Weetman Pearson in Mexico and the Emergence of a British Oil Major, 1901-1919.

Abstract.

British overseas investment was one of the most powerful forces contributing to rapid global integration before World War 1. Approaching half of this total was in the form of foreign direct investment, as British entrepreneurs increasingly located their activities away from the mature domestic economy to faster growing, less-developed regions. Weetman Pearson was one of the most successful of all Britain's overseas-based entrepreneurs of the period. Using original financial records, the paper shows how the Pearson group of companies became one of Britain's most valuable industrial enterprises by 1919 having diversified from international contracting into the Mexican oil industry from 1901. The Pearson group highlights how British entrepreneurs were technically competent in managing large, complex infrastructure projects, able to navigate their way through various political systems, and adept at turning to whichever organisational form best suited their business interests; characteristics far removed from the outdated stereotype of the incompetent Late Victorian entrepreneur.

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Weetman Pearson in Mexico and the Emergence of a British Oil Major 1901- 1919^*

In October 1918, a month before Armistice, Calouste Gulbenkian, the Armenian 'Mr Five Per Cent' of the Russian oil industry, approached Weetman Pearson about whether Royal Dutch-Shell could acquire control of Pearson's Mexican Eagle Oil Company. It wasn't the first time Mexican Eagle had been the target of such an approach by the Anglo-Dutch oil major, but earlier attempts to merge had foundered. Indeed, Pearson had similar discussions with several potential suitors, with Jersey Standard in 1912 and 1913, for instance, and with the British Government, about creating a British oil industry national champion. But it wasn't until the Shell Group's straightforward offer for control of the company that Pearson cashed out. On April 2nd, 1919 Pearson reportedly received £10 million and Mexican Eagle became a subsidiary of the Shell Group.¹

The acquisition attracted significant coverage at the time and was rightfully seen as a major commercial transaction of the day, so important that the United Kingdom Government had to give its blessing before it could proceed. But nevertheless the sheer scale of Mexican Eagle's commercial success had barely begun to be acknowledged. It is not that Pearson has been omitted from the historical record. He has rightly been lauded as one of Britain's leading entrepreneurs of the period. In a lengthy entry in the *Dictionary of Business Biography*, David Jeremy describes him as 'the leading contractor' in the United Kingdom by 1914, for instance. Geoffrey Jones called him 'The most brilliantly successful of all British oil entrepreneurs before the

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First World War'. His later career as a prominent financier, newspaper owner and investor in overseas utilities developments has also attracted historians' attention. Such prominence notwithstanding, when compared with his near contemporaries, like Lever, Nobel and Mond, for example, the scale and significance of his accomplishments has (it is proposed here) nevertheless been seriously underestimated.

In part this is the outcome of Pearson's own preference for retaining as near to complete control as was possible over a business empire that was mostly based overseas (and so away from domestic publicity), was held in private companies, and followed a conservative interpretation of financial reporting, which have left a legacy of only the most minimal amount of accurate information in the public domain about the true size of Pearson's corporate empire. But not only did the Pearson empire attain a far bigger scale than previously acknowledged, the significance of his activities deserves to be underlined because he represents so completely the emerging re-interpretation of British entrepreneurship in the Late Victorian and Edwardian periods.

This sharply contrasts with the traditional version of the sapping of entrepreneurial dynamism, which, even in its recent, modified form, still declaims the impact of an ossified social structure and inept entrepreneurship. A recent synopsis concluded that 'In Britain there was too much inheritance..., insufficient luck..., and too little effort on the part of entrepreneurs to break out of existing paths of development.' This is utter nonsense. Rather with opportunities at home sharply constrained by the inevitable consequences of industrial maturity and its lower rates of return, historians increasingly recognise that British entrepreneurs largely moved overseas. With a vast

pool of savings and reliable and sufficiently transparent institutions in the City for their mobilization, British entrepreneurs were in a prime position to obtain finance for their overseas ventures. Edelstein estimates that the value of British overseas investments was the equivalent of almost one-third of net national wealth by 1905, a far higher exposure than for any equivalent economy before or since: it was yet more by 1913. According to John Dunning, 40 percent of this was direct, not portfolio, investment. Corley's recent re-working of the original figures suggests that the share of direct out of total British overseas investment might even have been as high as 45 percent. The net effect was that approaching half of the entire global stock of foreign direct investment in 1913 was owned and managed by British entrepreneurs, focusing on exploiting natural resources and infrastructure and using small, free-standing rather than fully integrated companies. Evidence of the rates of return on overseas investments is scarce; most almost certainly lost money. But many became large and successful. Entrepreneurial dynamism like this hardly constitutes any failure.

Weetman Pearson typified this approach, exploiting the enormous advantages of close links to the London financial community to develop a range of business activities around the world, first in civil engineering, then in transport and in electricity generation, before, most spectacularly, in oil. These were organised within dozens of separate firms: some were free standing, others not; some listed on the London stock exchange, others in Mexico, others entirely privately owned and unlisted; the largest three operations were together a fully vertically integrated organisation employing many thousands. All were controlled by a single, privately-controlled, holding company. Using the original papers held in the Pearson Archives, this paper has attempted to overcome this undeserved obscurity through a partial reconstruction of

the complex financial arrangements between the different sister companies in Weetman Pearson's group of firms. The result is to provide an estimate of the aggregate value of the group both before and at the time of the sale of the Mexican oil interests to Royal Dutch- Shell.

It was the creation of this Mexican oil business that elevated the Pearson group into the top echelons of the British oil industry by 1919, along with Burmah, Anglo-Persian and Shell. Burmah's market capitalisation of £62.8m (\$278m) somewhat surprisingly gives it first place on Chandler's list of Britain's leading industrial firms of 1919. Burmah produced and sold kerosene oil in Asia and entered a contract to supply to Royal Navy with fuel from Rangoon in 1905, which led to it being invited to take on the Anglo-Persian oil concession in 1905. After oil was discovered there in 1908, the newly formed Anglo-Persian Oil Company (now BP) acquired considerable value, becoming the third largest industrial company in Britain in its own right, with a market value of £29.1m (\$129m), contributing significantly to Burmah's otherwise inflated value in 1919. 11 Shell Transport (its market value of £18.2m (\$81m) made it the ninth largest firm on Chandler's list) had earlier been Britain's largest oil company after Marcus Samuel discovered oil in Borneo, but he did not possess the necessary organisational skills to create a fully integrated oil major. Shell increasingly foundered from 1901 until rescued by a merger with Royal Dutch in 1906, which allowed Henri Deterding to create Europe's largest firm and the only serious rival to Standard Oil of New Jersey in the world oil industry. 12

By 1919 the Mexican oil business had become so valuable that Pearson's corporate empire was easily the equal of any of these. Yet almost paradoxically his entry into oil

represented something of a departure for the company. The article begins by describing Pearson's early success as one of the world's leading international civil engineering contractors by 1900, before going on to examine his 1901 entry and eventual success in Mexican oil, then presenting estimates of the value of the Pearson group of companies in 1913 and 1919. The article then concludes with a discussion of how Pearson illustrates the characteristics of British overseas entrepreneurship during the period.

Origins

Weetman Pearson (1856-1927) inherited control of his family's teetering contracting business, S. Pearson and Sons Ltd., and began to turn it around. In 1884 he relocated its headquarters to London, and was soon claiming to be one of the largest contractors in Britain. This growth came through major infrastructure projects on the British mainland. But with foreign governments increasingly able to raise funds in London, demand for new infrastructure was soaring overseas. In 1886 his first overseas contract was an imperial commission to build a dry dock in Halifax, Nova Scotia. At £270,000 it was the firm's largest contract to date. It was quickly followed by the much bigger £950,000 contract for the construction of the Avila and Salamanca Railway in Spain in 1888, and then the £235,000 contract for the Hudson River tunnel in New York City. 14

Along with its rapid growth, the nature of international contracting was changing as foreign governments shifted from offering concessionary agreements (where contractors got a share in the eventual profits) to more detailed and contractually-binding deliverables. ¹⁵ The time to project completion and its associated final

payment (and avoidance of penalty clauses) therefore became the critical barometer of profits. ¹⁶ Pearson acquired a reputation for successfully managing projects of great complexity. He became known as 'one of the nineteenth century's master civil engineers'. ¹⁷

Mexico: Infrastructure Projects

Mexico saw the rapid economic development enjoyed by Argentina and Brazil in the second half of the nineteenth century largely pass it by. This was partly for geographical reasons, making its interior less accessible to railway development. But it was also a consequence of political instability. Prior to the autocratic regime of Porfirio Díaz (1876-1911), with 75 presidents in the 55 years since independence, Mexico had been a 'classic case of a country locked into a coup trap'; economic growth had remained negligible. While Díaz showed many of the unpalatable features of dictators everywhere, he did impose a system of property rights from 1883. Their distribution reflected his preference for rule by cronyism, but their creation led to state solvency and Mexico's resumption from 1888 as a credit-worthy nation. Able to borrow on international markets, the *Porfiriato* had several development projects pending. Prime among these was the construction of the Gran Canal in Mexico City, to act as the city's drainage and flood defence system.

In his memoirs, dictated shortly before his death, Pearson recounted how he was left temporarily paralysed from tunnelling under the Hudson River in December 1889. His wife dispatched him to sunny Mexico to recuperate, whereupon (and despite initial reservations) he was persuaded to undertake the Gran Canal project. ²¹ No doubt he dined out on this story many times. But, as Priscilla Connolly's detailed

reconstruction of events from archival evidence in Mexico confirms, Pearson was far more instrumental in gaining entry to Mexico than his anecdote implies. In fact he was actively bidding with other foreign contracting companies for the Gran Canal contract. And his clinching position was not any superior technical ability but the 'repeated wishes of the financiers that the Drainage Board allocate the Canal work to a British firm, as this would boost the confidence of the English public in the project's eventual success.'

This was no chauvinism on the part of British underwriters of Mexican bonds. Rather it was a simple consequence of Mexico's fragile reputation in financial markets. With no track record for avoiding default and no collateral, when requesting investors to front up for assets with nil zero resale value (the Canal was just a hole in the ground) and nil productive return before completion, the Mexican government faced all the hallmarks of a classic credit market dilemma. With incomplete contracts opening up the possibility of non-repayment and the asymmetric distribution of information about the ability (and willingness) to repay, the lenders needed to devise techniques to monitor contractual progress through until completion. British bond holders insisted on the project employing a British contractor because such an intermediary could be hauled before investors and held to account over the life of the contract. Even if technically superior, French, German and American civil engineers would inevitably prove more slippery subjects to their financial masters.²³

In fact Connolly demolishes the myth that Pearson was some sort of engineering virtuoso, showing how he struggled to complete the Canal project. He was subjected to close and critical scrutiny by the Drainage Board, which included several members

of the political elite, led by Finance Minister, Jose Limantour. From their archival record, Connolly suggests that as the project ran into difficulties from 1895, Pearson may have even lost money. ²⁴ But despite breaching successive deadlines, he was awarded a second large contract in 1895, this time for £3 million to construct a harbour at Veracruz, and then a third for £2.5 million in 1896 to construct the Tehuantepec Railway. ²⁵

The Veracruz contract was his platform for expansion and diversification in Mexico. Pearson was in fact more familiar with harbour and port construction than canals and could legitimately claim to be a genuine international specialist. Considerations of outside investors may well have swayed the Mexican Government's decision to award him the contract, although the close relationship built up over the previous years' completion of the Gran Canal is surely likely also to have played a role. Pearson invested in mining, land ownership, electrical utilities and transportation in and around Veracruz. He collaborated with another leading international contractor, the Canadian F. S. Pearson (no relation) to develop the Mexico Power and Light Company, which brought electric power to the capital for the first time. The contract's real importance was, however, because it was during the early years of this project that Pearson was able to cement his role as a key intermediary for the Porfirian elite.

In their explanation of how the Porfirian economy flourished, Haber, Razo and Maurer begin with the observation that Mexico did not enjoy rule of law. Rather they use the term vertical political integration to describe how a coalition of key asset holders and the political elite could have provided a stable polity and economic

growth superior to the stationary banditry of the preceding years. After the anarchy of the 'coup trap' era, Díaz integrated key members of the wealthy economic elite into the political process, enabling them to monitor the regime's commitment to property rights (and so to their wealth). Díaz also encouraged his main political rivals, the regional political elites, to enter into business activities that were dependant on the continued stability of his federal government. State governors therefore moved from fomenting revolution to become third party enforcers of the system so that their rental incomes would continue. It was a system that could remain relatively stable as long as asset values and rental incomes continued to rise and the dispossessed masses remained quiescent.²⁸ Until the 1911 Revolution the latter condition held. The former depended on foreign intermediaries like Pearson, entering, bringing their expertise, and completing the major development projects that transformed property values.²⁹

Pearson was far from alone. 'Foreign investors poured nearly 2 billion into Mexico during the Porfirato'. ³⁰ Somewhat belatedly Mexico had joined the international economy and was seeing the windfall from its nascent financial respectability. Foreign entrants like Pearson had to operate within the Díaz regime's vertical political integration, which meant that key politicians needed to be induced to co-operate. So Guillermo Escandon, a leading federal governor, received a five percent commission on all monies received from the Gran Canal project. In time Díaz' son, Porfirio Jr., was given a board position with the main oil business, and Díaz' wife's family were able to sell land around Veracruz to Pearson during the hunt for oil. ³¹

Despite operating in a highly competitive market and despite (allegedly) charging relatively high prices, Pearson gained the lion's share of major contracts. Traditionally

this combination has led Mexican historians to conclude that Pearson was able to exercise an undue degree of influence over the President. But Connolly notes that his allegedly 'special relationship' with Díaz could not have been so close in reality. Despite opposition fomented in part by his American rivals, there is no evidence of Pearson engaging in any corruption.³² His reputation in Britain was impeccable. Jones refers to him as 'the most honest and incorruptible' of British tycoons of the time. And neither the Parliamentary nor London investment audiences were thought to be overly credulous.³³

In fact with the costs borne mostly out of future duty revenues, and the impact on asset values (and rental income) so large after completion, Pearson's price would mostly have been a secondary issue for the commissioning bodies. Pearson's value to the regime was that he had demonstrated the ability to bring complex projects to successful completion. As Connolly states, where he 'can take the credit is for having successfully completed the work to a high standard, unlike his predecessors.' Given that large infrastructure projects had a minimal impact on asset values until after completion, the facility to bring such projects to a successful end was of enormous significance. By the early 1900s Pearson had completed the Gran Canal, almost completed the main Veracruz harbour project and was concentrating on the Tehuantepec railway project.

Pearson himself felt the Tehunatepec railway project was one of the firm's greatest technical achievements. He certainly was personally committed to it.³⁶ In terms of what was to follow, however, the Mexican railway construction was to prove particularly valuable for another entirely unrelated reason. The railway project gave

Pearson a familiarity with vast quantities of Mexican land. And it was his investment in Mexican land that enabled him to become one of the world's most important oil barons of the early twentieth century. There were other important infrastructure projects in Mexico afterwards, but from 1901 onwards the focus of his business activities increasingly moved to oil.

Mexican Oil

Oil became an exceptionally valuable resource in the first decade of the twentieth century as diesel engine technology diffused and oil replaced coal in ships. Many American and European entrepreneurs entered this market; and a few enjoyed spectacular success. In Mexico there were three major contenders for dominance—Henry Clay Pierce, Edward L. Doheny, and Weetman Pearson.

Pierce's Waters-Pierce Oil Company was an affiliate of Standard Oil. It brought petroleum into Mexico and initially had a profitable sales monopoly. But in the first decade of the 20th century Pierce suffered from competition, first from Doheny and then Pearson. Prior to moving south of the border, Doheny had discovered oil in Los Angeles and built a successful business in California. He expanded into Mexico in 1901 where he established *Huasteca*, a petroleum production firm.³⁷

Commercial oil production therefore commenced in Mexico in 1901. Output increased from a negligible 5,000 barrels in 1900-01 to a barely significant 12½ million barrels in 1911, before rising steeply to 26 million in 1914, 87 million in 1919, 156 million in 1920, and 195 million in 1921. By 1914 Mexico was the third largest oil producing company in the world after the United States and Russia; after

1917 it was ranked second. And it was Doheny and Pearson, not Pierce, who dominated the market. In 1914 Pearson alone controlled 60 per cent of Mexican oil output. ³⁹ The early 1900s were, in other words, a propitious time to enter the Mexican oil business. And Pearson was well placed to enter. He already had substantial international business experience combined with deep local knowledge and Government favour plus a network of agents embedded in the region. But there was an element of serendipity that brought him to the right place at the right time.

In April 1901, on his return from Mexico, Pearson missed a train connection and was stranded for nine hours in Laredo, Texas. The town had been gripped by "oil mania" since February when Captain Anthony J. Lucas had dramatically struck oil, with a 100,000-bd gusher, at Spindletop. ⁴⁰ In the midst of this charged atmosphere Pearson suddenly recalled a surveyor's report of oil seepage in the vicinity of Pedregal, and another at San Cristobal in Tehuantepec. Pearson immediately set about to gather all the prospectuses in town in order to inform himself about the business. Within a few short hours he had cabled J.B. Body, his experienced manager in Mexico, with instructions to secure "…all land for miles round."

In a more detailed letter to Body he explained,

"that oil deposits frequently extend over big areas, so the oil rights must extend over a large district to be really valuable. Ten, twenty, or forty thousand acres appears to be no uncommon size—so in getting the option, get it over as big a country as possible. A short option is no good. We must have it for a year at least—preferably two, as it would take time to put down an oil well or otherwise prove it."

Pearson was initially motivated to invest in oil to supply his locomotives on the Tehuantepec railway. ⁴³ But his ambition spiralled. During 1905 and 1906 he invested in substantial refining and transportation facilities, building a refinery, pipelines, and port facilities. Even at cost-price for the contracting firm, these represented enormous pre-emptive investments. He was gambling on discovering oil in Mexico. ⁴⁴

Test drilling continued through 1906 and 1907 but with no significant results. Pearson desperately needed some revenue to offset the sunk cost of the idle infrastructure. In 1908 he tried to engineer an agreement with Waters Pierce to refine and ship their crude, but unsurprisingly given his aggressive build up of refinery capacity it fell through.⁴⁵

Finally in June 1908 the first large flowing well was struck. But this was soon followed by a disaster, when an oil strike caught fire and proved impossible to extinguish. The fire lasted for eight weeks and destroyed the entire field. Even someone with the depth of Pearson's pockets was beginning to doubt the wisdom of events, as he recorded in 1908, with a note of regret:

I entered lightly into the enterprise, not realising its many problems, but only feeling that oil meant a fortune and that hard work and application would bring satisfactory results. Now I know that it would have been wise to surround myself with proved oil men who could give advice that their past life showed could be relied on, and not, as I did, relied upon commercial knowledge and hard work coupled with a superficial knowledge of the trade.⁴⁶

Pearson continued without joy through 1908, desperately trying in January 1909 a final attempt to make a deal with Pierce. He then drilling operations were extended north along the coast between Veracruz and Tampico, where on 27th December 1910 he struck 'black gold' with the Potrero No. 4 well gusher. It spewed forth 100,000 barrels per day and took sixty days to cap it. In its eight year life it gave over 100 million barrels. Snatching victory from the jaws of defeat, it was the turning point in the company's fortunes.

Already before the First World War, the scale of Pearson's Mexican business had become impressive, with:

"concessions over 1½ million acres (about 2 per cent of the habitable area of Mexico), ... 175 miles of pipeline, storage for 7 million barrels, and with a new plant at Tampico, two major refineries. Such an empire, before 1914, ranked as one of the great industrial combines of the world—small as yet beside the ramifications of Standard Oil, but, so geologists then promised, with as much potential as all the wells of Texas."

As output soared, new entrants were attracted to the Mexican fields. Doheny's *Huesteca* and Pearson remained the leading contenders, still with a 61% share between them of the much bigger market in 1918. But by then dozens of new companies were contributing, including subsidiaries of the Texas Company, Gulf Oil, Standard Oil Company of California, Standard Oil Company of New Jersey and Royal-Dutch Shell.⁵⁰ It was this boom in the Mexican oil industry, and his prime position in it, that enabled Pearson's business empire to grow so spectacularly from 1910 to 1919. But just how spectacular has hitherto remained elusive.

Valuing the Pearson group 1913 to 1919

In part this obscurity is because of the sheer number of different subsidiaries in the Pearson group. All of Pearson's investments in Mexico had initially come under the guise of the contracting firm, S. Pearson and Sons Ltd., which included major interests in several Mexican mines, railway, tram and electrical companies. But such was the rapid growth in the oil operations that a formal reorganisation needed to take place.

The momentum for this had begun in 1909, when the Mexican Eagle Oil Company (*Compañia Mexicana de Petróleo El Aguila SA*.) was registered in Mexico, with a capital of first \$30 million (Mexican) and then \$50 million (Mexican), to take over all of S. Pearson and Son's Mexican oil properties: the land and leases, the oil wells, the refineries, the pipelines, the tank farms and loading pipes and other port facilities. Mexican Eagle/ *El Aguila* was then responsible for all Pearson's production and refining operations. ⁵¹ The 1909 incorporation of *El Aguila* as a Mexican company was apparently a *quid pro quo* for Government favours. ⁵² But a Mexican primary listing suited Pearson too, as it meant Mexican Eagle could enjoy a secondary listing on the London stock exchange without him either having to dilute his ownership or to comply with London's stringent reporting requirements. ⁵³

The Eagle Oil Transport Co, was registered in the UK in 1912, and was the second element in Pearson's Mexican corporate restructuring. It managed the transportation and distribution of oil outside Mexico and ordered twenty state-of-the-art tank steamers at once.⁵⁴ A third company, Anglo-Mexican Petroleum Co., was also

registered in the UK in 1912, and soon employed 800 people in Finsbury Circus

House, London, becoming 'the model of a well-run company', to market Pearson's oil
outside of Mexico. ⁵⁵ A fourth Pearson company, Whitehall Securities Corporation

Ltd., was founded in London in 1908 to manage all of S. Pearson and Son's other
investments. In time this also became significant for the structure of Pearson's

Mexican oil business. S. Pearson & Co. then remained as the principal holding
company (although its contracting business was formally hived off into a separate
company, S. Pearson & Son (Contracting Department) Ltd., in early 1919). It was
these companies that together represented the Pearson group in the years leading up to
the sale of the Mexican oil business to Royal Dutch-Shell.

Before the 1929 Companies Act there was no obligation on companies in Britain to publish annually and file with the Registrar of Companies a profit and loss account showing profit arising in that year. A summary balance sheet to Companies House and a more detailed one printed for shareholders at the Annual General Meeting were all that was required by law. But balance sheets might not report annual profits; at best, they might only show a balance for those profits accumulated over previous years and retained within the business. In fact the printed balance sheets for S.

Pearson & Son Ltd at this time do not even show accumulated profits separately. The 1919 balance sheet merely contains a single figure under the heading "Suspense and Profit and Loss Balances, after providing for Preference Dividend", which could mean almost anything. Pearson typified the outlook of most business leaders of the period in holding strongly the opinion that as little as possible information should be disclosed on financial matters, especially the amount of profit. He was not unusual in

Britain and his American and German peers typically disclosed even less information.⁵⁸

Despite the complexity in the historical reconstruction of the group's accounts (especially unpicking the commingling of Pearson's private and corporate share dealings), the impact of Mexican oil on the value of the Pearson group of companies can be gauged by estimating the size of each of the principal Pearson companies involved. Historians have adopted several different indicators to measure a firm's size, but perhaps the most useful (at least in capitalist economies) and most widely used is market value. It was a measure well understood by contemporary investors in the world's stock exchanges. Within the group S. Pearson & Son Ltd., was the firm most tightly controlled by Pearson himself. Whitehall Securities Corporation Ltd., Mexican Eagle's financial agency, was wholly owned by S. Pearson & Sons. Mexican Eagle Oil Co. Ltd. had its shares listed on the Mexican and London stock markets. Eagle Oil Transport Co. Ltd. had all of its ordinary shares held 50/50 by S. Pearson & Son and Mexican Eagle. Finally Anglo-Mexican Petroleum Co. Ltd. was a private company and so its shares were not quoted.

The net result is that using market capitalization alone will unfortunately render any measurement of the Pearson group incomplete, because several of its core companies were held under private ownership and so not listed. Any attempt to gauge the scale of the Pearson group therefore has to be a composite measure of market value and, the next best alternative financial indicator, its net assets, or its long term capital employed.

A privately circulated brief history of Mexican Eagle claimed that Pearson had invested £2.5 million in the Mexican oil business by June 1910, £3.75 million by December 1914 and as much as £5 million by April 1919. Total investment was somewhat greater. Pearson claimed in a letter (cited in the same source) to the then Chancellor of the Exchequer, Lloyd George, in December 1913, that the total invested in the rapidly growing Mexican oil drilling business was £8 million. He went on to say 'that the Transport Co.'s boats had cost £3,000,000 and that the Selling facilities [Anglo-Mexican Petroleum] would cost £1,000,000; making a total of £12,000,000 of capital invested.'61

Reconstructing the net assets from the 1913 balance sheets for the five companies gives a similar sum of some £11.4 million, made up as follows:

Table 1. Pearson Group Net Assets 1913 (£m) 62

S. Pearson & Son	3.0	at 31 December
Whitehall Securities	0.4	at 31 December
Mexican Eagle	6.8	at 30 June (see Appendix)
Eagle Oil Transport	1.0	at 31 December
Anglo Mexican Petroleum	0.2	at 30 June
Total	11.4^{-63}	

Table 1 shows that there is some variation in the companies' individual balance sheets with Pearson's own account of the distribution of capital invested. The figures for the net assets for both Eagle Oil (at £1 million) and Anglo-Mexican Petroleum (£200,000) are much lower than Pearson's claims for the £4 million invested in shipping and marketing, for example, and the net assets of the Mexican Eagle, valued at £6.8 million in 1913, are also significantly below his own estimate of £8 million.

Plausible explanations for the differences might be that some of the cash outlays occurred before the formation of the limited companies (Mexican Eagle in 1909 and Eagle Oil and Anglo-Mexican in 1912) and so were left off their balance sheets but remained on the parent company's balance sheet. And S. Pearson & Sons' net assets were indeed dominated by ownership of the share capital subsidiaries, to the extent that despite significant revenues from civil engineering activities, its balance sheets scarcely give any indication that this was the world's leading contracting business. A more likely explanation is that the variations simply indicate varying degrees of undervaluation. The group's total net assets of £11.4 million reported in the published accounts of 1913 represent a conservative valuation of the £12 million invested in the Mexican oil business plus some unknown value of the global contracting business.

The Pearson group had become a very large entity. Indeed, Pearson appears to have used its financial size as a means of impressing Lloyd George as to the strength of his group. Noting in his letter of late 1913 that £12 million had been invested, he went on to state that 'the shares today notwithstanding the adverse conditions in Mexico stood at £5,000,000 premium'. Aggregation of cost and premium implies a market valuation of £17 million for the oil business; presumably somewhat more if the contracting business was also included. This is at least 50 per cent higher than the net asset figure arrived at above, and suggests that the reporting of net assets in the published balance sheets for 1913 was indeed deliberately cautious.

It also suggests that the Pearson group was already by then one of Britain's largest businesses. Conservatively valued at \$83 million (£17m), the Pearson group would have been Britain's seventh largest and one of the world's thirty largest businesses

had it been included on Schmitz' list of the world's largest industrial companies for 1912, only a little smaller than Standard Oil (Indiana). The Pearson group had experienced dramatic growth in the years immediately preceding 1913. It is doubtful, for instance, whether in 1904/5, before the major oil-related investments, the contracting business alone (plus the assorted transport, mining and so on investments in Mexico) would have given S. Pearson & Sons a value large enough to figure on Wardley's list of Britain's largest industrial companies then.

Turning to 1919, at the point at which Pearson formally ceded control of Mexican Eagle to Shell, the reported net assets of the five companies had risen to £29.6 million, as follows:

Table 2. Pearson Group Net Assets 1919 (£m) 67

	()	
S. Pearson & Son	10.3	at 31 December
Whitehall Securities	0.7	at 31 December
Mexican Eagle	13.4	at 30 June (Appendix)
Eagle Oil Transport	3.6	at 31 December
Anglo Mexican Petroleum	1.6	at 30 June
Total	29.6	

The net assets of Mexican Eagle, at £13.4 million, had doubled in six years. The net assets of S. Pearson & Son had, however, more than trebled. Eagle Oil Transport by 1919 continued to be a large company in its own right for its single function of operating oil tankers, while the net assets of Anglo-Mexican Petroleum had grown greatly from its small beginnings in 1913.

Compared with the combined net assets of £11.4 million for 1913, at £29.6 million the group's net assets had nearly tripled over just six years. The Pearson group held

no significant debt at either date, so the increase in asset values may have come from ploughing back profits or additional outside investment. Wartime inflation had, however, led to more than a doubling of prices, so some of the increase may have been a revaluation. Indeed, the increase in the group's net assets at constant prices over six years of what was a very rapid expansion in Mexican oil production emerges as a scarcely credible 18 per cent.⁶⁸ There is evidence in the company accountant's papers relating to 1919 that the Pearson companies' accounts significantly undervalued the Pearson group. ⁶⁹ But the most significant adjustment in the company's net assets was that the value of each Mexican Eagle share had been written down in 1918 or earlier to £0.48. This was a tiny fraction of its market value in 1919. The range of market prices in Mexican Eagle shares in 1919 was between a year's low of £10.72 and a high of £11.87. The simple mean of these two prices is £11.30, or twenty-three times greater than the value listed in the balance sheets. In order to arrive at a more accurate value for the group, the value of Mexican Eagle therefore needs to be adjusted upwards using the mean share price for 1919, for the reported net assets of Mexican Eagle of £13.4 million in 1919 were dwarfed by the market's valuation of the company's shares at £62.6 million.⁷⁰

Eagle Oil Transport also had its preference shares listed and their market value was £238,000 higher than the par value shown in the accounts of £2 million. Together the market value of these two listed companies aggregates to £66.5 million, somewhat larger than for Burmah, the largest on Chandler's list. Moving from a market valuation of part of the Pearson group to some sort of estimate of the value for the whole group requires the unlisted companies to be included. But there can be no market value adjustment as regards S. Pearson & Son Ltd, since that was a private

company. Nor can the figures for Anglo-Mexican Petroleum or Whitehall Securities be adjusted, since their shares were not quoted either. But with no debt to dilute their value, it is very unlikely that any market valuation would have insisted on a discount to what were conservative valuations of the net assets. It seems not unreasonable to include the three unlisted companies' net asset valuations in trying to come to some estimate of the overall value of the Pearson group, even while recognising that this may produce a somewhat more conservative result than any contemporaneous market listing might have.

With the slight adjustment to the valuation of Eagle Oil Transport, the enormous increase in the market's valuation of Mexican Eagle, and retaining the net asset values for S. Pearson & Sons, Whitehall Securities, and Anglo-Mexican Petroleum, the combined valuation of the Pearson group for 1919 is no longer £29.6 million, but the now rather more impressive figure of £79.1 million.

Table 3. Pearson Group combined market valuation and net assets, 1919 (£m)

S. Pearson & Sons	10.3	
Whitehall Securities	0.7	
Mexican Eagle	62.6	(£53.1m ordinary + £9.5m preference shares)
Eagle Oil Transport	3.9	
Anglo Mexican Petroleum	1.6	
Total	79.1	

None of the Pearson group companies features in either Chandler's list of the largest British companies by market capitalisation in 1919, never mind any kind of consolidated Pearson group.⁷³ But Chandler's methodology based on share prices quoted in London has been followed here, so a direct comparison with his '200 largest industrial enterprises in Great Britain' for 1919 is possible.

Table 4. Britain's Largest Industrial Enterprises, 1919.

1	Pearson Group	Market Value £m 79.1	Sector Oil & Contracting
2	Burmah Oil	62.8	Oil
3	J & P. Coats	45.0	Cotton thread
4	Anglo Persian Oil	29.1	Oil
5	Lever Brothers	24.3	Soap & Fats
6	Imperial Tobacco	22.8	Cigarettes
7	Vickers	19.5	Transportation Equipment
8	Guinness	19.0	Beer
9	Brunner, Mond.	18.7	Chemicals
10	Shell Transport & Trading	18.2	Oil
11	Nobel Explosives	16.3	Chemicals
12	Courtaulds	16.0	Textiles

Source: Chandler, Scale and Scope, p. 367 and Appendix B1, and text.

On this basis, if the Pearson group had been included by Chandler, it would have emerged as the largest British company by far in 1919 with a value more than 25 per cent higher than Burmah Oil. Comparison with Britain's other leading oil companies gives the Pearson group a vastly greater value than both Anglo-Persian and Shell Transport. The Pearson group was much as 75 per cent more valuable than Chandler's second largest company, J&P Coats.

Exit from Mexico

It has been widely recognised that Pearson's Mexican Eagle was a major player in the global oil industry before 1919, yet it seems remarkable how little historians have understood of the true scale of his business empire. When Calouste Gulbenkian set up Shell's takeover in 1919, it was in fact the merger of Britain's largest company with Europe's largest company, and evidently consolidated the resulting Shell group's position as the only global rival to Jersey Standard.

That Pearson was able to see his Mexican oil business expand so greatly seems all the more extraordinary given the political turmoil into which Mexico had descended after 1911. Given how easy it was (and remains) to sabotage oil pipes, that the near anarchy did not cause a precipitous decline in oil output needs some sort of explanation. Haber, Razo and Maurer suggest that with each of the competing factions depending on tax revenue to fund their military campaigns, no party had any incentive to do anything other than encourage the foreign oil companies to maximise output. Indeed, they suggest that the political factions and the oil companies were able to act almost as competing coalitions and discover stable equilibrium positions where the oil companies had sufficient incentive to continue to invest and produce and the political elites optimised tax revenues. 76 Investment continued apace. Over 4,300 oil wells were drilled between 1920-9, compared with only 442 during the 1901-19 boom. Royal-Dutch Shell through its newly acquired Mexican Eagle subsidiary also invested enormously in Mexican fields, the value of its net assets almost trebling in the first four years after 1919 (see Appendix Table A1). After he had sold out, Mexican Eagle's market value continued to soar (it continued to have a separate listing – see Appendix Table A2) before falling along with the other majors as oil stocks lost value after 1920 – Jersey Standard saw its price collapse in 1922, the Texas Company also saw its stock price fall after 1922.⁷⁷

The Mexican environment remained in fact relatively stable as long as the oil continued to flow and as long as the U.S. Government continued to support the interests of its oil companies in Mexico. Oil did continue to flow, although with growing difficulty after 1921 as the industry faced increasing geological problems in

its extraction, according to Haber, Razo and Maurer. And the U.S. Government continued to support U.S. companies. But Pearson of course was not an American citizen. And so, perhaps ironically given the dramatic increase in the scale of his Mexican business interests, the Pearson group's position after 1911 had become far more tenuous there than it had been before.

From 1889 to 1911 Pearson had been the Mexican Government's civil engineer of choice. The Díaz regime's strategy of vertical political integration depended on continually rising asset prices and rental incomes to ensure the co-operation of its rival economic and political elites. Pearson brought the necessary contracting expertise and credibility with foreign investors. As the key intermediary, he undoubtedly acquired considerable influence. In contrast to the unflattering rumours spread by his U.S. rivals during the Díaz era, Pearson's continued receipt of patronage was more because he was viewed by the regime as a highly competent, relatively trustworthy outsider. Employing such a relatively impartial outsider meant no individual faction would gain additional commercial and political clout and so threaten the polity's fragile stability. As a known entity, Pearson held an important political advantage over other competitors. Not only would he deliver, but he would not upset the fragile governing equilibrium.⁷⁹

But the Revolution destroyed such equilibrium and there were no more civil engineering contracts. Had Pearson not diversified into oil, he would have had little cause to remain in Mexico. But his growing oil empire in Mexico gave him a strong incentive to remain, even while his contracting business continued to undertake major projects around the world after 1911. However, the role of (a highly selective) third

party enforcer in the new polity of anarchy for all bar the oil producers moved from the Mexican political elites to the U.S. Government. Pearson was increasingly isolated and his own position would appear to have become increasingly fraught. When the nationalization of oil deposits in the Constitution of 1917 put a strain on relationships with both the British and American firms, for example, it was only the American firms that had strong countervailing U.S. Government support.⁸⁰

That presumably explains why Pearson was so eager for an exit route. The privately written short history written in 1928 details the various discussions Pearson held before selling out to the Shell group, beginning with a first approach by the Texas Company in 1911. Discussions with Jersey Standard in 1913 were discontinued because the Americans were unable then to pursue matters, although they resumed with some seriousness in November 1916. The British Government (with its military concerns then paramount) 'urgently requested [Pearson] to discontinue our negotiations.' But Pearson was becoming increasingly eager to sell out. 'In reply we told the Government that we could not be expected to do this; that the state of affairs in Mexico was such that we should not be justified in continuing to shoulder the whole burden ourselves'. Pearson invited the British Government to take a half stake in the business, but its response in 1917 was instead to issue him with regulations restricting any ownership transfer during the war. Such a fiat was contested by Pearson; but Jersey Standard was nevertheless persuaded to postpone any possible acquisition until after cessation of hostilities. 81 Pearson also held discussions with Royal Dutch Shell representatives in 1912 and 1913, but the sticking point had been his insistence in cashing. As the end of war approached, Deterding approved the cash purchase for control, so that Shell could 'assume the management and leave Lord

Cowdray with a perfect peace of mind.'⁸² After nearly twenty years of building up such a large stake in the Mexican oil industry, he sold all his shares and reinvested the proceeds back into the global contracting business, in particular in electrical utilities companies in Mexico and Chile, and the Californian oil company, Amerada.⁸³

Conclusion

'Pearson luck' was a phrase used by contemporaries to describe outrageous good fortune.

84 Certainly Weetman Pearson arrived in Mexico at a fortuitous moment. With the Díaz Government anxious to begin important development projects in the late 1880s and financial credibility so fragile, Pearson's reputation with British underwriters proved crucial in gaining the first contract. But fragility in Mexico was not restricted to its fiscal reputation in world markets. As Haber, Razo and Maurer explain, the stability of the Porfirian regime was also tenuous and depended on the continual rise in asset prices. After Pearson demonstrated that he could complete complex infrastructure projects, he became a key intermediary, an essential vehicle of expertise for the development of Mexican resources and their commercial exploitation by its political and economic elites. In this sense he was a beneficiary of what inevitably was only a temporary political system.

The 1911 Revolution therefore meant that Pearson's 'luck' ran out. His role as the Mexican Government's civil engineer of choice ceased. After 1911 as the country slipped progressively into a near-anarchic state, the role of third party enforcer in the sole ocean of stability, the oil industry, switched to the U.S. Government, and so Pearson's position became increasingly vulnerable and he wanted to sell out. But despite wanting to exit, his hands were forced first by Jersey Standard's own legal

pre-occupations and then by the First World War. Yet during this enforced hiatus, Mexican Eagle had become transformed into 'a most prosperous concern'. ⁸⁵ Mexican Eagle continued to prosper as Royal Dutch Shell invested heavily, before the underlying geological conditions undermined the Mexican oil industry; an industry that Pearson had been instrumental in creating.

Pearson's example illustrates how British entrepreneurs moved overseas in search of higher returns in the decades after 1880. In particular they pursued complex infrastructure projects, constructing railways and ports for instance, and resource-based investments, from land and plantations to mining and oil, all supported by finance raised in London. British entrepreneurs were participating in the extension of global markets through market deepening activities or through adding to the resource-base of the world economy. Like Pearson, many were active outside the relative protection of the Empire and had to work with governments of greater or lesser legitimacy, in environments with less enforceable property rights. These were all market-driven activities. In this sense they were fundamentally different from the technologically-driven activities of those (often American or German) firms commonly associated with what business historians have called the second industrial revolution.

Technologically intensive sectors as automobiles, electricals and chemicals were sectors that emerged largely without established markets for their new products.

These firms needed to invest in managerial hierarchies in order to substitute for the galaxy of specialist intermediaries that fuelled the efficient allocation of resources in established markets. British entrepreneurs were no less innovative, indeed they were

collectively responsible for the bulk of integration of the world economy in the years before 1920. But, like Pearson, they operated in sectors that required less technological and more financial innovation and where markets and specialised intermediaries were long established. It made no sense here to invest scarce capital in managerial hierarchies. Management was no substitute for market coordination when transaction costs were low. Specialisation dictated the route chosen. 'The entrepreneurial and management skills of the British lay in activities involving commerce, risk and short time horizons. These skills were of great value in their extensive extractive and service sector FDI before 1945.'

The example of Pearson also shows that where British companies were in sectors where sufficient market failure dictated greater levels of internalization, like oil, they were able to invest in the appropriate organisational structure. The Pearson group of 1919 may have resembled a complex conglomerate, with several free-standing companies active in overseas transportation, mining and electricity, as well as the fully integrated oil major and the global contracting firm, all under the control of the family holding company. But the efficiency and success of this organisation in all its fields has never been questioned. It reinforces the view that 'British multinational activity could not have been sustained without considerable organisational capability.' The Pearson case demonstrates that British entrepreneurs were just as able as their American or German counterparts to build vertically integrated, global organisations.

British entrepreneurs did not fail during this period. Rather it was increasingly the case that they rationally moved their operations away from the slow-growing, mature

domestic economy to the faster growing areas of the world. Those who elected to remain wedded to domestic manufacturing (and who subsequently became the subjects of extensive historical scrutiny) were in fact increasingly unrepresentative of British entrepreneurship in the decades after 1880. Moreover, the criticism that British entrepreneurs were unable to build appropriate management structures appears difficult to sustain for this period. The truth is that in most sectors where most British entrepreneurial talent was focusing, such management-heavy structures were simply inappropriate and inefficient. Specialist market intermediaries could perform the intermediation tasks more efficiently. But on the rare occasion where British entrepreneurs were facing environments where internalization was the most suitable organisational response, like Pearson's oil empire, they were able to create the necessary structures. Entrepreneurial failure and managerial deficiencies may well have characterised British business at some point in the twentieth century, but this article adds to a growing body of historical literature that refutes the stereotype of the incompetent early twentieth century entrepreneur.

Appendix Table A1: Mexican Eagle Oil Co. Ltd: Growth in Balance Sheet Value of Net Assets, 1911-1923 (£m current prices)

1911	3.12	1916	9.03	1921	29.91
1912	3.92	1917	10.05	1922	36.70
1913	6.83	1918	11.02	1923	37.29
1914	7.28	1919	13.43		
1915	8.09	1920	17.78		

Note: data for 1911-20 are 30 June; for 1921-3 31 December

Sources: *Stock Exchange Year Book* and *Official Intelligence*, 1911-23. (And compare with Haber et al, *Politics of Property Rights*, Table 6.3, 218, on fixed assets.)

Appendix Table A2: Market Capitalisation of Mexican Eagle, 1914-1923 (£m current prices)

1914	7.35
1915	7.91
1916	9.22
1917	14.79
1918	21.47
1919	62.63
1920	78.11
1921	62.54
1922	48.74
1923	25.87

Sources: Stock Exchange Official Intelligence and Year Book

Note: Derived from average of highest and lowest share prices quoted in London, except for ordinary shares 1914-18 and preference shares for 1918, where 'latest price' from following year's *Stock Exchange Year Book* was taken. (Compare with Haber et al, *Politics of Property Rights*, Table 6.10, 232, on real share prices.)

¹ "History of S.P & S.'s [S. Pearson & Son, Ltd.] Oil Interests in Mexico, S.A.", by Mr C. Reed, unpublished ms., S. Pearson & Son Ltd. records. The Pearson archive, named Pearson Historical Records (hereafter PHR), is held at the Science Museum Library, Imperial College, South Kensington, London. The unpublished history can be found at PHR, ARCH:PEAR, box C43 file LCO 23/3. Shell actually acquired only 35% of Mexican Eagle shares, but bought the right to managerial control. See Geoffrey Jones, *The State and the Emergence of the British Oil Industry* (London, 1981), 217-8.

² David J. Jeremy, "Weetman Dickinson Pearson," in David Jeremy, ed. *Dictionary of Business Biography* (London, 1985), 4: 582-594; and Jones, *State*, 74, 65. Also see G. Jones, 'Pearson, Weetman Dickinson, first Viscount Cowdray (1856–1927)', *Oxford Dictionary of National Biography*, Oxford University Press, 2004 [http://www.oxforddnb.com/view/article/35443, accessed 5 Jan 2006].

³ See R. P. T. Davenport-Hines, *Dudley Docker: the Life and Times of a Trade Warrior* (Cambridge, 1984), chapter 10; T. A. B. Corley, *A History of the Burmah Oil Company*, 1886-1924 (Heinemann, London, 1983), ch. 16; also see Henry Osborne O'Hagan, *Leaves from My Life* (2 vols. Bodley Head, London, 1929) (our thanks to Les Hannah for this reference).

⁴ It is noteworthy, for instance, that none of Pearson's companies figure on any of the principal listings of prominent British businesses during the period. For example, both Peter Wardley, 'The Anatomy of Big Business: Aspects of Corporate Development in the Twentieth Century', *Business History* 33 (1991): 268-296; and Alfred D. Chandler, *Scale and Scope: The Dynamics of Industrial Capitalism* (Cambridge, Mass., 1990), Appendix B, include other overseas-based businesses but omit Pearson. Other well known lists tend to focus on British-based businesses or on British-based employment, and so Pearson's businesses would not figure anyway. For example, Les Hannah and John Kay, *Concentration in Modern Industry* (London and Basingstoke, Macmillan, 1977).

⁵ Tom Nicholas, 'Enterprise and Management', in *The Cambridge Economic History of Modern Britain: Volume 2: Economic Maturity, 1860-1939* eds R. Floud and P. Johnson (Cambridge University Press, 2003), 252.

⁶ Flagged by Les Hannah, 'Visible and Invisible Hands in Great Britain', in *Managerial Hierarchies* eds A. Chandler and H. Daems (Harvard University Press, Cambridge MA, 1980): 40 (oil), 51 (food), 57-8 (overseas investments), 58 (raw materials), 62-3 (overseas markets)), and developed by P. J. Cain and A.G. Hopkins, *British Imperialism: Innovations and Expansion, 1688-1914* (Longman, Harlow, 1993), but most clearly elucidated by Geoffrey Jones, 'British Multinationals and British Business since 1850', in *Business Enterprise in Modern Britain* M. Kirby and M. Rose eds, (London, 1994).

⁷ Les Hannah, 'The Divorce of Ownership from Control from 1900: Re-calibrating Imagined Global Historical Trends', *Business History* 39 (October, 2007, forthcoming), Table 1. Indeed, had Hannah included Britain's overseas companies, then the bias to London's dominance of global liquidity would be even greater.

⁸ M. Edelstein, 'Foreign investment, accumulation and Empire', in Floud and Johnson, *Cambridge Economic History*; John Dunning, 'Changes in the level and structure of international production over the last 100 years', in Mark Casson ed., *The*

Growth of International Business (Allen & Unwin, London, 1983); Tony Corley. 'Britain's Overseas Investments in 1914 revisited', Business History 36 (1994); and 'Competitive Advantage and Foreign Direct Investment: Britain, 1913-1938', Business and Economic History 26 (1997).

⁹ Geoffrey Jones, The Evolution of International Business: An Introduction (Routledge, 1996): 30-33; and Jones, Multinationals and Global Capitalism (Oxford University Press, 2004), chapter 2. Mira Wilkins and Harm Schröter eds, The Free Standing Company in the World Economy, 1830-1996 (Oxford University Press, 1998), and Corley, 'British Overseas Investments', for free standing companies. Until relatively recently historians had assumed these firms to be vehicles for British portfolio rather than direct investment. ¹⁰ R.C.O. Matthews, C. Feinstein, and J. Odling-Smee, *British Economic Growth*,

1856-1973 (Stanford University Press, Stanford CA, 1982), 163-78, show that domestic profits were falling while overseas profits were rising. Jones, 'British Multinationals and British Business', emphasises the diversity of financial outcomes, 188.

¹¹ R. Ferrier, *The History of the British Petroleum Company* volume 1 (Cambridge, University Press, 1982), 158-201; Jones, State, chapter 5; Corley, Burmah. Jones, 'British Multinationals and British Business', 186 on the contribution of the Anglo-Persian holding to Burmah's market valuation; and Chandler, Scale and Scope, Appendix B1 for values (1919 exchange rate of \$4.43 to £1 is from Lawrence H. Officer, "What Is Its Relative Value in UK Pounds?" Economic History Services, October 30 2006, URL: http://www.eh.net/hmit/ukcompare/).

¹² Les Hannah, 'Marshall's "Trees" and the Global "Forest": Were the "Giant Redwoods" Different?' in Naomi Lamoreaux, Dan Raff, and Peter Temin, Learning By Doing in Markets, Firms, and Countries (University of Chicago Press, Chicago IL, 1995), estimates Royal Dutch-Shell to have had a value of \$187m and Jersey Standard \$390m in 1912, Table 7.A1.

¹³ There are three suspiciously adulatory biographies of Pearson, from which this section is drawn. J. A. Spender, Weetman Pearson: First Viscount Cowdray, 1856-1927 (London, 1930),11. Desmond Young, Member for Mexico: a Biography of Weetman Pearson, First Viscount Cowdray (London, 1966), 6-7. Robert Keith Middlemas, The Master Builders: Thomas Brassey; Sir John Aird; Lord Cowdray; Sir John Norton-Griffiths (London, 1963), 168.

¹⁴ Spender, Weetman Pearson, 18, and Appendix I. Priscilla Connolly, "Pearson and Public Works Construction in Mexico 1890-1910," Business History, 41, 4 (1999).

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15 Middlemas, *Master Builders*, 171; Connolly, 'Public Works', on changes to the Principle Connolly *Fl Contratista de Don* international contracting industry, and Priscila Connolly, El Contratista de Don Porfirio: Obras publicas, deuda y desarrollo desigual (Mexico, 1997), 261 for the specific example of Pearson using down payments from the Mexican Government to smooth working capital requirements. Pearson evidently attained some degree of financial sophistication, his "phenomenal expansion was mounted on bank overdrafts as little as 3 to 5 per cent of the value of his current contracts, and since he used his clients' securities as collateral, [his growth] was self-financing", Jeremy, "Weetman Dickinson Pearson," 585. Also see similar point made by Jones, "Pearson".

¹⁶ Connolly, "Public Works," 53.

¹⁸ Haber et al, *Politics of Property Rights*, 42-3 and ff.

²⁰ Connolly, "Public Works," 57-8.

²¹ Spender, Weetman Pearson, 56, 84-6.

²² Connolly *El Contratista*, 234-5, our translation (literally 'a moral boost' rather than 'confidence'. See Connolly, 'Public Works, 58).

²³ Even then British bond holders insisted on a steep discount, Connolly, 'Public Works,' 58. On credit rationing theory see the classic, J. E. Stiglitz and A. Weiss, 'Credit Rationing in Markets with Imperfect Information', *American Economic Review* 71 (1981); and for an explanation in a business history context, see Andrew Godley and Duncan Ross, 'Banks, Networks and Small Firm Finance', *Business History* 38 (1996), 1-10.

²⁴ Connolly, 'Public Works,' 66.

²⁵ Connolly, 'Public Works,' esp. Table 2, and *passim*. Also see Young, *Member for Mexico*, 81-100; Spender, *Weetman Pearson*, 101-111.

²⁶ Connolly, *El Contratista*, 337-40. Other reasons thought to be in his favour include: his allegedly 'special relationship' with the President and his competence and skills in labour management (Connolly, "Public Works," 57, 60-63). Spender, *Weetman Pearson*, 102; Brown, *Oil*, 47-53, emphasise his ability to gain financial resources from London banks. Connolly also speculates about Pearson's role in supporting Mexican regime by canvassing for British diplomatic support during a border dispute with Guatemala (*ibid.*, 340-1). Unlike with the Gran Canal contract, there is no actual evidence of why he was awarded the Veracruz contract.

²⁷ Connolly, *El Contratista*, 374-6. Charles A. Gauld, *The Last Titan: Percival Farquhar – American Entrepreneur in Latin America* (Stanford University, Institute of Hispanic America, 1964), 55; and Reinhard Liehr and Mariano Torres Bautista, 'British Free Standing Companies in Mexico, 1884-1911', in Wilkins and Schroter, *Free Standing Company*, on F.S. Pearson and Mexico Light & Power.

²⁸ Haber et al, *Politics of Property Rights*, 29-40.

²⁹ See Connolly, 'Public Works', 61, on the need for foreign contractors for the Canal project. She also states that Mexican engineers 'had no previous experience of harbour dredging' (66), so foreign contractors were preferred for the Veracruz project. Haber, *Industry*, 30 emphasizes that Mexico was dependent upon foreign technology and technicians for its railroad design and construction because there was a lack of domestic engineering expertise.

³⁰ Haber et al, *Politics of Property Rights*, 50 (the currency symbol has been omitted, so it is not clear whether it is \$US or \$Mexican – either way it was a lot).

³¹ Connolly, 'Public Works', 62; Haber et al, *Politics of Property Rights*, 48 listing some of the politicians who were multiple board members, including Porfirio Jr. (also n. 21, p. 197). Connolly, *El Contratista*, 12, on Diaz' wife's family benefiting from Pearson's acquisition of large land holdings around Veracruz. In 1895 Pearson also offered seemingly generous terms to a group of politicians who owned bonded warehouses, see *Mexican Yearbook 1908*. Our thanks to one of the referees for this reference.

¹⁷ Stephen Haber, Armando Razo and Noel Maurer, *The Politics of Property Rights: Political Instability, Credible Commitments, and Economic Growth in Mexico, 1876-1929* (Cambridge University Press, 2003), 194, n.11.

¹⁹ Stephen Haber, *Industry and Underdevelopment: The Industrialization Of Mexico*, 1890-1940 (Stanford, 1989), 18-19.

³² Connolly, 'Public Works', 57; Haber et al, *Politics of Property Rights*, ch.6 and passim for their revisionist perspective. Americans had become resentful of Pearson's privileged position with the Díaz regime. Pierce campaigned relentlessly against Pearson in the press (Jones, State, 67; and Brown, Oil, 54-5, 64 and 173-6). As domestic opposition to the regime grew, so did anti-Pearson sentiments and rumours, which persisted after 1911.

³³ Jones, "Pearson". He was the Liberal MP for Colchester from February 1895 to 1910. According to Jones, "Pearson", his political career was distinguished by not having made a single speech in the Commons. He joined the House of Lords as Baron Cowdray of Midhurst in July 1910.

³⁴ Connolly, 'Public Works', citation 58, and 57 on the allegedly high profit margins for harbour dredging.

³⁵ Middlemas, *Master Builders*, 196-99. Spender, *Weetman Pearson*, 110-16; Young, Member for Mexico, 100-3. According to Brown, Oil, 48-9, Limantour, the Mexican Finance Minister, who had been in Europe when the Tehuantepec contract was agreed, was critical of "the liberal terms and autonomy given to the foreign capitalist." Nevertheless, according to Middlemas, Master Builders, 199, "The return on this money justified the outlay for seven rich years."

³⁶ Spender, Weetman Pearson, 121-122; Young, Member for Mexico, 110. Pearson spent several months in Mexico on the project each year for eight consecutive years. His frequent absences from the House of Commons led to him being nicknamed the 'Member for Mexico'.

³⁷ Haber et al, *Politics of Property Rights*, 190-8; Brown, *Oil*, 9-10, 25-27. Doheny later reorganised his holdings into the Mexican Petroleum Company.

³⁸ Haber et al, *Politics and Property Rights*, Table 6.1, p.199.

³⁹ Haber et al, *Politics of Property Rights*, p. 198. Jones, *State*, 68. Jeremy, "Weetman Dickinson Pearson," 590.

⁴⁰ Brown, *Oil*, 15, 51

⁴¹ As quoted in Spender, *Weetman Pearson*, 149. J.B. Body ran the firm's headquarters in Mexico City and continued as a director of Mexican Eagle after the Shell acquisition.

⁴² Spender, Weetman Pearson, 149-50.

43 Middlemas, Master Builders, 211; Spender, Weetman Pearson, 122-23.

⁴⁴ After receiving concessionary land from the Mexican government in 1906, Pearson decided to increase the size of the refinery and invest an additional half million pounds. "Deciding to double his expenditure before he found oil on the new lands was a gamble, but this was nothing to the scale of operations implied because, by aiming to produce so much refined oil, he committed himself to a large export trade in world markets and to competition in Mexico itself," Middlemas, *Master Builders*, 214.

45 Spender, *Weetman Pearson*, 156; Jeremy, "Weetman Dickinson Pearson," 589.

⁴⁶ As quoted in Spender, Weetman Pearson, 155.

⁴⁷ Middlemas, *Master Builders*, 216.

⁴⁸ Jeremy, "Weetman Dickinson Pearson", 589; Middlemas, *Master Builders*, 218-219; Reed, "History of S.P and S.," 7.

⁴⁹ Middlemas, *Master Builders*, 220. Also see Reed, "History".

⁵⁰ Haber et al, *Politics and Property Rights*, 216 and ff.

⁵¹ Reed, "History", 5.

⁵² Jonathan Brown, "The Structure of the Foreign-Owned Petroleum Industry in Mexico, 1880-1938," in The Mexican Petroleum Industry in the Twentieth Century eds Jonathan Brown and Alan Knight (Austin, 1992), 7; Brown, *Oil*, 55. Perhaps, most important of all from the Mexican Government's perspective, through this incorporation, the threat of Standard Oil was thwarted.

⁵³ Hannah, 'Divorce of Ownership', states that the listing rule in London was that 'in any public issue at least two-thirds of any security should be placed in the hands of the public', 20. Overseas registered companies with a secondary listing on the London stock exchange could avoid the otherwise mandatory compliance with these regulations.

⁵⁴ Middlemas, *Master Builders*, 219. Ten of the tankers could carry 15,000 tons, the largest oil tank capacity available in the world.

⁵⁵ Citation from Jones, *State*, 70. Also see Jeremy, "Weetman Dickinson Pearson," 589; Reed, 'History', 7. Pearson had originally planned to market his oil through Bowrings, but then acquired that company and expanded it into Anglo-Mexican. ⁵⁶ Few sets of the accounts which were filed at Companies House before 1950 have survived. The main source for company accounts for the early twentieth century is the Stock Exchange set held at the Guildhall Library, as listed companies had to deposit a

set of accounts with the Stock Exchange. But because Pearson's listed companies issued only preference shares, they fell outside this regulatory orbit. Successive *Stock Exchange Yearbooks* prior to 1918 show that S. Pearson & Sons (or any of its listed key subsidiaries – see below) sent in no accounting information. After 1918 it became a private company again and so was not required to deposit any copies of its accounts.

⁵⁷ Pearson received from his accountant in November 1920 a commentary on the draft

Pearson received from his accountant in November 1920 a commentary on the draft accounts (balance sheet and profit and loss account) of S. Pearson & Son Ltd for 1919. He made the following annotation on the section of the commentary dealing with changes during the year in the company's reserves and in the 'suspense account': "This [the suspense] a/c is kept open so that the P & L [profit & loss] item also includes Suspense a/c and the actual profits are thereby not disclosed in the printed a/cs." PHR, ARCH:PEAR, box A10. (This box contains the accounts for S. Pearson & Son Ltd and Whitehall Securities Corporation Ltd together with associated papers, which form the principal source for this section.) Normally a suspense account temporarily holds sums received by a company, which will each be finally allocated to its correct place within the accounts at a future date after further information on the nature of the transaction (perhaps a liability to a creditor, for example) becomes available. They therefore were a common device among contracting companies where contracts commonly ran over the period of the accounts. But Pearson's usage went far beyond that and he was clearly using the device to disguise 'actual profits'.

⁵⁸ See, for example, A.J. Arnold, 'Corporate Financial Disclosures in the UK, 1900-24', *Accounting Business & Financial History*, vol. 7 (2), 1997, 143-65, especially, 161, 165. See Hannah, 'Divorce of Ownership', on comparative patterns of disclosure.

⁵⁹ Wardley, 'Anatomy of Big Business', 275-7; and Hannah, 'Divorce of Ownership'. For a general discussion see Hannah and Kay, *Concentration in Modern industry*, ch. 4 and appendix.

⁶⁰ Stock Exchange Year Book 1915 and 1919. This also states that Anglo Mexican Petroleum (hereafter AMP) accounts were sent to shareholders only and not to the exchange. 50% of AMP's ordinary shares were sold to the Shell Group as part of the 1919 transaction, but we have not found for what price. Jones State, 217-8.

⁶¹ Reed, "History", 6 & 9. Connolly, *El Contratista*, 12, corroborates the £5m figure invested in Mexican Eagle before 1919.

⁶² PHR, ARCH:PEAR, box A10, for the balance sheets of S. Pearson & Sons (hereafter SP&S) and Whitehall Securities Corporation (hereafter WSC). Eagle Oil Transport (hereafter EOT) balance sheets are held in PHR, ARCH:PEAR, box C47/4. AMP balance sheets are held in PHR, ARCH:PEAR, box C50/1. We have avoided

double counting in adjusting for cross shareholdings.

⁶³ The net assets of SP&S, at just over £3m, had not vastly increased from three years earlier when the Potrero gusher was opened up. The net assets in the balance sheet include £800,000 representing the cost of shares held by SP&S in WSC. WSC's own accounts reveal that its net assets were £1.2 million in 1913, suggesting that it had accumulated £400,000 of retained profits between 1908 and 1913. All of EOT's £240,000 issued ordinary shares were held by either SP&S or Mexican Eagle (hereafter ME), so are included in those two companies' net assets. The remaining £1.0 million represents its preference shares together with accumulated profits.

⁶⁴ Reed, "History", 9.

⁶⁵ Christopher Schmitz, 'The World's Largest Industrial Companies of 1912', *Business History* 37 (1995). 'Marshall's "Trees"', Table 7A.1, lists ME (as a Mexican firm) valued at \$50m in 1912, making it the 8th largest oil firm in the world.

⁶⁶ Wardley, 'Anatomy of Big Business', Table 3, 278.

- ⁶⁷ SP&S and WSC balance sheets in PHR, ARCH:PEAR, box A10. EOT balance sheet in PHR, ARCH:PEAR, box C47/4. AMP balance sheet in PHR, ARCH:PEAR, box C50/1. Double-counting has been avoided in the same way as for 1913 regarding cross-shareholdings.
- ⁶⁸ Using the GDP deflator, Lawrence H. Officer, "What Is Its Relative Value in UK Pounds?" Economic History Services, October 30 2004, URL: http://www.eh.net/hmit/ukcompare/.
- ⁶⁹ The cost of the shares and debentures which SP&S or WSC had purchased in regard to dozens of companies (admittedly fairly small holdings in some cases) over the previous twenty years had been written down the to nil in the companies' books, for instance. In many instances the shares were no doubt indeed worthless, but in a few cases the companies invested in were still paying dividends, which boosted SP&S' annual income.
- ⁷⁰ Stock Exchange Official Intelligence for 1920. This exactly follows the methodologies in Wardley, 'Anatomy' and Schmitz, 'Largest'.
- ⁷¹ Its ordinary shares were not listed, so this may still conceal some undervaluation. The market value of the preference shares (£2.238m) has been added to the par value of its ordinary shares and existing reserves in the balance sheet to give the £3.9m figure in Table 3.
- In fact it prior to December 1918 SP&S had a market listing, but only the debentures (all of which were repaid by 1918) were quoted in the Official List. The *Stock Exchange Year Book* states repeatedly that "reports are not obtainable, as all the share capital is privately held". *Stock Exchange Official Intelligence* for 1919.

 73 Chandler Scale and Scane 660 Chandler to the Scane 660 Chandler to
- Chandler, *Scale and Scope*, 669, Chandler states, 'Not included are most privately held companies', 632, and 'Included are industrial enterprises which operated domestic production facilities', 631, which might exclude ME, although Chandler neither excluded Burmah, Shell nor Anglo-Persian on this account. And while ME was registered in Mexico, it was evidently controlled from the UK.
- Chandler, *Scale and Scope*, Appendix B.1. Chandler simply states that his values were 'based on the market value of shares for the years 1919... in the *Stock Exchange Daily Official List*', *Scale and Scope*, 631. He does not explicitly state his valuation

methodology. We note that the non-oil companies on his list are from Hannah and Kay, *Concentration*. For the purpose of comparison note that Haber et al *Politics of Property Rights*, state that Pearson and Doheny together enjoyed 61% share in 1918 (n.24, p. 198). If their shares were roughly equal, and so Pearson had 30% alone, this would represent a firm output of well in excess of 20m barrels out of the 1919 Mexican industry output of 87m barrels. Corley, *Burmah*, appendix, 320-1, states that Burmah's crude oil production was 6.4m in 1914, rising to 6.9m in both 1918 and 1919, peaking at 7.0m in 1921.

⁷⁵ It should be emphasised that Chandler also omitted several other major overseas based British industrial enterprises, including, for example, Rio Tinto and Consolidated Goldfields, the second and fifth largest industrial enterprises respectively in Wardley, 'Anatomy', for 1904/5. Rubinstein also indicates other possible omissions highlighting Sir John Ellerman's shipping fortune and the 'Randlords' as having acquired the very largest of business fortunes in Britain at this time. W. Rubinstein, *Men of Property: The Very Wealthy in Britain since the Industrial Revolution* (Second edition, Social Affairs Unit, London, 2006), 60-1, 218-9, for example. The Pearson group were larger than any other British business with a currently known 1919 value, but one or more of these (or other) firms may well have been even larger.

⁷⁶ Haber et al, *Politics of Property Rights*, 228-34; Connolly, *El Contratista*, 12. ⁷⁷ Haber et al, *Politics of Property Rights*, Tables 6.10 and 6.11 and discussion, pp.

232-4.

Haber et al, *Politics of Property Rights*, ch. 6. Haber, *Industry*, 152 describes the

precipitous decline in oil output in the 1920s.

Peter Calvert, *The Mexican Revolution 1910-1914. The Diplomacy of the Anglo-American Conflict*, (Cambridge, Cambridge University Press, 1968); Friedrich Katz, *The Secret War in Mexico. Europe, the United States and the Mexican Revolution*, (University of Chicago Press, 1981); and Lorenzo Meyer, *Mexico and the United States in the Oil Controversy, 1917-1942* (Austin, University of Texas, 1977). It is also instructive to compare evidence of Pearson's relatively limited interventions in the political process in Porfirian Mexico (there is no evidence of outright corruption or attempts to garner political power for himself) with the near contemporaneous so-called 'Randlords' (like Cecil Rhodes and Julius Wernher and Alfred Beit) who instigated the Boer War in South Africa to pursue their commercial interests; and United Fruit's position of 'king-maker' in Guatemala from the 1920s. See Paul J. Dosal *Doing Business With the Dictators : a Political History of United Fruit in Guatamala, 1899-1944* (SR Books, 1997). While Pearson was evidently a figure of some importance in the Porfirian state, compared to these examples, he was neither willing nor able to accumulate such influence.

There was already considerable tension between the U.S. entrants and Pearson, a legacy of the Diaz era. See Brown, *Oil*, 55, 173-6. On the 1917 Constitution see Lorenzo Meyer, "The Expropriation and Great Britain," in *The Mexican Petroleum Industry in the Twentieth Century*, eds. Jonathan C. Brown and Alan Knight (Austin, 1992), 154. In 1938 the Mexican oil industry was nationalised and reserves were used to meet domestic needs. This strategy did not change until the early 1970s when large deposits of petroleum were discovered in southern Mexico. Ironically these fields discovered in 1972 in Poza Rica, Veracruz, were drilled by Pearson but the contemporary technology, which only went down to 2,500 feet, did not allow for deep enough wells to be dug.

⁸² Read, 'History', 11-12. Deterding had already architected the global oligopoly with Jersey Standard and Anglo-Persian, by then, so presumably felt little cause for concern at representing a non-American interest in Mexico.

83 The balance sheet for S. Pearson & Sons for 1923 (box A10) show that it continued as the principal holding company, its £10 million net assets comprising of shares in Whitehall Securities Corporation (£3.6m), Whitehall Petroleum Corporation (£3m – the parent company of his Amerada oil venture in the U.S.), Whitehall Trust (£2m - a finance and issuing house), S. Pearson & Son (Contracting Department) (£1m), Lazards bank (£1m) and smaller holdings. Whitehall Securities balance sheet was dominated by the investments in the Chilean electric utilities sector (£1.5m) with £600,000 in the Mexican electricity and transport companies. Only £200,000 of shares in Mexican Eagle remained. Mira Wilkins Foreign Investment in the United States, 1914-1945 (Harvard University Press, Cambridge MA, 2004), 108, 226 and 266 on Amerada; and Linda and Charles Jones and Robert Greenhill, 'Public Utility Companies', in Business Imperialism 1840-1930: An Inquiry Based on British Experience in Latin America, ed. Desmond C. M. Platt (Oxford University Press, Oxford, 1977), on the Chilean investments. The press investments, on which the later Pearson publishing conglomerate was built, were only a very small part of his interests during his lifetime.

⁸¹ This was complicated by the fact that Pearson was himself a member of the Government in 1917: appointed by Lloyd George as the President of the Air Board in January. He resigned in November 1917.

⁸⁴ Jones, *State*, 65 on 'Pearson luck'.

⁸⁵ Deterding's comment reported in Reed, 'history', 11.

⁸⁶ Jones, 'British Multinationals and British Business', 202.

⁸⁷ Jones, 'British Multinationals and British Business', 202. In which case Chandler and Daems seem overly dismissive of holding companies, in *Managerial Hierarchies* eds A. Chandler and H. Daems, 'Introduction', 4. In this context (financial not technological concerns predominated, and allocation through existing market structures rather than elaborate managerial hierarchies) holding companies would appear to be a sensible organisational device