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**The development of modern accounting and the  
changing position of shareholders**

**1864 – 2000**

by

**Marianne V. Pitts**

A collection of papers submitted in partial fulfilment of the requirements  
for the degree of Doctor of Philosophy

Warwick Business School, University of Warwick

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## **Declaration:**

This dissertation has been written by me, Marianne Pitts and has not been submitted for a degree at any other university. The four papers presented herein are all sole-authored and based on my research into primary data.

1. Victorian share-pricing – a problem in thin trading.

*Accounting, Business and Financial History* Vol. 8 No.1 1998 pp.33-52  
presented at the ABFH conference, Cardiff, September 1997.

2. Did dividends dictate depreciation in British coal companies  
1864-1914?

*Accounting History* NS Vol. 3, No. 2, November 1998 pp. 37-67  
presented at the BAA conference, Birmingham, April 1998.

3. The rise and rise of the share premium account

*Accounting, Business and Financial History* Vol. 10, No. 3, 2000 pp.317-346  
presented at the Accounting History conference, Melbourne, August 1999.

4. In praise of the “other” William Armstrong: a nineteenth century British  
engineer and early management consultant

*Accounting History* NS Vol. 6, No. 2, November 2001 pp. 34-58  
presented at Journées d’Histoire de la Comptabilité, Paris, April 2000  
and the Accounting History conference, Osaka, August 2001.

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## Chapter 1 Introduction

### 1.1 Introduction

This dissertation consists of a set of four sole-authored, reviewed and published papers which develop the theme that company accounting policies, particularly those relating to asset valuation, depreciation and dividend policy, developed in response to a change in the general perception of the nature of the property rights of the original owners. The original owners of commercial and industrial concerns in the early nineteenth century were the partners. After incorporation they and others became the shareholders of the company.

The origin of commercial and industrial companies as partnerships influenced the British government and legal thinking for nearly a century from 1856 to 1945, the date of the Cohen Committee. It was the age of *laissez-faire* and has been much discussed: Parliament was less keen to intervene in connection with the generality of companies, where the view expressed in 1856 by Robert Lowe, then President of the Board of Trade, that 'having given [companies] a pattern the State leaves then to manage their own affairs ... (quoted in Hein, 1978, p.149) provided a rationalization of the widespread belief that it was no business of the state to interfere in what were seen as private contracts between shareholders (Sugarman and Rubin, 1984, p.12). Moreover, a *laissez-faire* approach on the part of the courts, where 'formalist' views were at their height (Atiyah, 1979, pp.388-97), seems also to have affected the attitude to accounts on the part of the courts. This may be observed in the series of 'dividend' cases in the nineteenth century (French, 1977) where judges on the whole were loath to go beyond

the companies' Articles of Association and the latter of the Companies' Acts (unless they could adduce fraudulent or improper behaviour on the part of directors) in assessing *matters of valuation, income measurement and profit determination*.

(Napier and Noke, 1992, p.38, emphasis added).

These issues '*matters of valuation, income measurement and profit determination*' form the basis for much of this dissertation. There is one further paper extending the work of Jefferys (1938) and Cottrell (1980) on the format of share issues from 1914 (Pitts 2000).

Much of the material in this dissertation is based on primary data collected from the London Stock Exchange Archive and coal company archives (including integrated coal, iron and steel companies) for the period 1860-1914 (see Chapter 3 for sources of data). The topics considered are those of corporate finance: the valuation of assets (Pitts 1998a, Pitts 2001) and dividend policy (Pitts 1998b). Pitts 1998a and 2001 are case histories and relate respectively to a specific company and an individual, while Pitts 1998b relates to the coal and iron industry generally. The only paper which considers periods after 1914, and is not sector-specific, is Pitts 2000 which deals with the development of low nominal value shares with high share premiums after 1920. Examples of early share premiums and their treatment in accounts are, however, taken from the coal companies.

Although the primary data is taken from the archives of coal producing companies, the conclusions of the papers in the dissertation apply across a wide range of industries.

Many of the biggest coal producers (Bolckow Vaughan, Dowlais/GKN, Powell Duffryn, John Brown, Wigan) were vertically integrated with the allied sectors of iron, steel, engineering, shipbuilding and ordnance, so these sectors shared the same evolution. Moreover, there was a common legal, financial and economic background to all British sectors: speaking of a wide variety of trades at the end of the nineteenth century

‘even the very large mergers that took place in branches of the textile industry and in brewing, iron and steel, cement, wallpaper and tobacco at the close of the nineteenth century often failed greatly to weaken the hold of the founding families, so high a proportion of the issued share capital was retained by the vendors’ (Payne, 1984 p.173)

and there was still a substantial degree of family or founders’ control in the twentieth century (ibid.). Other owners were drawn from the same groups: the coal and iron companies were located in the provinces like most British industrial and commercial concerns, and:

‘the vast majority of provincial public limiteds were floated locally, ... . A frequent procedure was to place securities privately among the former partners, the directors (if the firm was already a limited company) and wealthy friends and contacts’ (Edelstein 1971 p.89).

The development of accounting and valuation techniques discussed in the papers which follow is, therefore, not confined to the British coal industry, important as it was: coal was the chief world energy source during the Industrial Revolution and



after (well beyond 1914) for manufacture, transport (rail, ships) and domestic heating. In Britain it was a boom industry after 1860; U.K. coal-mining employment grew from 300,000 to over 1 million in 1914 (Church 1986 p.189). Production also more than trebled in the same 50 year period: from 85 million tons a year in 1860-4 to 270 million tons a year in 1910-1914 (Mathias 1983, p.449). There were a large number of coal enterprises ranging from the largest companies to very small family concerns, but size did not seem to affect the accounting methods approved and adopted by directors of these companies.

British accounting development in the century from 1864 to 1950 was a crucial period for modern company accounting practice world-wide. Current accounting practices of the former British Empire and the United States of America were derived from the British example and even Japan 'built the foundation of modern accounting practice by learning from the Anglo-American experience' after 1868 (Tsumori, 1995 p.71). The only exceptions among industrialised nations are those of mainland Europe, whose accounting tradition is based on Napoleon's Code de Commerce of 1807.

The purpose of the collection of published papers presented in this dissertation is to investigate some of the important changes in British accounting law and practice and the events that led up to them, with the aim of rationalising and putting these developments in context in a general economic and legal framework.

## 1.2 History: from Partnerships to Joint Stock Companies

Companies, as such, did exist before the Joint Stock Companies Act of 1844: there are estimated to have been 1000 or so of them, mainly in railways (108), gas and water (224), insurance (172), banking (48) and shipping (46), each with its individual Act of Parliament or Royal Charter (Edwards, 1989 p.104) and their accounts were closely regulated (see section 2.3). All other businesses were run by sole traders or partnerships and their accounts followed the well established principles of partnership accounting. A major change was brought about by the Limited Liability and Joint Stock Companies Acts 1844-1862, which offered an unprecedented opportunity for entrepreneurs in existing firms: incorporation of sole traders and partnerships as limited companies suddenly became cheap and easy (Cottrell 1980), involving registration and a fee rather than an individual Royal Charter or Act of Parliament. This was a defining moment for all manufacturers and businessmen. At the time, the chief attraction of incorporation was limited liability; the possibility of extended finance from shareholders who might be willing to invest in new projects was of secondary importance.

The opportunity for incorporation was also a challenge: these were uncharted waters. There were book-keepers, economists and engineers but no professional accounting body as such. The Companies Act 1862 Table A was the default model for the Articles of Association of a company and was *optional*, giving the directors complete freedom in the structure and management of their business affairs. Leading industrialists of the day were pioneers of the new corporate format.

Most companies incorporated in 1860-1880 had an earlier existence as partnerships (Shannon 1932, Payne 1984). Table A included the following two articles which are evidence that the legislation assumed that shareholders in a company (significantly referred to as 'Members') would be treated as 'sleeping partners' and be entitled to as much financial information as they might require:

'Art. 78 *The Books of Account* shall be kept at the Registered Office of the Company and subject to any reasonable restrictions as to the time and manner of inspecting the same that maybe imposed by the Company in General Meeting, *shall be open to the inspection of the Members during the Hours of Business.*' (emphasis added).

'Art. 79 Once at the least in every year the Directors shall lay before the Company in General Meeting a Statement of the Income and Expenditure for the past year ... arranged under the most convenient Heads the amount of Gross Income, distinguishing the several Sources from which it has been derived, and the Amount of Gross Expenditure, distinguishing the Expense of the Establishment, Salaries, and other like Matters:

Every Item of Expenditure fairly chargeable against the Year's Income shall be brought into Account, so that a just Balance of Profit and Loss may be laid before the Meeting.'

Contrary to the expectations of the legislators most companies did not publish a Profit and Loss account at all: any information on profits appeared on the balance sheet in the entry for the revenue reserve revealing only the allocation of the current year's



profit to interim and past proposed dividends. Even the published balance sheet was much reduced in detail from that of Table A (Edwards and Webb, 1985, p.184). The annual accounts were not always distributed to shareholders and might 'only be available for inspection at the company's registered office for a limited period' (ibid. p.185-6). The degree of detail recommended in 1862 for a Profit and Loss account only became compulsory in the Companies Act of 1981. In general, the management and corporate governance of early companies resemble those of modern "close" companies much more than those of multinationals.

### **1.3 Structure of dissertation**

The next chapter contains a review of the literature that relates to the development of accounting and finance over the period of the study. This is broader in scope than the (necessarily) narrower and more focussed discussions of the literature within the published papers. There follows a separate chapter devoted to the primary data which form the basis for all the papers. This leads on to the papers themselves, which are presented in the underlying sequence of topics: asset valuation, the issue of shares and profit recognition. This sequence is consistent with the ordering of these matters in the transition from partnership to limited company.

### *1.3.1 Valuation of assets for the issue of share capital*

The first financial decision that had to be made on incorporation as a company was how to value the assets of the trade so that ownership of assets could be exchanged for ownership of shares in the new company vested with these assets. Two papers in the dissertation are concerned with the methods employed (Pitts 1998a, 2001). The simplest method of asset valuation was the net book value of the fixed assets on the balance sheet or partnership accounts, i.e. the depreciated historic cost. This valuation was used in a family settlement of 1896 for Pease and Partners Ltd. and formed the basis of the legal case described in the paper (Pitts 1998a). The 1898 valuation for the initial public offering (IPO) of Pease and Partners Ltd. was made by the accountants Price Waterhouse and was based on expected *future* earnings and dividend cover.

One method which could *not* be employed was comparison with the *Price/Earnings* ratio of other coal and iron companies because trading in such shares was too thin for quoted prices to give any guidance on current value (Lavington, 1921 p.221), and confirmed in Church (1986, p.552). The consequent large bid-ask spread of such shares was found in Stock Exchange daybooks (Pitts 1998a) and from inspection of companies' annual returns, which were required to list both the current shareholders and those who had ceased to be shareholders during the financial year. The turnover in share ownership in all companies was found to be very low until well after 1914: inspection of annual returns for the 1930's (many of which are hand-written) also show little change from year to year.



The earliest valuations (1850-1870) seen in the archives for the incorporation of coal-mining firms and for the purchase of mines as going concerns were by the mining engineer and consultant William Armstrong (Pitts 2001). He used techniques which are regarded as modern: particularly the calculation of the net present value of future net cash flows discounted at risk adjusted rates (DCF). This method is generally thought to be a development of the twentieth century and is credited to Fisher (1930) in current textbooks of finance (e.g. Brealey and Myers 2000) but Pitts (2001) demonstrates that DCF was a standard valuation technique in regular use a century earlier. There is evidence of even earlier use in the valuation of real assets such as land and mines (Miller and Napier 1993, Scorgie 1986, Parker 1968).

### *1.3.2 Share issues*

At the start of the period, 1864, initial public offerings of shares were of high denomination: see section 2.4. Shares were normally issued at par and part-paid; 'calls' could be made by directors on shareholders until the share was fully paid up. As examples, both Staveley and Sheepbridge issued shares of £100 nominal value, part-paid (£60, £80) and Powell Duffryn's 1866 IPO was for shares of £5,000 with regular calls for £100 per share or more and dividends compulsorily re-invested in the company until the shares were fully paid in 1882 (Pitts 1998b). Generally calls were unpopular with shareholders and the most regular source of equity for any company after the IPO was retained earnings (typically about half: see Pitts 1998b). On occasion more capital contributions were required:

‘British industry continued to maintain its operations right up to 1914 largely through a mixture of internal finance generated from profits and inheritance, a complex network of personal loans, and a fairly frequent resort to short to medium-term bank loans’ (Kynaston 1983 p. 7).

As a last resort, secondary issues of shares were used to widen the share capital base. IPOs of private companies (Pitts 1998a) were one example of this, secondary issues of ordinary shares (e.g. Consett and John Brown) another and purchases of assets such as coal mines could be financed with new shares, as was done by Henry Briggs in 1907 (Pitts 2000).

In IPOs and non-rights secondary issues, pricing the shares for sale to new external investors was a problem; the equity of the existing company consisted of not only the nominal value of shares issued at par at incorporation – as was the universal practice at the time – but also past earnings retained in the company for growth. Later issues were therefore made at a higher price than the nominal price of the share (“at a premium”) to reflect the continuous investment of past shareholders through retained profits.

Before the Companies Act of 1948, there was complete *laissez-faire* on the treatment of any share premium. There was no mention of it in any company legislation; it could be, and, was used for any purpose the directors thought fit - such as payment of dividends or depreciation of assets (effectively using the premium as a hidden reserve). This freedom was often explicitly stated in the Articles and undisputed until after 1920.

In Chapter 6 (Pitts 2000), the difference between the early permissive attitude on the use of the share premium account and modern legal restrictions, and the reason for this change, is analysed and explained using Commissioners of the Inland Revenue (CIR) reports and company prospectuses 1900-1950 from the London Stock Exchange Archive. The paper shows that there was a change in the nature of the share premium account: it was originally a contribution by 'new' shareholders in a secondary share issue to the accumulated retained revenues of the 'old' shareholders, but after 1920 share premiums appeared in IPOs, when they became part of the issued share capital. This was the result of a tax loophole, open from 1899, but not exploited until the capital duty rate had risen to 1% in 1920. The loophole was closed in 1973, but the custom of issuing shares of low nominal value at a high premium has persisted in the U.K. right up to the present day.

### *1.3.3 Definition of profit and dividend policy*

Once the assets had been valued and shares issued, the old profit-sharing partnership agreements were replaced by a dividend policy. Discussion of this was not minuted; no mention of the topic was ever seen by this author in any records of the directors' meetings. There were few guidelines: article 116 of CA 1862 Table A stated that dividends should be paid from profits arising from the business of the company. Most companies adopted this in their Articles (Edwards 1989, p.177) but Table A made no clear definition of profit and particularly omitted all reference to depreciation. As a coal mine is a wasting asset this was a significant omission (Pitts 1998b).



The case law on distributable profits is generally seen as inconsistent and incoherent giving directors little guidance or restraint (see Section 2.3.2). William Armstrong's position on this issue is interesting and relevant. As discussed in Chapter 7 (Pitts 2001), he saw a clear need for a systematic depreciation policy and possibly the creation of a sinking fund so that the capital of the coal-mining company might be preserved. His advice was highly regarded and sought by many of the leading industrialists of his time.

The directors of the coal companies were substantial owners of the company. In the sample of companies studied, ownership of directors (excluding their kin) ranged from 100% to 4% at incorporation, with a mean of 40%, (which fell to 20% by 1914). Pressure to distribute dividends was hard to resist, particularly as the directors were not diversified in their investments and much of their personal wealth was tied up in the company, just as it had been when the business was a partnership. Their own standard of living was affected by the dividends that they proposed.

Coal company dividend policy changed over the years – beginning with a simple partnership style of profit-sharing. The consequent big variations in dividends gave rise to shareholder complaints in poor years. Chapter 7 (Pitts 1998b) shows how provision for depreciation was one element which could be – and was – adjusted from year to year to create profits and enable dividends to be paid even in bad years. Generally this was not disclosed to the shareholders. The profit-sharing policy was gradually replaced by the payment a steady percentage of the paid-up share capital,

and quoted as such in *The Economist*. Thus shareholders ceased to be seen as partners or even sleeping partners but more like deposit holders in a bank or building society. The earliest example seen in the LSE archive was the Patent Nut and Bolt Company 1872-1896, under Arthur Keen, founder of Guest Keen, and it was common in the first half of the 20<sup>th</sup> century (Florence, 1961 p.148).

#### **1.4 The relevance of the issues**

This section discusses the relevance of the issues addressed in the published papers and what may be learnt by the study of their history.

##### *1.4.1 Accounting problems*

The definition of capital; the valuation of assets; the protection of creditors; the necessary disclosure standards of public or private companies; the need for depreciation of assets and the definition of distributable profits were all controversial before 1914 and are still matters for debate in current accounting practice, both nationally and internationally. Statute and case law are derived from the scandals, verdicts and solutions of the past. New accounting standards are regularly set up in an attempt to improve or refine the old.



#### *1.4.2 Corporate governance*

The problems of corporate governance are subject to much recent enquiry and review (Hampel 1998, Greenbury 1995, Cadbury 1991) and currently shareholder approval of Director remuneration in aggregate is being considered. Directors of the largest companies are no longer owner-managers but agents. Ensuring that company assets are managed for the benefit of shareholders and not abused for the benefit of directors has evaded the best efforts of the legislature, particularly when one director is a very powerful and aggressive personality (Napier 1999, Kay and Silbertson 1995).

Current “received wisdom” is that agency problems can be reduced by aligning the interests of directors with those of shareholders (Jensen and Meckling 1976). To this end, directors are granted employee stock options which increase in value with the value of the company. The efficacy of this theory might be challenged by looking at the past: in early companies, directors’ and shareholders’ interests were very closely or even fully aligned but this did not eliminate accounting and financing problems or the abuse of directors’ powers (Pitts 1998a).

#### *1.4.3. The effect of individuals on accounting and finance*

A number of individuals mentioned in the dissertation had a powerful effect on the financial decisions and policies of the new limited liability companies and on company legislation. Many have entries in the Dictionary of Business Biography. One example was David Chadwick:

'who as one concerned with the formation of some of the most important limited companies in the first thirty years of limited liability knew more about the workings of the system than any one single person' (Jefferys 1946 p.49).

There were others: William George Armstrong, Arthur Keen, Isaac Lothian, Henry Pochin, David Dale. Many set the standards for industry in their own companies and were consulted by Parliament on amendments to company law (Pitts 2000, 2001, 1998a).

The subject of Pitts (2001) is an important but forgotten individual: William Armstrong of Newcastle (1810-1896). He is another of those who had an important influence in his day, hitherto obscured by his more famous namesake, and his correspondence confirms the financial sophistication of Victorian entrepreneurs. He was a consultant Mining Engineer and "was generally regarded in the North of England as the father of the coal trade, his advice being sought in almost every difficulty that arose: in fact no man in his profession was more trusted or more respected" (from his obituary *Transactions of the Institution of Mining Engineers* 1897-8). This is no mean tribute for the time and place. The paper (Pitts 2001) identifies Armstrong as an important disseminator of valuation and management accounting techniques and confirms Parker's view that in the coal and iron industry "the extension of discounting to investment in fixed assets ... was based on the work of engineers and economists" (Parker (1968), p.58).

## 1.5 Conclusion

Great Britain was the undisputed leader of industry in the nineteenth century and pioneered the processes and regulations for companies limited by simple registration. Forces for change were economic and social; there were no comparable institutions overseas to set the standards. These processes were open to abuse. Investors were exposed to fraudulent prospectuses and secretive directors and the *laissez-faire* government policy which prevailed throughout the period did little to protect them. The very survival of the limited company was uncertain. The history of company law traces the legal steps taken to increase disclosure which is a necessary but not sufficient prerequisite for shareholders to exercise control over their assets.

In this series of papers, the emphasis has been placed on the underlying reasons for change and how these have been channeled into new practices, working wherever possible from primary data. The aspects considered in depth are identified in Sections 1.3 and 1.4. The process of change was continuous; the coal industry experienced many changes of fortune after 1914. As part of an ongoing research programme, collection of primary data up to the time of the nationalisation of the coal companies in 1946 is currently in progress with the aim of analysing later accounting developments in this industry.



## Chapter 2 Literature review

### 2.1 Introduction

A full bibliography containing all the references cited is to be found at the end of the dissertation. In addition, each individual published paper (Chapters 4 - 7) ends with a specific list of references, indicating the relevant literature sources. The purpose of this chapter is to provide a broader review of the literature in order to put the material of the papers in context.

Industrial finance and accounting in Britain for the period which ended with the First World War has been studied extensively in the last century. In this dissertation the analysis has been based on primary rather than secondary sources – chiefly, but not exclusively, relating to coal mining activities. The primary documents and the methodology are discussed in Chapter 3.

It has been argued above (section 1.1) that the conclusions of these published papers apply not only to the coal industry but also to many other sectors of the nineteenth century economy. A unique exception (so far) is on record: for *part* of the important cotton industry, the large cotton coarse spinning industry in Lancashire:

‘the crucial characteristic of this particular sector of the industry was that for over 30 years, between approximately 1860 and the late 1890s, a very significant proportion of its companies engaged in a policy of full and public disclosure of accounting data’ (Toms 1998 p. 222).

The practice was due to the localised nature of the trade and investors and the popularity of share ownership, combined with an active market in shares on the Lancashire Stock Market in Oldham (and not on the London market). The breakdown of the Oldham cooperative principle from 1880 onwards was due to an economic depression and consequent working class disillusionment with investment leading to a changing pattern of share ownership from employees to wealthy individuals. This, in turn, led to a growth in private and secretive companies (ibid.), with similar practices to those discussed above. The coarse spinning industry 1860-1890 is the exception which proves the rule.

Whereas the work discussed above related primarily to research in coal and allied industries, the study of the growth of the share premium (Pitts 2000) has its genesis in a tax-avoidance technique and is therefore applicable to all sectors of trade and industry in Britain. This paper traces the interesting development of this accounting device from its 'discovery' as a Stamp Duty avoidance technique to its current role in capital maintenance.

## **2.2 Companies after the reform of company law 1855-1862 (all papers)**

A frequently cited passage from Cottrell (1980) sets the scene:

'The total reform of English company law during the years between 1855 and 1862 marks a sudden and sharp break; change both before and subsequently was a long drawn out, gradual process. Not only was the pace suddenly quickened, but the law itself was turned upside down, with all the barriers in the



way of company formation being removed. This extreme degree of permissiveness was to become the hallmark of English law.' (p.54).

Effective general limited liability started with the Joint Stock Companies Act of 1856 and the fate of the first 5000 (actually 4859) registered in London under this Act before December 1865 has been traced in a series of papers by Shannon, published in 1932-3. Some companies never started ('abortive'), or were wound up voluntarily or sold or amalgamated or reconstructed, but more than half became insolvent within less than eight years of promotion. 54% of the first 5000 had ceased to exist after 10 years (Shannon 1932a p.418). Fraud was suspected in a material but unspecified number of cases:

'For the benefit of promoters and their professional allies, the lawyers and accountants, many companies were deliberately set up in order that after a short fictitious existence they might pass into the winding up process, with birth and burial expenses accruing to their creators.' It would be arranged that the first charge on the capital received from investors should be the preliminary promoting and vendor charges, which satisfied the first of the trio, and a preferential charge on the assets in winding up was (and is) the legal expenses, which satisfied the other two.' (Shannon 1932a p.415)

Shannon also calculated the 'factor of fraud, ignorance and misjudgment' in company promotions in 1856-65 (35.9%), 1866-75 (37.1%), and 1875-83 (36.2%):

'The investor, it seems, was neither *homo economicus* nor *homo sapiens*.'

(Shannon 1933 p.302). In another contemporary paper there is the following comment on the speculative (and possibly fraudulent) company, explaining the reasoning behind the introduction of capital duty and it is a relevant preliminary to Pitts 2000:

‘The problem of the speculative company existed also in the eighteen-eighties, for according to the Royal Commission on the Depression of Trade and Industry the cure was to be found in an increase in the fee for registration. When the Share Capital Duty was raised gradually this effect followed, and the problem of investment in speculative companies tended to become subordinate to that of investment in badly managed companies.’ (Todd 1932 p.69)

It is important to note that the companies studied in this dissertation were the survivors and were set up in good faith. There is, therefore, an inevitable survivorship bias in the papers. Data for the failures has not survived (Church 1986 p.518).

### **2.3 Disclosure to shareholders (Pitts 1998b)**

By contrast with normal commercial and industrial enterprises, during the period before 1856:

‘no one seemed to have queried the right of railway companies to have limited liability. It was taken for granted that where a large capital beyond the means of a few partners was needed for a work of acknowledged public usefulness, the subscribers should be given that privilege. ... As the members had no real

control over the company, limited control must be balanced by limited responsibility, if the capital was to be raised.' (Shannon 1932b p.286)

Railways belonged to a different class of companies whose activities were regulated: they were required to issue Profit and Loss accounts to their shareholders by specific Acts of Parliament (Jones and Aiken 1994 pp.207-218). Section 1.2 lists the numbers and sectors for regulated and chartered companies in 1844. Many of them were natural monopolies and their operations 'could affect safety in two ways: the physical and the financial' (Parker 1990 p.57). The legislators and bureaucrats were conscious 'not just of the interests of shareholders and creditors but also of the consumers of (railway) services ... and of the government itself' (ibid. p.58) – hence the strict reporting rules for railway companies and similar requirements for public utilities and financial institutions such as banks and life assurance companies. These requirements did not apply to limited companies created by registration in the period 1856-1862:

'With respect to commercial and industrial companies there is cause for believing that regulators sought to minimise disclosure to an acceptable minimum. For instance, evidence given to the Gladstone Committee (1841-3) and the Davey Committee on Company Law Amendment (1895-8) revealed that witnesses were firmly opposed to the disclosure of the profit and loss account.' (Jones and Aiken 1994 p. 221)



Politicians assumed (see page 1.6) that shareholders of companies, working in the competitive fields developed by partnerships, could as 'members' receive all the financial information they needed by inspecting the company records or by enquiry at General Meetings: 'In shareholder/director relationships the market was not expected to fail' (Parker 1990 p.55). However, it frequently did. Minutes of Annual General Meetings for coal companies revealed that shareholders asking questions were snubbed and their questions left unanswered. This was general: *The Economist*, in an editorial on 'The Rights of Shareholders' thought that the legislature should:

'... convince the directors that they are the servants and not the masters of the shareholders. Autocracy may have its advantages in some spheres of life but it is distinctly out of place at the meetings of public companies.'

(April 8 1899 p.499)

As further confirmation, the following was found to be true at P&O in the 1920s:

'... it must have taken some courage for a shareholder to stand up at the Annual General Meeting after Inchcape (*the Chairman*) had spoken and ask detailed questions' and

'little use was made of questions at the Annual Meeting as a means of obtaining further details about the accounts, and when shareholders did ask questions they rarely received informative answers.'

(Napier 1991 pp.309-310).

As late as 1936, Arthur Chamberlain, as Chairman of Tube Investments, was



castigating Ordinary Shareholders for their indifference, referring to 'tens of thousands of bad shareholders – foolish, credulous, short-sighted, ignorant and easy-going' (Baxter 1950 p.212):

I do wish shareholders would realise that they are not only trustees for their own capital, they are trustees for our workpeople's employment, and for the honour and credit of England's industries. They are neglecting their duty and creating unemployment if they do not attempt to distinguish between good and bad management, and make some sort of effectual protest directly things begin to go wrong. The indications are nearly always there to be read ...'

(ibid. p.205)

That may have been true for Arthur Chamberlain, but these comments were made soon after the publication of Berle and Means' seminal book (1932) on the divorce between ownership and control of 200 large quoted companies in the USA, indicating that the problem was fundamental and universal. A search by J.R. Edwards (1981) in 12 steel and iron company accounts over the period 1900-1940 reveals that most of his selected companies did not in fact publish a profit and loss account until this became compulsory in CA 1929 s.39 (p.12-15), and Edwards and Webb (1985) point out that 'the consensus in favour of keeping financial disclosure to a minimum ... remained free from serious challenge for further 25 years' (from 1906: p. 184).

The most frequently cited papers to criticise the accounting practices of Victorian entrepreneurs, particularly with regard to the lack of disclosure and the failure to

distinguish between capital and revenue, are by Brief (1965, 1966, 1990). More recently, historic company published statements were summarised as follows:

‘The battery of criticisms that can be directed against their accuracy, reliability and consistency is so intense that one might be tempted to conclude that they contain no useful information at all’ (Marriner 1980 p.203)

Arnold (1995) has argued that some of the defects pointed out by Marriner are general and unavoidable in any accounting system: a degree of aggregation; the imposition of annual accounts which do not coincide with the natural business cycle; the lack of consistency in definitions and practice which has persisted to at least CA 1948 and beyond.

Other criticisms such as the manipulation of profits by altering the depreciation policy or by revaluing assets were not found to be substantiated after the internal records of a sample of iron companies were studied in depth (Edwards and Boyns 1994), though Pitts (1998b) found that profits were smoothed and depreciation policies changed to suit the directors’ dividend policies in many companies. In response to this critique of Victorian entrepreneurs, other recent papers have shown that the directors had a clear understanding of depreciation and the Capital Maintenance Rule even if the published accounts did not disclose this (Bryer 1993, 1998, Lamb 1997, Reid 1987). Many papers relating to the coal industry in particular are based on the unusually high disclosure policy and excellent archives of the Consett company (Baldwin and Berry 1999, Baldwin, Berry and Church 1992, 1994, Boyns and Edwards 1995) but not all: Wale 1990 discusses five

smaller coal companies, four in Northumberland and Durham plus the Warwickshire Griff Colliery; Baldwin 1994 is concerned with the Staveley archive. From all these it is evident that much relevant financial information was not disclosed to the shareholders and Pitts (1998a and b) gives further evidence of this.

The use of secret reserves in industrial firms was seen (Napier 1990, Edwards and Webb 1985) but not widespread in the nineteenth century (Arnold 1995 p.48). Moreover, standards of disclosure were actually higher in the late nineteenth century than in the early twentieth (Arnold 1995 p. 49).

Modern standards of disclosure for limited companies began with the Companies Act of 1947 and 1948 (Edwards 1989, Bircher 1991, Maltby 2000); according to Jeremy (1998) this forced disclosure was the cause of a wave of mergers after 1956 by revealing “true (and previously understated) asset values and ... which firms were bargains on the Stock Exchange” (p.213). Directors’ desire for secrecy is entirely rational.

#### **2.4 The nature of shares 1864-2000 (Pitts 2000)**

At the start of the period, 1864, issues of ordinary shares were of high denomination following the precedent set by banks earlier in the nineteenth century. The mean value of shares issued in the period 1865-1870 was above £15



(with a large variance) but shares of £100 were not uncommon and 'more than 30 companies had share denominations of £1,000 or over' (Jefferys 1946 p.45, and more fully in his unpublished PhD thesis of 1938) and see also Cottrell, 1980 Chapter 4. Shares were normally issued at par and part-paid; 'calls' could be made by directors on shareholders until the share was fully paid up. Those shareholders who did not pay a call would forfeit their existing subscription.

In the majority of cases there was no initial intention of calling up the whole of the amount of the share and this fact was advertised in the Prospectus (Jefferys 1946 p.46) but the potential liability remained. This system was not popular with shareholders:

'Shareholders had good cause to dislike additional calls. They often came at embarrassing times. They were frequently made by companies which were in desperate financial straits, and there was thus presented to the stockholder the prospect of sending good money after bad. Moreover the shares upon which calls were unpaid were not transferable' (Evans 1936 p. 41).

The potential liability for future calls made the purchase unattractive and according to many Articles of Association, the Directors' approval was needed before an unpaid share could be sold. The unpaid portion of the share was seen as an excellent security for trade creditors and bank overdrafts and a protection against the new limited liability of investors. The difficulty in transferring such shares "tended to keep the composition of the shareholders stable and to interest them in



the concern” (Jefferys 1938 p.175) – to treat shareholders as partners rather than passive investors.

The nature of issued shares was radically changed soon after 1862: in the financial crisis of 1866 triggered by the collapse of the Overend Gurney bank (Cottrell, 1980 p.58-62; Jefferys, 1938 p.159 and 177-180), the House of Commons and House of Lords were petitioned to introduce amendments to the 1862 Act allowing companies both to reduce their nominal share capital and to subdivide their shares, which was achieved. Not all sectors took advantage of this:

‘The major reason for the high and uncalled shares of the finance companies, banks, investment, insurance etc., was the need of this type of company, more than any other, for good credit and high standing in the eyes of the public and in the opinions of their creditors. They had little or no tangible security ... in the shape of land, machinery or factories, so the security took the form of large nominal capitals and uncalled shares’ (ibid. p.194).

The coal companies studied changed the format of their shares but not immediately: those who had been incorporated with high denomination part paid shares restructured their capital to £10 or £1 fully paid shares in the period 1890-1910. Pitts 1998 gives two annual returns for Pease: the first, dated 1883, features £100 shares, with £80 paid; the second, dated 1900, features £10 shares, fully paid.

After 1920, the nature of shares changed again, gradually, due to an avoidance technique discovered in the rules for Capital Duty, where the nominal value of the authorised share capital was liable for the duty on incorporation, but any share premium on issue was not. As a result the format for Initial Public Offerings became 5/= (25p) shares at a premium of 15/= or more (Pitts 2000) instead of the previous standard £1 shares at par or at a small premium. Logically, therefore, the share premium was as much part of the share capital as the nominal value of the shares. This was a real change in the nature of the share premium. This fact was recognized by the ICAEW and featured in their submission to the Cohen Committee when consulted on the introduction of *no par value* (npv) shares. As a result, the share premium was classified as capital and non-distributable in the Companies Act of 1948 (Napier and Noke 1991, Pitts 1998b, Maltby, 2000). The problems resulting from this law in merger accounting have been discussed by Napier and Noke (1991). The npv share was rejected by the Cohen Committee and again by the Gedge Committee (1954) and is currently under review in a DTI discussion document. Noke has published papers on npv shares in 1981 and 2000, arguing adoption of the format.

The tax loophole which created the high share premiums was closed in 1973 and Capital Duty has since been abolished entirely (in 1995) but the format of 25p shares at a premium has persisted – possibly due to fifty years of custom and expectations of consistency between companies and within them. No other reference to this transformation has been found in the literature and Pitts 2000

extends the work done by Jefferys (1938) to the present day in explaining the format of modern share issues.

## **2.5 The market for shares and the importance of dividends**

**(Pitts 1998a, 1998b)**

Even after the reduction of shares to more manageable nominal values of £10 or less (and fully paid up soon after issue) trading in commercial and industrial shares was very thin. Much of the initial trading in coal and iron shares was so thin that Chadwick's unpublished Investment Circular (1870-1875) gave more relevant and specific information on such shares than any of the London Stock Exchange records. Apart from the London Stock Exchange, there were provincial exchanges in cities such as Manchester, Sheffield and Cardiff for local industries (textiles, steel, coal) and municipal stocks and even smaller Exchanges such as Oldham (Thomas 1973 chapter 6). However, speaking well after 1914:

'It may not be assumed that this organization, extensive as it is, enables all securities, or even any very large proportion of them, to be readily marketed. Even on the London Stock Exchange, as is well known, the quotations of many securities are only nominal: they have no active market and can be dealt with only at a considerable sacrifice in price. Provincial markets are naturally far less effective; many small but sound industrials can neither be bought nor sold within any reasonable margin of price or period of time; the holders of such securities are often, in this respect, *little better than partners in the business ...*'

(Lavington 1921 p.221, emphasis added).



In confirmation of the low marketability of shares, Lowenfeld (quoted in Kynaston 1983 p.245) stated that there was at any one time a genuinely free market in about 400 out of the 5000 quoted securities on the London Stock Exchange in 1909. As far as primary issues were concerned, the London Stock Exchange was more expensive, offered inadequate protection against pre-allotment dealings and speculators, did not guarantee the prospectus and did not ensure ready marketability of shares once issued (Kynaston 1983 pp.343-5). It is therefore not surprising that:

‘... in the specific sphere of the provision of new capital to home industries, ... it is generally accepted that the formal capital market (including the provincial stock exchanges as well as London) supplied only about 10% of such investment’ and

‘British industry continued to maintain its operations right up to 1914 largely through a mixture of internal finance generated from profits and inheritance, a complex network of personal loans, and a fairly frequent resort to short to medium-term bank loans’ (Kynaston 1983 pp.6 and 7).

Shares were held for long periods and the bid-ask spread for industrial and commercial shares was high (Pitts 1998a). Other than at incorporation, shares and share issues were not a significant source of new finance before 1914 due to the poor secondary market. This was not seen as a financial handicap at the time, but shareholders, who might be discontented with a company’s low dividend payout policy, did not have the easy modern alternative of selling the shares, realising a capital gain (‘a homemade dividend’) and investing elsewhere (Miller and



Modigliani 1961). Shareholders were not indifferent to the dividend policy of the directors and it is not surprising that most of the important cases on dividends were decided in the period 1865-1900 (Edwards 1989 pp.177-187).

## **2.6 Case law on distribution of profits (Pitts 1998b, 2001)**

The judgment in *Trevor v. Whitworth* 1887 explained the limitations imposed on distributions by limited liability companies and is cited in Edwards 1939 p.171:

*'(for) a company where the liability is limited ... to assure those dealing with the company that the whole of the subscribed capital ... shall remain available for the discharge of its liabilities. ... A part of it may be lost in carrying out business operations authorised (by the Objects clause of the Memorandum). Of this all persons trusting the company are aware, and take the risk. But I think they have the right to rely, and were intended by the legislature to have the right to rely, on the capital remaining undiminished by any expenditure outside these limits, or by the return of any part of it to the shareholders.'*

The payment of dividends should come from profits, defined as the increase in the value of the company over the year, and to pay dividends implied (to creditors, investors and potential investors) that profits had indeed been made. This is generally known as the Capital Maintenance Rule (CMR) (French 1977 p.306-9). However, profits were never defined as such, and the need for a depreciation policy to allow for the erosion in value of plant, equipment, mining deposits or mining leases to be part of the Profit and Loss account was never legally required.

It was also not clear whether past losses should be recouped before dividends could be paid and whether this applied equally to preference dividends, or whether dividends could only be paid from trading profits and not from capital gains. In view of all these uncertainties, the case law on distributable profits is generally seen as inconsistent and incoherent (Yamey 1941 and 1962, French 1977, Reid 1987, Marriner 1980), giving directors little guidance or restraint, although Bryer (1998) disagrees. He maintains that judgments were entirely consistent with the CMR doctrine until 1889 when 'general agreement on the theory of accounting was shattered by *Lee*' (p.26). '*Lee*' refers to a very significant case: *Lee v Neuchatel 1889*, which seemed to give explicit permission to directors to omit depreciation from their profit and loss accounts for wasting assets:

'There is nothing in the Companies Acts to prohibit a company formed to work a wasting property, as e.g., a mine or patent, from distributing, as dividend, the excess of proceeds of working above the expenses of working, nor to impose on the company any obligation to set apart a sinking fund to meet the depreciation in the value of the wasting property' (decision of Stirling, J).

There is some evidence that depreciation accounting declined in British mining companies after this decision (Morris 1986). However, the conclusion one draws from the literature and the case law is that directors had great economic freedom in deciding their dividend policy, particularly when they could claim an adequate provision for depreciation. Pitts 1998b confirms this view and gives a statistical

analysis of the connection between dividends and depreciation policy, arguing that the requirement to pay dividends dominated the depreciation policy.

## **2.7 Dividend policies (Pitts 1998b)**

The first directors of the coal and iron companies were owner-managers, who were not diversified in their investments and relied on dividends to maintain their standard of living (Edelstein 1970, Thomas 1973), just as they had depended on the partnership profits which generally preceded incorporation. The earliest dividend policies (1865-1914) were the distribution of a substantial proportion of the trading profits and very variable from year to year; see Church, 1986 p.540. In years of loss, no dividends were paid. This pattern is confirmed by Walters (1977, pp.292-298). He exonerates the shareholders from greed:

It certainly cannot be said of the pre-war Welsh steam coal industry that it suffered from a capital starvation inflicted by the cupidity of proprietors or shareholders (p.298)

However, there were contemporary commentators such as Matheson who warned (in 1893) that the omission of depreciation to raise earnings and distributions might not leave adequate resources for repair and renewals but he was speaking of Tramways in particular. Edwards (1980) gives instances of excessive dividend payments from capital rather than revenue in some coal companies.

After World War 1, most coal companies were paying a constant dividend, reported as fixed percentage of the paid-up capital (Supple, 1987 pp. 394-5) in line with



other industries (Florence, 1961 p.148). After World War II, the prevailing dividend policy changed again to a “maintainable regular dividend on a growth path” (Arnold, 2002 p.860) with a long established and generally appreciated “target payout ratio”. This was first identified by Lintner (1956) in an empirical study of listed USA companies for the postwar years and was further explored in Fama and Babiak, 1968, Koyck 1954 and others. It is the policy taught in current finance textbooks such as Brealey and Myers 2001, Arnold 2002, Ross Westerfield and Jaffe 2000 and others.

## **2.8 Management accounting (Pitts 2001)**

Management accounting is a field where inspection of surviving primary documents in company archives has challenged earlier ‘received wisdom’ on the timing and development of management accounting practices. It was formerly believed that costing and financial accounts were not integrated until well into the twentieth century following the American model (Solomons 1952, Edwards 1937, Pollard 1965 cited in Boyns and Edwards 1997(both papers)) and also that there had been little development in costing systems until the end the nineteenth century. The basis for this belief was that very little cost accounting theory was *published* in the accounting literature of the nineteenth century until after 1870. It was assumed by the historians listed above that innovative practice would follow theory – and not precede it.

A number of case studies have proved this conclusion false for the coal and iron



industry at least (Boyns and Edwards 1995 for Consett, Fleishman and Parker 1990 for Carron, Boyns and Edwards 1997a for coal, iron and steel companies). Surviving records cited in these papers show that, from about 1850, departmental costs of production were calculated, overheads were apportioned to identify total cost and transfer prices were used to track the movement of goods between departments in all the companies studied throughout the period. Transfer pricing must always have been a problem in vertically integrated concerns where the output of one sector becomes the input of the next – particularly if the managers wish to know where profits and losses are made or in “make or buy” decisions. Debate on whether transfers should be made at cost or market value was recorded in several coal and iron companies in the 1870s (Boyns and Edwards 1997a, p.18-9) and anticipate the conclusions reached nearly a century later:

‘Hirschleifer [1956, 1957], in two classic articles, ... demonstrated, in a limited setting, the optimality of using the opportunity cost of the selling division as the appropriate market price. This rule includes the market price as a special case when the intermediate product is sold in a perfectly competitive market ...’ (Kaplan, 1984, p.402-3).

The market for coal was always competitive (Church 1986 p.66). William Armstrong is mentioned in Boyns and Edwards 1997a, (p.19), recommending the market price of coal as a transfer price to Bell Brothers and an 1867 Report to Bolckow Vaughan (analysed in Pitts 2001) gives alternative methods for transfer pricing and gives reasons for adopting them. The decision is not a purely economic one; transfer pricing policy can be used to establish interdependence between sub-

units or a degree of decentralization and is a rapid and flexible management tool (Kaplan 1884 p.403, Boyns, Edwards and Emmanuel 1999 p.105).

As far as integration of cost and financial accounting is concerned, in Britain this was achieved well before 1925, the date given in for the USA (Kaplan 1984 p.396): Staveley's records showed 'widespread integration of cost and financial accounting systems ... from as early as 1690' (Boyns and Edwards 1997a p.10). *The Accountant* of 1892 is cited to show that Cost Accounts were taught and at least one relevant book on colliery cost records (Practical Book-Keeping Adapted to Commercial and Judicial Accounting, by F. Hayne Carter, published in Edinburgh in 1874) has been found.

Early consultants like William Armstrong (Pitts 2001) were asked by directors to advise on a prudent depreciation policy for the management of wasting assets such as mines, indicating that they well understood the principle of Capital Maintenance. Armstrong based his calculations of the necessary provision on either the length of the lease (if leasehold) or the reserves of minerals (if freehold), as part of a programme of management accounting, as well as financial reporting.

Altogether 'a dramatic inconsistency' has been found between 'the conventional wisdom and the contents of the archives' (Boyns and Edwards 1997a pp. 1-12). The study of primary documents has shown 'that cost accounting practice was in

advance of the related theory as espoused in the literature' (p.21), both in the recent literature cited above and in Pitts (2001)

In addition to the practices discussed above, the valuation of collieries and iron works by the application of discounted cash flow at risk-adjusted discount rates, generally assumed to be a 20C invention, is shown to have been standard practice in the North East of England by 1850 and was in use even earlier (Parker 1968, Scorgie 1996, Brackenbury, McLean and Oldroyd 2001). Pitts 2001 discusses an important expert in this field, consulted and honoured by leading industrialists over a long period: William Armstrong, 1811-1896. He disseminated his knowledge widely and his contribution to accounting technology should be acknowledged.

## 2.9 Corporate governance (Pitts 1998a)<sup>1</sup>

The paper on the legal case involving Joseph Pease (Pitts 1998A) was inspired by newspaper cuttings and family letters in the Pease deposit in Durham Record Office. The family history "Men of Business and Politics: the Rise and Fall of the Quaker Pease Dynasty of North-East England 1700-1943", written by M.W. Kirby (1984) was essential to understand the conduct of Joseph Pease. As reported in the newspaper, the

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<sup>1</sup> Professor M. Kirby was the second referee for the Pease paper and revealed his identity by stating that he had already seen the manuscript when the author sent him a draft. His generous review reads as follows:

"...The relevant details are recorded accurately in the article which has clearly benefited in this respect from my earlier work. *The article does, however, go well beyond my own treatment by raising technical and financial issues which are of historic and current relevance in the area of business and financial history.* ... As the article states, the case of Portsmouth v. Pease raises some critical questions concerning share valuation and the duties of directors. More to the point, it provides some key insights into responsible corporate governance nearly a century before the issue appeared on the public agenda. Speaking for myself, "Men of Business and Politics" would have been a better book if the author's work had been available." (emphasis added)



story was sensational and seemed inexplicable: he was a rich Quaker, highly esteemed, who had cheated his orphan niece out of her inheritance – the classic Wicked Uncle. The book explains that he had used the financial resources of the very successful coal company and the family bank to subsidise other family owned companies in order to avoid their closure and the consequent distress of the workforce and he had never told his fellow directors, his sons or his accountant of his actions (Kirby 1984, Chapter 5). This paternalistic attitude was due to his Quaker faith and he was convinced of the rightness of his actions. According to Kirby:

In the running of J and JW Pease (*the family bank*), it may have been understandable, even laudable, to extend hundreds of thousands of pounds' worth of financial aid to loss-making companies, but this policy, exacerbated by the result of the Portsmouth case, was to bear fruit in the events of August 1902 (*the collapse of the bank*). (ibid. p.114)

This comment misses the point that much of the extended financial aid channeled through the bank was derived from the revenues of Pease and Partners and that Joseph Pease was acting illegally: *ultra vires*. He did not understand the restrictions which the new company format and the Articles of Association imposed on the directors of any company and continued to behave as the senior and dominant partner in an associated group of enterprises.

Restricting dominant and litigious directors from abusing their power is a recurrent problem. Robert Maxwell (Napier 1999) was arguably the most dramatic and

destructive British director in recent history, but the divorce between the ownership and control of a company has caused the collapse of many famous concerns 'amongst allegations of false accounting and vanished assets': Barings, Polly Peck, BCCI (Kay and Silbertson 1995). The Cadbury Report (1992), Greenbury Report (1995) and Hampel Report (1998) have introduced new codes of conduct for corporate governance and executive remuneration based on the assumption that directors are accountable to shareholders, which is the position assumed when companies began.

Kay and Silbertson are sceptical of the powers of shareholders, even large institutional holders, to control directors:

'We doubt whether shareholders have either incentive or capacity to provide such monitoring. ... And we are not persuaded that the main lines of the proposed remedy – an enhanced role for non-executive directors, more extensive involvement of shareholders in major decisions, and the provision of fuller information about corporate affairs – presents a suitable monitoring mechanism. It is precisely the form of relationship which government, as controlling shareholder, traditionally enjoyed with nationalised industries, and its effect was to undermine management responsibility for corporate performance without providing stimulus to the effectiveness of corporations' (p.94).

In view of the failure of shareholders to control directors in the past, it may be time for directors to be seen as trustees, rather than agents, of shareholders in their use of

company assets belonging to these shareholders. Those who do not learn from history are bound to repeat it.

## **2.10 Tertiary literature: contemporary comment (all papers)**

*The Economist* of the period was a valuable resource at a variety of levels. Share prices were given on a weekly basis. (These might be constant for periods of several weeks or even months for many companies and were additional evidence of thin trading.) The nominal value of each share, the amount paid up, and the dividend yield (on the paid up nominal capital, not the market value of the share) were also given until 1914. Financial information in quarterly or yearly summaries of the coal and iron/steel industries with comparisons between leading companies has been transcribed. Editorial material which gave informed opinion on the financial and economic issues of the day, such as prospectuses, profitability and corporate governance has been cited in the tradition of previous and current economic historians such as Shannon, Napier and Kynaston. The standard of comment and debate in this periodical commands respect; for example the candid comments on Prospectuses (cited in Pitts 1998a) and editorial recommendations on necessary reforms in company law which anticipated legislation decades later.

Editorials in *The Accountant* on subjects such as the permitted uses of the share premium account have been cited as the received opinion of the accountancy profession at the time. Information about price levels and inflation was taken from



Fischer (1986) and historical statistics such as indices of coal prices from Mitchell and Deane (1962).



## Chapter 3 Data and Methodology

### 3.1 Primary documents

3.1.1 Coal and iron companies data Primary data were collected from surviving coal industry accounts and archives 1864-1914. This work was funded by ESRC Grant 000234513, 1993-1995. In all, financial details of 35 coal producing companies with good surviving accounts and archives were recorded for a period of up to 50 years.

The annual accounts were entered on spreadsheets, one column per year. Most of these were copied from the London Stock Exchange archive which begins in 1881. In addition, directors' reports, minutes of general meetings, minutes of directors' meetings and surviving ledgers were studied, whenever these were available, and used to fill gaps in the annual accounts and to provide explanations of the policies employed.

Most annual accounts were found in the London Stock Exchange Archive, Guildhall Library, London (starting in 1881 and stored by year and by industry). Alternatively, or in addition, annual accounts are stored with the remainder of the company's documents in National Coal Board deposits in district record offices such as Matlock, Sheffield, Cardiff and – for all Scottish companies – in Edinburgh. The coal company deposits, their nature and their locations are listed in detail in Appendix 1 at the end of this chapter. Some of the largest and most



successful Victorian coal producing companies were vertically integrated into iron and steel and significant deposits of these companies were held by British Steel (now Corus) at Shotton, Middlesbrough and Irthlingborough.

3.1.2 Annual Returns for quoted companies, giving names, occupations and holdings of current shareholders and names of those who have ceased to be shareholders during the past year, have been pruned by past archivists and are not available for every year. These remaining are stored either in Kew PRO (*Files of Dissolved Companies BT 31*), or in Companies House for surviving companies. These archives may also contain the occasional Memorandum and Articles of Association. Otherwise details of share ownership were found within the company archive. Details and reference numbers are given in Appendix 2.

3.1.3 Prospectuses for the issues of share capital 1900-1954. These are stored by year in London Guildhall Library and have been searched for the occurrence of any share premium and the proposed use of these funds.

3.1.4 Other London Stock Exchange documents included the Daily Review and Weekly Intelligencer for share transactions (the price of the share, the frequency of transactions and the bid-ask spread). The manuscript section for applications by companies for Stock Exchange listings (MS 18000) includes letters and summaries addressed to the LSE by the company directors, which may include relevant information not available elsewhere.

3.1.5 William Armstrong Archive in Northumberland Record Office. This large and well-catalogued deposit includes documents required for valuations, plans and correspondence relating to specific sites, schemes and companies 1850-1940 (NRO 725 Armstrong C), and a set of Report Books, with transcriptions of reports sent to clients by William Armstrong, his predecessors and his son Henry over the period 1836-1943 (NRO 725 Armstrong D).

### **3.2 Government Publications**

Clauses of the main relevant acts of 1844 (Joint Stock Companies), 1855 (Limited Liability) 1862 (The Companies Act), 1867 (An Act to amend "The Companies Act, 1862"), and Companies Acts of 1907, 1929 and 1948 were cited in the dissertation.

Published reports of the Sankey Commission (1919), the Greene Committee (1926), the Cohen Committee (1945) the Gedge Committee (1954) and the Jenkins Committee (1962) have been studied, together with the minutes of the committees which gave rise to the reports. Unpublished minutes are stored in the Public Record Office (PRO) at Kew.

Recent investigations on corporate governance (Cadbury 1992, Greenbury 1995 and Hampel 1998) are also relevant to this thesis. Other recent reports include

the DTI consultative document for Reform of Company Law (1998) which is the most recent government publication to be discussed in the dissertation (Pitts 2000). This document discusses the abolition of the share premium in the UK possibly following recent Australian legislation: the Australian Company Law Review Act of 1998 repealed the share premium in Australia. Shares there have become No Par Value shares.

Commissioners of the Inland Revenue (CIR) Reports for various years from 1892 to 1946 have been consulted for information about stamp and capital duty receipts and the number of company incorporations within each tax year. The list of Government publications is given in Appendix 3 at the end of this chapter.



**Appendix 1****Coal Archives and London Guildhall Archives**

<b>Company</b>	<b>Location of Archives</b>	<b>Notes</b>
Andrew Knowles	No relevant data found Accounts LGH post 1881	No Accounts pre 1881
Bell Brothers	Cleveland CA, Middlesbrough Dorman Long papers Accounts pre 1899 Accounts LGH post 1899	Partnership to 1873. Rich archive
Blaenavon Coal & Iron Co.	Gwent County RO D 480 Account books post 1904 Directors Minutes 1880-1914 Accounts Gwent pre 1892 Accounts LGH post 1892	Gaps in accounts: 1883-1891 and 1897
Bolckow Vaughan	Cleveland CA (transfer from British Steel) Dorman Long papers. Accounts Cleveland pre 1881 Accounts LGH post 1881	Very full archive, no longer catalogued.
Butterley	Derbyshire RO, Matlock NCB N4 and N36 and D 503B Accounts Derby RO only	Partnership pre 1888. Limited by guarantee. Good archive.
Cannock Chase	Birmingham University Business Records 14/ii/1-19 Minutes 1859-1929 Accounts Birmingham only	Accounts missing 1912-14. Good archive
Carlton Main	Sheffield RO MD 4081-4087 Directors Minutes. Accounts Sheffield only	Good archive
Carron Iron Co.	Minutes of General Court GD 58 22/1/5-8 Dividend Book GD 58 3/2/1 Accounts Edinburgh GD 58 4/2/1-40	Very large archive. Royal Charter company
Consett (now part of British Steel)	AGM Minutes 1864-1947 Fixed Assets and many ledgers now with Derwent Local History Society Accounts LGH 1881 onwards	Very large archive, no longer catalogued
D.Davis and Son	None found Accounts LGH 1890 onwards	

<b>Company</b>	<b>Location of Archives</b>	<b>Notes</b>
Ebbw Vale	Gwent RO MSS 788 Company History 1893 Accounts LGH 1881 onwards	No earlier accounts found. Scanty archive
Guest Keen	Birmingham Central Library, MS 298 for Nettlefolds Guest Keen at GKN plc Redditch Accounts LGH 1900 onwards	Merged with Nettlefolds 1902. Very full archive at company HQ
Dowlais (later part of Guest Keen)	Glamorgan RO, Cardiff D/DG Misc. Ledger with annual accounts 1863-1875 and E3/21-39. Box of reports 1863-1884	Partnership. No annual accounts after 1884
Hamstead	Staffordshire RO, Stafford D 876/1-31 Minutes 1875-1930 D 1230 Nom. Ledger 1881-1888, including accounts. Accounts LGH 1881 onwards	No balance sheet 1911 Good archive.
Henry Briggs	Leeds Brotherton Library MS 160 Directors Minutes 1865-1914. West Yorks RO, Leeds ACC1351 A2/3-29 miscellaneous ledgers Accounts LGH 1881 onwards	Very full archive
John Brown	Sheffield RO. Firth-Brown archive recently transferred; not catalogued. Post 1881 only Accounts LGH 1881 onwards	Firth-Brown archive has not kept pre 1881 accounts for John Brown
Lochgelly	Edinburgh RO SRO/CB2/218 Abstract Book 1876-87 CB2/192-. Minute Books 1870 on CB2/146 and CB2/119 Journals and Ledgers Accounts LGH 1897 onwards	Accounts missing 1888-1895. 1896 accounts reconstructed from ledger CB2/121

<b>Company</b>	<b>Location of Archives</b>	<b>Notes</b>
Main Colliery Company	West Glamorgan RO, Swansea WGAS/DD/MC1-8  Accounts WGAS/DD/MC6 only	Very complete archive for 1890-1914
Mitchell Main	Sheffield Central Library NCB 599, 608(a), 601, 573-5 Annual Accounts & Journals 1883-1914.	Company held shares in Carlton Main from 1897
New Sharlston	West Yorks RO, Halifax Crossley papers DC2253-7 Accounts LGH 1881 onwards	Gap in accounts 1874-1880
North Navigation Co.	Welsh Industrial & Maritime Museum WIMM 85.181.I.1 Private Ledgers Accounts LGH 1889 onwards	1893 accounts missing
Pearson & Knowles	BSC Shotton Dep. 433/9 Dirs. Reports 1873-1914 Dep. 433/2 Ledger Iron Dept. 1873-84 Accounts LGH 1881 onwards	Good archive
Pease & Partners	Durham RO NCB 1/X Accounts LGH 1900 onwards Legal case on share valuation 1900 D/Pe3/130	No records from earlier incorporation 1883
Powell Duffryn	Glamorgan Record Office D/D PD 1/1-6 Minutes of Directors' meetings, AGMs and EGMs 1864-1914 Accounts LGH 1888 onwards	Big gap in accounts 1866-1888 Rhymney Iron part of Powell Duffryn deposit
Sheepbridge	Derbyshire RO, D 503B, D 3808 Directors Minutes 1864-1958; also ledgers and journals 1864 on Accounts LGH 1881 onwards	Very complete records
Shelton Bar Iron Company Shelton Iron Steel & Coal	Staffs RO D 4810/1/2 Profits 1890-1920. British Steel, Shotton dep. 472/3 and 6 and SR1/2/4. Accounts LGH 1892 onwards	Partnership to 1882. No records seen 1886-89 and no explanation found



Company	Location of Archives	Notes
Shotts Iron Co.	SRO Edinburgh GD1/3/15-23 Complete Directors Minutes with annual accounts from 1871 Accounts LGH 1899 onwards	Incorporated by Acts of Parliament 1871 and 1877.
South Hetton	Durham Record Office NCB 13/215 and NCB 1/X/44 Accounts LGH 1887 onwards	No earlier accounts found and poor archive.
Staveley	Derbyshire RO, D 3808 Minutes & ledgers 1863-1930 Accounts LGH 1881 onwards	Very good archive
The Rhymney Iron Co.	Glamorgan RO Cardiff D/D PD53 and RH 269 and RH 6-11 Accounts LGH 1881 onwards	Part of Powell Duffryn deposit
Tredegar	Gwent RO, Cwmbran MSS 1147 Commemorative leaflet 1923 Accounts LGH 1881 onwards	Archive lost? Listed as with John Brown, but not found
Walsall Wood	Staffs RO D876/39-41 Directors Minutes 1876-1914	Good archive
Wigan	Wigan RO Shotton D433 & D492 Accounts LGH 1881 onwards	Very full and complete archive

LGH is the London Guildhall Library, London Stock Exchange Archive, (Coal and Iron). Accounts are filed by year.

BSC stands for British Steel Company Archives, which were stored at Irthlingborough, Middlesbrough and Shotton. Much of this has been dismantled recently by Corus PLC.

**Other London Guildhall collections consulted:**

London Guildhall Library *Prospectuses 1900-1950*

London Guildhall Library *London Stock Exchange Daily Review / Stock Exchange Weekly Intelligence*

London Guildhall Library *MS 18000 Application for Listing*

**Appendix 2      Annual Returns for share ownership data**

<b>Company</b>	<b>Dates of incorporation</b>	<b>Source of Information</b>
Andrew Knowles.	1873	BT 31 14470/7902
Bell Brothers	1872, 1895, 1898	BT 31 31676/60411
The Blaenavon Company	1880	BT 31 38190
Bolckow Vaughan	1864	BT 31 30734/1705
Butterley Company	1888	CH 26306
Cannock Chase	1859	BT 31 36624/1468
Carlton Main Colliery	1872	Sheffield RO MD 4080
Carron Iron Company	1776	SRO GD 58/1/14
Consett	1864	CH 1140
D.Davis & Son	1890	BT 31205/31383
Ebbw Vale	1864, 1866	BT 31 33755/3956
Guest Keen (later Guest Keen and Nettlefold)	1900	CH 66549
Hamstead Colliery Co.	1875	BT 31 14531/9441
Henry Briggs	1865	BT 31 38180
John Brown	1863	CH 1125
Lochgelly	1873, 1896	SRO BT 2/400
Main Colliery	1889	BT 31 31167/29139
Mitchell Main Colliery	1882	BT 31 36777/17707
New Sharlston Collieries	1865, 1873	BT 31 37016
North's Navigation Collieries (1889)	1889	LGH MS 18000
Pearson and Knowles	1873, 1899	LGH MS 18000/62B
Pease and Partners	1883, 1898	BT 31 37136

<b>Company</b>	<b>Dates of incorporation</b>	<b>Source of information</b>
Powell Duffryn	1864	BT 31 30728
Sheepbridge	1864	BT 31 3877/1594C
Shelton Iron, Steel and Coal Company	1886, 1889	BT 31 3655/22608
Shotts	1871, 1877, 1897	SRO BT 2 3597 and 3633
South Hetton	1874, 1899	BT 31 1997/8571 BT 31 36839/57257
Staveley	1864	CH 866C
The Rhymney Iron Co.	1871	BT 31 30796/5346
Tredegar Iron & Coal	1873	BT 31 37002 - 7/7116
Walsall Wood	1875	BT 31 37022/10004
Wigan.	1864	BT 31 37920 - 1

BT 31 Kew Public Records Office, Board of Trade Records BT31

Defunct Companies Files

SRO BT2 Scottish Records Office, Edinburgh, Defunct Companies Files

CH Companies House, London.



*An Act to amend 'The Companies Act, 1862.'* (1867), Law Reports and Statutes 30-31 VIC.: 1372-1386, London.

Commissioners of the Inland Revenue (CIR) (1892). *Thirty Fifth Report of the Commissioners of Her Majesty's Inland Revenue for the Year ended 31st March 1892*, (C.-6731), HMSO, London.

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Commissioners of the Inland Revenue (CIR) (1905). *Forty Eighth Report of the Commissioners of Her Majesty's Inland Revenue for the Year ended 31st March 1905*, (Cd. 2633), HMSO, London.

Commissioners of the Inland Revenue (CIR) (1911). *Fifty Fourth Report of the Commissioners of Her Majesty's Inland Revenue for the Year ended 31st March 1911*, (Cd. 5833), HMSO, London.

Commissioners of the Inland Revenue (CIR) (1921). *Sixty Fourth Report of the Commissioners of Her Majesty's Inland Revenue for the Year ended 31st March 1921*, (Cmd.1436), HMSO, London.

Commissioners of the Inland Revenue (CIR) (1926). *Sixty Ninth Report of the Commissioners of Her Majesty's Inland Revenue for the Year ended 31st March 1926*, (Cmd. 2783), HMSO, London.

Commissioners of the Inland Revenue (CIR) (1929). *Seventy Second Report of the Commissioners of Her Majesty's Inland Revenue for the Year ended 31st March 1929*, (Cmd. 3500), HMSO, London.

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Greene Committee (1926), *Company Law Amendment 1926* (Cmd. 2657) HMSO, London.

Jenkins Committee (1962), *Report of the Company Law Committee* (Cmnd. 1749) HMSO London.

Kew PRO *Committee of 1929 Companies Act* BT 146 1/12.

*Ministry of Fuel and Power, Coal Mining. Report of the Technical Advisory Committee. March 14, 1945 (Charles C. Reid)* Cmd. 6610 IV, London: HMSO.

*Minutes of Evidence taken before the Company Law Amendment Committee (1944)*, London: HMSO (Cohen Committee).

*Report of the Committee on Company Law Amendment, 1945* (Cohen Committee) (Cmnd. 6659) HMSO, London.

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**Chapter 4 Victorian share-pricing – a problem in thin trading.**

*Accounting, Business and Financial History* Vol. 8 No.1 1998 pp.33-52

(Pitts 1998A)



**Chapter 5 In praise of the “other” William Armstrong: a nineteenth century**

**British engineer and early management consultant**

*Accounting History* NS Vol. 6, No. 2, November 2001 pp. 33-58

(Pitts 2001)

**Chapter 6 The rise and rise of the share premium account**

Accounting, *Business and Financial History* Vol. 10, No. 3, 2000 pp.317-346

(Pitts 2000)

**Chapter 7 Did dividends dictate depreciation in British coal companies  
1864-1914?**

*Accounting History NS* Vol. 3, No. 2, November 1998 pp. 37-67

(Pitts 1998B)



## Chapter 8 Conclusion

### 8.1 Introduction

The papers presented in this dissertation develop related themes of asset valuation, recognition of profit and dividend policy in the evolution of accounting practice in an age of *laissez-faire*. Such company legislation as took place was in response to crises (the bank collapse of 1866) and manifest fraud, such as dishonest promotions, which gave rise to the CA 1900 (Edwards 1998 pp. 220-222). Despite wide knowledge of different valuation techniques and a clear understanding of the importance of depreciation in the exploitation of a wasting asset, the development of accounting practice was pragmatic and the policies were often chosen to suit short term goals such as desired dividends or a low / high asset valuation.

Modern company legislation and present practice in accounting, finance and governance are based on the past and cannot be understood out of context. History is path dependent. As an example, see Pitts 2000: the treatment of the share premium as capital (1948) followed the new practice of issuing IPO shares of low nominal value at a high premium when this became an advantageous tax avoidance technique after 1920. The practice remains, even though the tax advantage disappeared in 1973. After nearly half a century of issuing a 25p share at a large premium to raise £1 or more of capital, the earlier standard £1 share at a zero or small premium was effectively forgotten. Pitts 2000 extends the work of Jefferys (1938) and Cottrell (1980) in explaining the development of the format of modern British share issues.

Private (or 'close' or family) companies are the logical result or progression of partnerships which incorporated to achieve limited liability, and much of the coal industry retained this format up to 1914 and beyond (Supple 1987 p. 361). More generally:

'Almost 60 per cent of the paid up capital of "new" companies between 1885 and 1914 had gone to the vendors rather than being contributed by the public, many of the businessmen raising extra capital by the Stock Exchange had no intention of letting any outsider control their company. They usually sold largely fixed interest preference shares or debentures to the public, which did not carry voting rights, and issued most, if not all, of the ordinary shares to themselves, keeping control of their firms in their own hands or those of a few friends, ex-partners or their family.' (Mathias 1983 pp.353-4).

In partnerships, and in the private companies that followed, commercial information was regarded as private. Standards of disclosure were low in all major industrial sectors (Arnold 1997). Modern disclosure standards began in 1948 (Maltby 2000, Edwards 1989 p. 209). Company law still requires fewer disclosures from private companies than from Public Limited Companies; for example, small private companies have been exempted from the requirement to publish a Profit and Loss account audit since 1992 (Amendments to CA 1985, issued Nov. 1992) and the turnover threshold for the statutory audit was raised to £350,000 in 1998. These are issues which are constantly under review.

There is a view, based on the writings of Alfred Chandler (1976) and Payne (1967) that the success and development of twentieth century British industry was restricted by its failure to develop beyond the family company. This view has been refuted by Church (1992) in a paper discussing and comparing family firms in Britain, US, Germany and Japan. He argues that in matters concerning dividend policies, diversification strategies, adaptability and strength of management:

‘International comparisons suggest that greater attention should be paid to the cultural differences which produced contrasting behaviour and performance regardless of the major characteristics of corporate structures.’

(Church 1992 p. 39)

There is recent evidence that much of the current wealth of the US is still held in such family companies and not quoted on Stock Exchanges (Heaton and Lucas, 2000) and this is also true of Western Europe (*Financial Times* October 30 2001, p.18). The financial rewards of ownership in small companies were (and remain) the dividends received since the shares cannot easily be sold. Dividends are restricted by the profit available for distribution, which is, in turn, dependent on the depreciation policies pursued by the company. This has been analysed for a sample of key coal and iron companies for 1860-1914 in Pitts 1998b.

## **8.2 Dividends and depreciation policies employed 1850-1930**

Before 1890 most of the sample companies distributed about half of their operating profit *before* any charge for depreciation – so dividends could vary greatly from one



year to the next and be imprudent in poor years. The few exceptions are interesting: Carron Iron paid a constant dividend (yielding 15% on the paid up share capital) plus a “bonus” in good years and Cannock Chase was *entirely funded* by ‘redeemable preference shares’ at incorporation in 1859. The first shares were to yield 14% of the paid up value until 1885 when they were to be considered repaid, and the share capital was diminished by £80,000 in this period. The company appears to have been seen by the original Directors as a venture with a finite life as the dividend explicitly repaid the capital. Both were private companies and shares were not available to the public.

A minority of coal companies practiced ‘replacement accounting’ pioneered by the railways, keeping the initial value of their fixed assets constant and writing all repairs and improvements to the Profit and Loss account, with disclosure (Consett) or without (Guest, Keen and Nettlefold). Most charged depreciation as a percentage of asset cost, based on either the life of the lease or the size of the coal deposit (Bolckow Vaughan, Wigan, Staveley and others). In poor years depreciation was omitted or charged to reserves and in good years large fixed asset investments were charged to the revenue account so profits were smoothed. Disclosure of depreciation varied from company to company and with time, but directors did understand the need for it (Pitts 1998b).

After 1890 most of the sample coal companies continued to pay dividends varying with profits but a totally different dividend policy developed in this period: a growing trend to pay a *constant* dividend (expressed in the financial press as a fixed percentage yield on the paid up share capital and not on the market price of the share). The first



coal companies to do this were Guest Keen and Nettlefold and Carron. This policy spread to other coal companies from 1914 (Supple 1987 p.394) and was adopted by many other industrial and commercial sectors in Britain and the USA by the 1930s. The 'stable rate of dividend on the capital' policy persisted well into this century (up to 1950) and was applied in a wide selection of industries:

'Many famous American and British companies have treated their ordinary shares as though they were preference shares or debentures, to be paid a fixed income ... and the Bank of England, before it was nationalised, paid its shareholders 9% for the ten successive years 1904 to 1913 and 10% for the seven years from 1914-15 to 1920-21. This policy is sometimes spoken of as "institutionalising" a company.' Florence (1961 p.148).

This indicates a further change in the general perception of the nature of the property rights of the original owners: not only profits but dividends were smoothed to satisfy shareholders, now seen as mere passive receivers of dividends, rather than sleeping partners. The policy of paying constant dividends was an intermediate policy to the dividend policy which seems to be prevalent today. The current model determines dividends as a smoothed proportion of current earnings and last year's dividend; a form of dynamics, proposed by Lintner in 1956 in his partial adjustment model. However, this behaviour is also consistent with other prior hypotheses, such as the 'adaptive expectations' model (Nerlove 1958) or the 'distributive lag' model (Koyck 1954), so the precise behavioural implications are unclear although the fact that some form of dividend smoothing is taking place is

not in doubt. Shareholders ceased to be viewed as partners, even sleeping ones, by company directors at least a century ago.

Modern finance is much concerned about the tax implications of dividend policy as there may be an element of double taxation in taxing both company profits and distributions made from these profits (Brealey and Myers 2000 p.455-462). Rates of income tax before 1914 were very low. The *highest* rate in the pound between 1860 and 1914 was 1/4d (6.6%) and this was only charged during periods of war – the Crimea, the Boer War. Usually it was half this rate or even lower (Mitchell and Deane 1976 p.429). Income tax did not affect dividend policy before 1914. However capital taxes, such as Stamp Duty, were material to company decisions (Pitts 2000) as is outlined in the next section.

### **8.3 The effect of taxation on company financial practices and company law**

The twentieth century appearance of the share premium account in Initial Public Offerings indicated a change in the nature of the account: formerly share premiums were considered to be a contribution by new investors to the retained profits of previous generations of investors and only appeared in secondary offerings. However, in IPOs the share premium is part of the issued share capital. Once recognised as such, the share premium should logically have been restricted to the same uses as the nominal value of the shares but was not (CA 1948, s.56 and Noke

1981).

The change was the result of a tax loophole, open from 1899, but not exploited until the capital duty rate had risen to 1% in 1920. The loophole was closed in 1973, more than 50 years later, but the custom of issuing shares of low nominal value at a high premium has persisted in the U.K. right up to the present day. Pitts 2000 appears to be the only paper to explain this format and extends the work of Jefferys 1938 and Cottrell 1980 beyond 1914. The anomalies of this situation has led to repeated attempts by UK governments to introduce no par value shares, so far to no avail (Pitts 2000), although it has been achieved in Australia (Company Law Review Act 1998 s.254). This is one example of the unpredictable consequences of tax legislation on the financing strategy and reporting standards of commercial enterprise.

#### **8.4 The influence of individuals**

Two of the papers are much concerned with individuals: Pitts 2001 and Pitts 1998a. The latter records an individual dominating director (Joseph Pease) whose conduct was legally challenged and found to be inequitable. Corporate governance has been the subject of much government enquiry and recent legislation (see section 2.4). Modern company legislation has still not solved the problem of controlling a powerful individual director (Kay and Silbertson 1995, Napier 1999). The emphasis in the legislation is still on empowering the shareholder: more disclosure and more shareholder participation in decisions such as directors'



remuneration. History shows that problems existed even when the directors and shareholders were one and the same.

As far as professional advice was concerned, it should be remembered that the accountancy profession was in its infancy in 1862. Speaking of cost accounting before 1850:

The absence of an accounting profession, an accounting literature ... or a costing tradition emanating from accountants or bookkeepers was pronounced and deafening in its silence. Instead, the attribution of innovation and development in approaches to industrial cost managers must go to the then owners and managers of the firms themselves. It was they who developed and utilised their own systems ... in an ongoing pursuit of cost efficiency and competitive advantage. (Fleischmann and Parker 1997 p. 286)

The first book on audit was published in 1881 (Pixley) and on depreciation in 1893 (Matheson). In the absence of statute law and any professional guidelines some individuals had a powerful effect on the economic and financial decisions and policies of the new companies and many of these are in the Dictionary of Business Biography (Section 1.4.3).

The other powerful individual discussed (in Pitts 2001) was William Armstrong. He was an engineer and a prototype management consultant with clear ideas about capital and income and the amortization of wasting assets. He explained them in



several of his reports to directors. In his report to the Consett directors he pointed out that profits declared on wasting assets (short leases on mines) without provision for depreciation was unfair and misleading to *future* investors. His emphasis on future investors was ahead of his time; Victorian legislators assumed that the current 'members' of a company would be able to ask enough searching questions of the directors not to be misled and made no provision to protect potential investors from misstatements in the published accounts or in prospectuses.

Another issue which is still relevant and was discussed by Armstrong is transfer pricing: Bolckow Vaughan wished to partition their profits between coal and iron. Armstrong's 1867 report analyses the reasons for implementing a transfer pricing policy and the various methods which could be adopted with clarity and style. He anticipates the conclusions reported a century later by Hirschleifer and others (Kaplan 1984 p. 402-3) and demonstrates that the 'scientific management era of cost accounting (1895-1915)' began in Britain at least 25 years earlier.

In the interest of truth and fairness, the technique of valuing real assets by discounting net cash flows at risk-adjusted discount rates should have its history restored. Modern finance text books attribute the technique to Irving Fisher (1930). He made no claim to the origins of his ideas, attributing much of his work to John Rae (1834), although discounted cash flows do not feature in Rae's text. The DCF technique for valuing real assets was in use centuries earlier than 1930 (Miller and Napier 1993, Scorgie 1986, Parker 1968). These papers record its use in land and

timber valuation in the sixteenth and seventeenth century. Armstrong's advice was privately commissioned and not generally available but his many clients understood his reports and acted on them. He was not the first: there were others with equal insight among the engineers and viewers of the *eighteenth* century (Brackenbury, McLean and Oldroyd 2000). It may be another example of

'The aid which economic science has given towards understanding the part played by capital in our industrial system is solid and substantial; but it has made no startling discoveries. Everything of importance which is now known to economists has long been acted upon by able business men, though they may not have been able to express their knowledge clearly or even accurately.'

(Marshall 1922, quoted in Williams 1938)

## 8.5 Finale

The 'received wisdom' on the accounts of Victorian entrepreneurs is that these are 'at best ambiguous and at worst unreliable' (Brief 1990 p.24) and that company promoters and directors took advantage of the *laissez-faire* attitude of Parliament to deceive and mislead investors and shareholders. Much of the literature reviewing the accounting practices of this period has been written by historians and economists, who are not fully conversant with the conventions and restrictions of accounting practice at that time (or indeed the present). Later generations have drawn their conclusions from the existing body of secondary literature.

Inspection of primary documents suggests a different picture; the businessmen of the

nineteenth century were as intelligent as their successors and made good use of the economic opportunities available. Some of these opportunities may have arisen from poorly drafted tax regulations (Stamp Duty, discussed in Pitts 2000) or in the lack of governance controls leading to poorly informed shareholders (Pitts 1998a, 1998b). Similar opportunities are open to modern directors and recent history (Maxwell, Barings, BCCI) indicates that controls imposed since 1948 are no more effective.

The papers forming this collection add to the history of business and accounting development from partnerships to modern public limited companies, in the economic, legal and financial framework of 1850-1950.

The financial records collected for the ESRC project ended in 1914. The coal industry suffered many changes of fortune in the years that followed: the war years 1914-1919 and 1939-1945 with great domestic demand, a much reduced labour force and government controls, contrasted with the interwar years 1919-1939 where the loss of the export market led to chronic domestic oversupply and falling prices (Supple 1987 p.3-15). Directors of coal companies were criticised by politicians and the press for their failure to adapt to the changing market after 1920 and for the consequent unemployment and low wages suffered by their workforce. Many of these directors were the same men who had managed the coal companies in their period of prosperity before 1914. There is a need for more research at company level to evaluate both the entrepreneurial performance of British industry over a longer period and the effects of government intervention. The data collected for the original ESRC project (000234513) is being extended to nationalisation and beyond, as the compensation took years to negotiate, by the author.





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