as they were destined for the armed services and in the post-war decade with National Service. Issues such as defence, nuclear proliferation and latterly feminism were the interests of a small minority (*see transcript to responses to Q.6. in Appendix 1*).

Amongst the supplementary comments received there are three that merit comment:

A C.of E. Bishop wrote: *There used to be comparable class snobberies towards industry in other countries – notably the Prussian aristocracy whose base was military and rural (without too much literary or philosophical culture!) and who despised the industrialists and Catholics of the Rhineland.*

Yes, indeed, but the German scientists and industrialists of the Ruhr and Silesia rose and prospered mightily above this class snobbery within the 1871 Constitution. This effectively created the modern Reich, which was constructed in such a way ‘to create the institutions for a national state that would be able to compete effectively with the most powerful of its neighbours, without sacrificing or even limiting the aristocratic monarchical order of the pre-national period’ (Watson, 1992, 35).

An ICI Senior Process Manager wrote:

The Industrial Revolution of the Victorian era was made feasible by the excellence of Victorian engineers and entrepreneurs. The relative decline of many of Britain’s industries, e.g. textiles, shipbuilding, vehicle manufacture

has, in part, been due to an 'anti- industrial spirit' that has permeated every sphere of British life, including Government. In recent years manufacturing industries have suffered under Government policies which have been biased towards the service industries. As a result technological subjects at University have become unpopular in favour of 'soft options' e.g. Law, Media Studies etc.

Clearly the author is a strong supporter of the cultural critique, but he does not address the whole thrust of Rubenstein's counter argument (1993).

The wife of an old Etonian landowner wrote: My husband's family have been landowners since 1860. Before then they were immigrant refugees from the French Revolution who made a fortune as brass rollers in Birmingham. During 1850 the Patriarch, G.F. Muntz, rented a large country house which his son G.F. the second bought in 1860 following the death of his father. This meant selling the brass rolling company and becoming a country squire. Ever since then the family have been farmers or citizen soldiers. This is a classic tale of gentrification (Collins and Robbins, 1990, 31, pp 175-76).

7.4 Commentary

The cultural critique does not claim to be a complete explanation for the relative decline of the UK economy but does provide the sociological and educational background to the economic, managerial and technical forces that were acting on the UK, analysed in the literature on economic decline at the start of this thesis.

Within the broad thrust of the cultural critique Wiener (1981) and Rubenstein (1993) have opposing explanations for the relative decline of British industry and analyse the influence of the public schools from different standpoints. A problem with these analyses is that throughout the latter part of the nineteenth century and the whole of the twentieth century, the public schools were slowly changing and subtly reacting to evolving economic and social changes. They were selling, however discretely, an expensive product into a competitive market and could not have survived, let alone have expanded as they did, if they had not taken notice of the aspirations for the sons of their fee paying parents (Rae,

1982, 145). The implications of Rae's argument would be that the public schools were shaped by society and reflected its values as they changed with time.

Wiener (1981, 21) concluded that the ethos of the schools exalted the careers coloured by the aristocratic ideals of honour and public leadership – the military, politics, the civil service and the higher professions. He claimed that public school schoolboys made excellent administrators of a far-flung empire but the training, so admirably suited for that task, ill fitted them for economic leadership. The public schools nurtured the future elite's political, not economic, abilities and a desire to maintain stability and order far outweighed the desire to maximise individual or national wealth. It would seem that public leadership was rarely addressed directly in the curriculum but was inculcated through sport and given the nature of classical texts, the study of the classics.

In considering the changes in the public schools in the first half of the twentieth century e.g. the acceptance of the sons of business men, the gradual inclusion of science into the curriculum, stress on high academic achievement, Wiener (1981, 138) noted that even whilst the public schools were promoting a negative view of the life of business and industry and directing their best pupils away from industry, the spread of the public school model of education (notably into the grammar schools) ensured that increasing numbers of highly placed industrial managers were public school products. Despite inculcating preferences for professional and bureaucratic careers these were not expanding at a sufficient rate to absorb the rising numbers of public school leavers.

Rubenstein (1993, 136) however, based on a detailed examination of the products of some leading public schools and their family backgrounds, took a more positive view than Wiener. He claimed that there is a good deal of evidence that public schoolboys were always impressed by big money and by the wealthy parents of their classmates, regardless

of how the money had been made and that there was no prejudice, even an unofficial one, against trade or business.

Rubenstein (1993, 135) asserts that public schools did not produce a 'haemorrhage of talent' away from business life as suggested by the authors of the cultural critique. Most entrants followed in their father's footsteps and if many public school leavers failed to enter business life it was because their families were never in it in the first place. Public school boys who entered finance and commerce did notably well, as did those who ultimately became chairmen or directors of large industrial companies. Those who entered the professions, therefore, sought security far more than status. Rubenstein further claims that the public schools were considerably *less* important to understanding the role of Britain's elites in guiding broad movements in the British economy than is usually argued, certainly less important than the underlying factor of Britain's growing comparative advantage as a commercial and financial power. Far from leading Britain into an economic dead end, with a declining manufacturing sector, the public schools appear, in so far as they have much influence at all, to have guided its school leavers into the economically dynamic areas of the economy.

Rubenstein (1993) raises a further issue as to whether the public schools did actually engender an anti-business, anti entrepreneurial culture through their education and the ethos of the schools. In spite of the efforts of the authors of the cultural critique he claims that there is little direct evidence that they did, and postulates that few businessmen fathers would have educated their sons at schools preaching an ideology so much at variance with their own. Finally he makes the point that even if the prevalent ethos at the time of the public schools was demonstrably anti- business it does not follow that the resultant school leavers would decline to enter business life or would be inferior businessmen. This view is

supported in that twenty-one (out of sixty) of those in the sample did enter business or industry.

How then does the outcome of the Attitude Survey and Questionnaire contribute to this debate and, in particular, what light does it shine on the directors and senior managers of BSA?

While the responses to the Attitude Survey represent the views of experienced men of affairs looking back over a forty to fifty year period, the answers to the Questionnaire are much more focussed on a particular public school and university over a shorter period i.e. 1938-43 up to 1958-63. The context within which the answers were given is important because of rapidly changing national attitudes in the second half of the twentieth century and particularly the changes in the ethos and practices of the public schools after 1970 described by Rae, (1982, 91-101, 143-148).

Those who completed the Attitude Survey and Questionnaire were near contemporaries of the Directors and Senior Managers of BSA; indeed 20 out of the sample of 60 were working in not dissimilar industries at the time of the collapse. With the exception of Lord Shawcross, the quality of the education and training of BSA's Directors and Senior Managers (*Appendix 3*) from 1945-73 fell short of most of those in the sample and particularly those of IMI, a Birmingham engineering/metals company of similar size (*Appendix 12*).

The analysis of the responses to the first two statements in the Attitude Survey show that the defined population significantly agree with the general proposition that there was an anti-industry culture in Britain but have no clear view as to whether the public schools were the chief agent in transmitting it. The answers to the second question support this latter view for, even though a majority of those who responded confirmed that, in their

school, there was either an implicit or explicit view that classics and other arts subjects had greater academic prestige than economics, languages and science, this was not a statistically significant result for the population as a whole and uncertainty ruled. As Rubenstein noted and this survey confirmed, this bias did not necessarily prevent able boys taking science subjects at 'A' level in furtherance of their career objectives.

There was also a statistically significant agreement in the defined population that Britain had a relative deficiency in both technical education and general intelligence that threatened our prospects. It is difficult, however, to judge whether this is an objective view or whether there is an element of personal superiority present.

There was also marginal agreement, in the midst of both disagreement and uncertainty, to the final statement concerning the lack of influence of those who create wealth (as opposed to those who spend it) on government and the effect this has on decline. Perhaps those who supported the proposition treated the prime example of Joseph Chamberlain, Birmingham screw manufacturer and a member of the Cabinet of both Liberal and Conservative governments (Marsh, 1994, p. xi), as the exception that proves the rule.

Overall, the responses show that the defined population of public school educated, high-achieving men agreed that the propositions of the cultural critique fitted their long experience at school, university and in their profession, but were reluctant to accept that the public schools that they attended were chiefly responsible for the inter-generational transfer of the anti-business culture they acknowledged existed in Britain. This reluctance however, may have arisen from the deep loyalty they still gave to their school, even sixty or more years after entering it.

The Questionnaire explored the basis on which HSC and A-level subject-choices were made and the ethos of the school and home within which these choices were made. The

first influence, reported by seventeen of those who responded, was that although there was no explicit bias against particular subject choices in their school, there was an implicit understanding that the brightest boys took classics and that high honours in classics would ultimately lead to such careers as the Civil Service, the Bar, the Church, Academia, Politics etc., but unlikely to business or industry. There were exceptions however, such as Sir Michael Clapham, a Marlborough and Cambridge classicist who became Deputy Chairman of ICI Ltd and was President of the CBI. 1971-72. On the other hand, although a decade before the start of period covered by this research, an example of such bias is that of J. Enoch Powell, one of the greatest classicists of the twentieth century (Heffer, 1998, 21). On the basis of his entrance scholarship results, he was initially placed on the science side at King Edward's School Birmingham, but once his exceptionally high intelligence and ability had been recognised he was moved in to the classics stream (Heffer, 1998, 7). This occurred in a school at the very heart of British industry.

The second influence reported on was that, at that time, the great bulk of the British engineering industry (including BSA which recruited their first university graduate in 1963) not only made little or no effort to project itself to public school sixth formers and their parents as a desirable career choice but actively discouraged the thought by extolling the merits of apprentice-trained managers over university graduates. (Cotgrove, 1958, 203). Apart from the sons of industrialists, several of those that responded commented on the almost non-existent profile that manufacturing (as opposed to engineering) had at their school and university. A further influence was parental pressure to enter the family business or to succeed to the ownership of prime land.

In spite of these influences twenty one of the sample (including one Cambridge scholar who read history) made successful careers in manufacturing industry which tends to

support Wiener's view (1981) that some public school leavers or graduates could overcome whatever anti-industry bias they may have been exposed to. Whether industry was their first choice of career, or whether it was a fall-back position after failing to get into one of the professions, was not revealed, other than the production director of an international chocolate/soft drinks company who wrote that he had to choose between his first choice, the Colonial Service, and his young family.

While conclusions can be drawn from the outcome of the research, they do have some limitations. First, they relate to the educational experience of men from the public schools who were, or had been, close to the top of the professions, commerce/ industry and the public service; they cannot be taken as being applicable to men educated at state schools. Second, they relate to the 'cultural critique', which is but one of the explanations proposed for the relative decline of UK industry (*Chapter 2*). Finally, they are based on a statistical sample and the defined accuracy of the analysis. The conclusions are:

- During the period 1940-1960 there was an implicit anti-business, anti-manufacturing, pro-classics/arts, culture in many leading public schools. This had the probable effect of ultimately denying to business/industry the talents of many, but not all, of their brightest boys. This finding is in line with one of the propositions of the cultural critique.
- Parental pressures (to enter the family business or follow Father's career) and a vocation to enter the medical profession or the church also had the effect of reducing the number of the brightest boys who might otherwise have considered industry as a career.
- Manufacturing industry did very little in the period 1940-60 to inform pre-university school boys of their career opportunities and to counteract the prevailing view that

academia, the City, public service and the professions were the only acceptable career choice for a boy of high ability.

Whilst there was no explicit anti-business, anti-manufacturing culture in the Universities in the period 1940-60, outside the University Appointments Boards there was widespread ignorance about what might be involved in a career in manufacturing industry.

The consequence was that the pool of talent from which BSA drew its Directors was not as rich as it might have been and was certainly not as rich as it was in those countries, such as Germany, Japan and the US, where careers in engineering and large scale industrial management were eagerly sought by many of the most able boys (*Chapter 6*).

In the author's professional experience, covering the second half of the 20th century, the majority of the very limited number of the most able boys from the public schools and the Oxbridge colleges who were willing to contemplate a career in manufacturing industry, were attracted to companies such as ICI, Shell and the Anglo-Iranian Oil Company (the forerunner of BP) that had a culture derived from their Dutch, German or American roots and which was very different to that of British engineering companies such as BSA. This is a matter that merits further research.

It does not appear that there is a comparable study covering able boys leaving state Grammar, Secondary Modern, and latterly Comprehensive Schools, over the same period, 1940-60. It was much harder for such boys, compared to their public school counterparts, to rise to the Board of major British companies as evidenced by the experience of Hopwood in BSA (1981, 202). As nearly all are now very old, or have passed on, it was not possible to find out whether there were others within the company whose managerial potential was stifled by the class attitudes prevalent in BSA and Britain generally at that time.

CHAPTER 8

CONCLUSIONS

Some interim conclusions have already been drawn from the analysis in each of the Chapters of this thesis. This takes a more reflective view of what remains one of the most cataclysmic and illuminating examples of the decline and collapse of a major British-manufacturing company. Almost all of the issues analysed in the literature on industrial decline (*Chapter 2.2*) were exemplified during the final three decades of the existence of BSA and that alone justifies this re-examination of the events leading up to the final collapse of the company.

Due to the changes in the external environment within which BSA operated life was much more demanding for the company's directors in the 1960s than it was in the 1950s and this was reflected in the Group's lower return on capital employed. From 1960 onwards, BSA faced serious international, national and internal company problems and it was the conjunction of events at each of these levels that caused so much difficulty to the company's management. These problems demanded for their resolution directors and senior executives of international calibre and experience, which BSA did not have at that time. They included the fall in motorcycle demand from the home market, the onset of severe competition from Japan, Government policies on the taxation of companies, changing regulations on the licensing of motorcycles, inflation and the start of labour problems at Triumph/Meriden.

Nevertheless, some British manufacturing companies faced and overcame similar challenges and prospered. They did so because of the quality of their directors and senior managers, the clarity of their strategic thinking, their mastery of the businesses they were

in and because they had the confidence to invest, all of which attributes were conspicuous by their absence in post-WW2 BSA.

Chapters 3 to 7 enable a view to be taken on the five issues identified at the start of this thesis:

- Were the Directors of BSA negligent in their direction and management of the company or did they merely make errors of judgement?

In defence of the Directors it may be argued that the external forces they faced would have defeated any management, however competent and experienced, but their strategic errors and management failures cannot be ignored. They certainly add up to individual and corporate incompetence but do these failures add up to the more serious charge of corporate negligence? Smith B. (1983) used the word ‘suicide’ and Ryerson (1980) wrote of ‘a quiet, steady, merciless erosion due to a lack of true, deep-seated commitment and sense of purpose in the manufacture of motorcycles’.

As a recent (2004/2005) aborted court case following the collapse of Equitable Life has demonstrated, proving professional negligence by the Directors of public companies is extremely difficult (letter dated 2nd Dec. 05 from the Chairman of EL to Policyholders). There was undoubtedly a dereliction of duty by the Directors of BSA, the evidence for which is compelling, but to claim that this amounted to negligence is a conclusion too far, although there are many who were harmed by what happened who may not agree.

- Did BSA put short-term profitability before the long term investment required to secure the company’s future?

Perhaps the most serious charge levelled against the Directors is that they sacrificed long-term growth for short-term profitability. This criticism, however, can be taken in two ways. It is not true that BSA paid out excess dividends, indeed the reverse is the case. The

company's dividend policy was conservative throughout the 1950s and early 1960s and enabled substantial reserves to be built up which, in adverse circumstances, would have been sufficient to weather most storms. The criticism, however, is valid in a different sense. The Board did not, as did their Japanese motorcycle competitor companies, give a higher priority to securing and defending market share than to the payment of dividends.

- Why did BSA, in the 1950s, not invest heavily in its motorcycle business to protect its market share?

Five possible explanations have been identified why BSA declined to raise, as the company could have done, significant additional capital for the updating of its motorcycle manufacturing facilities. First, the Board showed extreme caution concerning the forecasts for growth in demand in the medium term. Secondly, the accounting and commercially oriented Directors seemed unaware of how old BSA's production facilities were, how far they lagged behind those of their competitors and how little the company knew about modern production engineering techniques. Thirdly, they believed that any funds available for investment should be channelled into a diversification programme that would deliver a higher yield, at less risk, than the motorcycle business. Fourthly, as the major growth market was in the US, the Board was unwilling to contemplate the greater cash/overdraft implications of a major expansion of motorcycle exports and finally the 'stop-go' nature of the British economy in the latter half of the 1950s and the 1960s, together with the ceding of management control of the Meriden shop floor, led to a loss of confidence within the Board.

- Did the company's diversification programme help, or harm, its motorcycle business?

The effects of BSA's post-1945 diversification programme on their motorcycle business were two-fold. First was the use of funds for the purchase of, and capital expenditure on,

non-motorcycle diversified companies that might better have been used for investment in the motorcycle business. The other was the considerable time and effort spent by the directors and senior managers on the diversified subsidiaries, to the detriment of the motorcycle business.

The diversification programme could only be justified if it consistently produced a significantly higher return on capital employed (which it did not) than delivered by the motorcycle business. There is no evidence, however, that this criterion was applied to acquisition proposals.

It was claimed by BCG (1975) and Smith.B. (1983) that the capital and management time and effort involved in diversification and the losses or poor profits made by the diversified subsidiaries, had a significant effect on the fortunes of the motorcycle business but this claim was never quantified, other than for the purchase of the Churchill Machine Tool Company. The subsidiary company and motorcycle business profit/loss records and the motorcycles verses diversification analysis in Chapter 5, however, confirmed these suspicions, especially by the heavy bias shown towards the diversified companies in the allocation of the limited capital expenditure.

- Does the ‘cultural critique’ of Wiener and Barnett, notably their assertion that there was a fundamental anti-business, anti-manufacturing culture in the public schools, provide an explanation for the collapse of the company?

The outcome of the research programme reported in Chapter 7 supported the cultural critique in as far as it confirmed that, in the period 1940-60, with a few notable exceptions, the most academically able boys leaving the public schools shunned manufacturing as a career, preferring to take the long established routes to the Foreign Office ,the Civil Service , the Law and the City. The pool from which BSA sought Directors of the highest

quality was thus not as large as it might have been. Although they were all professionally qualified, none of the executive directors of BSA had received any formal management training. Prior to the 1971 reorganisation of the Board, only two senior managers from the motorcycle division were promoted to Director.

Furthermore, as postulated by the cultural critique, the comparative analysis, in Chapter 6, of the British and Japanese educational and vocational training systems in Britain and Japan showed that, post WW2, BSA's craftsmen supervisors and junior managers were not as well educated and trained as their counterparts in Honda etc.

The comparison between the directors of IMI and BSA (*Chapter 6.6*) at first sight appears to negate the cultural critique but on closer examination confirms the importance of cultural factors in managerial performance. The clear superiority of the IMI Board arose from ICI's practice with its German culture of attracting university science/ engineering graduates of high potential from the most prestigious colleges. BSA, however, relied for its directors on the personal contacts of its chairman and merchant bankers and denied all but two of its most able staff the opportunity of becoming directors of the company. The comparison also shows that BSA's directors fell short of the mastery of the company's products and manufacturing processes, and the long experience of the business and its markets, possessed by IMI's directors, which were necessary for a firm to prosper against strong international competition.

Unresolved supplementary questions arose in attempting to answer this question. First, there is the issue of availability, recruitment, hiring and promotion. If the ethos of the public schools was anti-business and anti-manufacturing, how was it that BSA nevertheless managed to fill its top positions with so many public school products? Was it really the case that the City, the professions and the civil service got all the very bright boys? Do we

even know that the public school boys who ended up at the firm were really less able than their classmates who went elsewhere?

Secondly, BSA did quite well before 1946 and badly in the late 1960s. Was the company's top management in its glory days less 'old boy' than when it was rapidly declining? If not, then it has to be explained why the leadership after 1946 reflected the bias of the public schools when the leadership before did not?

The third issue relates to indifference and inattention. Lack of ability and expertise and an aversion to business and manufacturing are not the only routes to poor management.

Indifference and inattention can pull a firm down just the same. In the case of BSA there may well have been factors such as these that contributed to the same regrettable end, even if there were men in charge with talent, knowledge and a genuine belief in business as a calling.

To make the 'cultural critique' analysis viable it would have to be shown that the chairman and directors of BSA, either were not very able or that the ethos by which they worked was recognisably that of anti-industrial public schools (assuming that the public schools really were anti-industry). It can be seductively easy to think that a public school education leads automatically to poor industrial management: the record of BSA, (and British manufacturing) is rather more complicated than that.

The weaknesses of BSA's directors and senior managers could have been mitigated earlier in their careers by international standard production engineering and management training. Alas, management training in the UK in the 1950s and 60s left a great deal to be desired and fell well short of the highest standards. Furthermore, the need for such high level training was not recognised by the Directors themselves.

The hypothesis thus has some *prima facie* plausibility there are too many variables involved and too many unresolved supplementary questions arise, for this to contribute effectively to a rigorous account of the causes of the demise of the firm

Wider Issues

Chapter 4.2.1 examines (d) the way in which the Board, post WW2, made or failed to make key strategic and policy decisions and the consequences that flowed from them. The main reasons for the decline of the company are to be found here. Taken together they add up to a sustained failure of direction and management over two decades by a complacent Board running a company initially selling into soft markets, that was ultimately overwhelmed by international competition that it had failed to predict or assess.

The first error was the post-WW2 decision to further diversify the company, beyond the long standing pre-war ownership of Daimler Ltd and Jessop-Saville Ltd, in an attempt to build an industrial holding company, without appreciating the effects this may have on the motorcycle business. By opting to pursue an opportunistic, rather than a strategically planned, approach to diversification, by the late 1960s BSA was manufacturing in no less than eight diverse industrial sectors. Only one of these subsidiary companies (sintered metals) was a UK market leader, while the motorcycle division had been World market leader in the early 1950s. The managerial strain that such a wide spread of interests imposed on the Executive Chairman and his Finance Director made it inevitable that the motorcycle division would be starved of Board level monitoring and support. All this effort may just have been worthwhile if any of the new subsidiary companies had delivered substantially better returns than the motorcycle and tools businesses, but this was never the case.

Instead of spending capital and effort to acquire other industrial companies with profit and growth potential, the Board would have better been employed addressing the future of Daimler, the largest of its non-motorcycle subsidiaries. The failure to either sort out Daimler's problems, or dispose of the company much earlier than 1959, was a major failure of management for the financial record of the subsidiary was grim. Under Sir Bernard Docker's autocratic control, however, little could be done until he was dismissed in 1956 as his personal (and thus the company's) image was too closely bound up with his personal Daimler. Thereafter it took a further three years before this millstone was removed from the company's neck.

Jessop-Saville was different in that the company was consistently, but modestly, profitable and their in-house development work offered BSA an opportunity, in the 1950s, to enter into the fast growing aero-engine business. That this opportunity was not taken denied BSA participation in a major international growth business (*Chapter 3.4*).

The growth of the Tools Division, both by acquisition and organically, was relatively better managed than the rest of BSA in that, prior to being merged into Alfred Herbert in 1966, it had become the second largest machine tool company in Britain (*Chapter 4.2.6*). The decision to protect and possibly enhance, the income stream from this business by combining with the upmarket leader was defensible at the time. There was a lack of awareness, however, in the combined company of the fundamental weaknesses of the business arising from past under-investment in advanced research and development, and the collapse of their order book caused by the fall in corporate liquidity of their customers that occurred in the 1960s, was a death blow. Had Tools Division remained within BSA it is probable that the outcome would have been the same, for the adverse forces acting on the UK machine tool industry at the end of the 1960s spared no company in the sector.

The loss of almost £7m from this investment seriously weakened BSA's ability to ride out the crisis that enveloped its motorcycle division and to remain masters of its destiny.

It is over their direction of the motorcycle division that the Board is most open to criticism.

The inability of the non-executive Directors, due to lack of knowledge and experience, to hold meaningful discussions with their motorcycle professionals led to a vital communication gap. The strategic errors within the motorcycle business that were made in the 1950s came home to roost in the late 1960s. The failure to develop a cheap, lightweight motorcycle and to raise the capital necessary to update their motorcycle manufacturing facilities to Japanese standards, made it inevitable that BSA would not be able to compete (except, initially in large bikes) against Honda, Kawasaki and Suzuki when they arrived in the UK and US in force in the early 1960s. A further error in the 1960s was the staffing of the new Group (but effectively, Motorcycle) Research Centre with engineers predominantly from the aircraft industry that meant that while the costs were high, the benefits were minimal.

The delays in integrating the BSA and Triumph motorcycle businesses (*Chapter 4.2.2*) and in not adopting Hopwood's proposal to design a new modular range of motorcycles that could compete with the advanced Japanese machines, also left the business vulnerable to loss of market share (a key index of the long-term health of a business) regardless of the number of machines produced or short-term profitability. It was not until the formation of an Export Sales Team in 1966 that professional market analysis began to reveal the true position of BSA in the rapidly changing international motorcycle market and the full extent of the risks involved in being dependent on the heavy end of the US motorcycle market. There is no evidence, however, that the non-executive Directors ever saw this analysis.

The 1968 and 1971 production crises that led to the losses which brought the motorcycle division, and thus the group itself, to its knees was self-inflicted injury arising from poor re-design, production management and quality control. The major changes involved in moving to computer controlled material and component supply and the design change overload in the engineering department was badly handled by the management of the division.

While, with the benefit of hindsight, it is easy to criticise management for losing control of the Meriden shop floor, it must be recognised that this was occurring at the time throughout the UK motor car and general engineering industries. In contrast, industrial relations at Small Heath were far better than the norm in these industries and were underpinned by great loyalty to BSA as an institution; loyalty that deserved better management than it had in the 1960s and early 1970s.

In spite of the above failures the motorcycle division did have some successes, notably in overcoming the decline in its home market by rapidly increasing sales in the US (even though its market share was falling). In 1969/70, no less than 90% of its output was exported and in the previous six years the value of BSA and Triumph motorcycle exports had increased by well over four times, a fine performance dwarfed, however, by that of the Japanese motorcycle manufacturers.

The Directors handled governance issues considerably better than they did the severe management problems the company faced. Up to the final collapse, BSA retained, in Birmingham particularly and Britain as a whole, its reputation as a fine, long established British company and good employer. This well earned reputation made it all the more difficult for the stakeholders in the company come to terms with the collapse, previously seen as unthinkable.

Government policy undoubtedly had a significant influence on BSA. It cannot be considered, however, the primary reason for the collapse. The high company taxation regime in the 1950s and 60s and the 'stop-go' economy admittedly were factors in the decision of the Directors not to raise significant additional capital to invest in the motorcycle business. Frequent changes in the controls on hire-purchase, purchase tax and the tax on petrol inhibited sales in the home market and made sales forecasting difficult. These factors, however, were not unique to BSA or manufacturing industry at large. The damage done to the industry by the Anglo-Japanese trade agreement was due as much by BSA's failure to educate the Department of Industry of the validity of the argument for at least phasing-in its provisions, as by Ministers' rose coloured spectacles.

Nothing has been revealed that suggested that the City, represented by the clearing and corporate banks, the insurance companies and others, such as pension funds, that had capital to invest, were to blame for the collapse of BSA. There was little pressure on the company to pay high dividends and Barclay's Bank did all that it could reasonably have been expected to do in providing extended overdraft facilities during the company's terminal cash crises. They are also to be commended for taking over from BSA's American bankers in 1972 the financing of the company's motorcycle stocks in the U.S. It is not known what the response of the capital markets would have been had BSA sought to raise a substantial sum to re-equip the motorcycle factories, for the company never approached them, but its Profit & Loss Accounts and Balance Sheets of the 1950s and favourable comment in the financial press, suggested that the necessary capital would have been made available.

The influence of the Trades Unions on the events leading up to the collapse was minimal. Industrial relations at Small Heath were good and the well-documented problems at

Meriden (*Chapter 4.3.2*) were due to unofficial action provoked by poor management rather than the accredited Trades Unions.

Was the performance of the 1919-39 Boards of BSA any better than their post WW2 successors? Certainly, during the earlier period, BSA dominated the international motorcycle market but, taking the company as a whole, the results were far from impressive. Davenport-Hines described BSA's Boards during the inter-war years and concluded that the devastating comment of Geoffrey Robinson in 1978:

‘ in the period after WW2, BSA was subjected for some twenty-five years to a whole series of irrelevant structural reorganisations, top management re-shuffles and abortive attempts at new product development’ (1984, p.214).

was equally applicable back to 1918.

Could the collapse have been avoided? Better management of the problems of the motorcycle business in the late 1960s may have prevented the Group's complete collapse but it would have had an uncertain future thereafter. The relative decline of the motorcycle business, however, was inevitable once the decision was made in the late 1950s not to invest heavily in it. Had a decision been made soon after the war, however, to concentrate exclusively on the design and production of motorcycles by disposing of the other businesses in the Group (notably the loss-making Daimler), and investing heavily in new designs and modern production equipment, BSA may have been in a position to meet the subsequent Japanese competition. This, however, would have required professional management from the post WW2 Directors.

The above explains, in the managerial and financial sense, what happened and why. It does not explain, however, how BSA came to have in the late 1950s and 1960s such a weak Board capable of making so many strategic errors especially after the magnificent achievements during WW2. The lack of strong international competition and easy profits

in the late 1940s and 50s undoubtedly led to an undemanding approach to the recruitment of directors and senior managers.

In summary, the collapse of BSA was due to major failures of strategy, direction and management by directors and senior executives who were not up to the job of running one of Britain's then largest industrial companies after it was exposed to major international competition in its home market. These directors squandered two priceless assets bequeathed to them in 1946, world market leadership of their main product, and the exceptional loyalty of their work force at Small Heath. The City judges management by the value of the company's shares and their growth prospects; this is why both Lionel Jofeh and Eric Turner had to leave BSA. Had the shareholders forced them out earlier the company may have survived, but with a motorcycle subsidiary severely weakened by the strategic errors of the past.

This thesis is primarily a story of decline and failure, arising from poor management, that was all too common in British manufacturing industry in the 1960s and 1970s. It is hoped that the lessons to be learned from this debacle will be of value to today's students of industrial management.

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- Birmingham Central Library Archives: MS 321 Birmingham Small Arms
- Coventry City Archives: PA594, Daimler & Associated Cos. 1891-1943
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7 th July 71	Second Interim Report	(S 353)
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