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Free-Standing Firms and the Internalisation of Markets for Financial Capital: A Response to Casson

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'International Financial Capital Transfers: A Transaction Cost Framework' seeks to provide a theoretical framework to explain the variety of institutions used to transfer financial capital across countries, including the free-standing firm, an important form of pre-1914 foreign direct investment.[1] In that piece, I argue that free-standing firms arise from the internalisation of the market for financial capital. Free-standing firms differed in the location and scope of their activities (from Russia to Argentina, from banks to jute mills). The only characteristics they had in common is that they undertook only foreign operations, were registered in countries with major stock markets, and were funded by shares subscribed directly by the public.[2]

To understand the necessary and sufficient conditions for the emergence of free-standing firms, one must consider all the potential ways in which an investment in a given country can be financed: funds can be obtained through debt or equity, from local or foreign sources, and by local or foreign-based enterprises.[3] The free-standing firm corresponds to only one of those eight possibilities: that in which a firm is registered in country B to sell directly to the public shares used solely to finance operations in country A.

It is worth reflecting at this stage on this rather unusual way of funding foreign projects. Though not unknown today (an example would be European high-technology firms floating stock on the New York Stock Exchange) it is certainly not the norm. Projects in capital-poor countries are financed today through local enterprises obtaining loans from international banks or grants from foreign aid agencies, or through multinational firms raising finance through bank borrowing and the issuance of stocks and bonds in their home or in the local market.

Hence a theory of free-standing firms must provide answers to the following questions:

> Why were activities in country A financed in country B, and not in A? Why were these activities financed by equity, as opposed to

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> debt? Equity, compared to debt, provides the lender with a general and discretionary right to direct the behaviour of the borrower. Why was this form of hierarchical control chosen over the arm's length alternative of lending? In other words, why was the transfer of financial capital internalised? Why was this equity sold directly to individual investors, and not taken by existing institutions, firms or banks (why was the supply of finance not intermediated?).

II

In his comment, Casson argues that the existence of free-standing firms should not be explained in terms of the internalisation of the market for financial capital, but in terms of the internalisation of knowledge held by property-development experts at the headquarters of free-standing firms. Casson first points out that the projects undertaken by free-standing companies were in property-related industries, namely transport infrastructure, utilities, mines, plantations, and land development. One characteristic of property-related industries is that development is usually undertaken by a different company than that which does the subsequent management. This is because while the development of the properties requires considerable specialised skill, their day-to-day management is routine. Casson notes that this is the way that most modern property development is done today:.

> A special free standing company is formed – often financed as a consortium – which develops the property, operates it for a short period to train local personnel, and then sells to an indigenous company (often state-owned) which manages it independently thereafter. This is the 'build–operate–transfer' system. The difference between this and the free-standing company system is simply that the ownership of the assets is indigenised once the development is complete. (This was, in fact, the ultimate fate of a number of free-standing companies, whose assets were eventually nationalised by unsympathetic host governments).

Likewise, there was a similar division of labour in the nineteenth century, with free-standing firms supplying property-development expertise and managing agencies providing local management.

Casson argues that free-standing firms evolved in two different ways. In banking and oil, there was a continuing need for expertise from headquarters. In that case, the managing agency acquired the assets

they managed, and this led to the creation of what Casson calls 'expatriate multinationals': truly multinational firms, albeit peculiar ones, since they had no domestic operations.

In other cases – the true free-standing firm – the need for specialised project management skills was short lived. After construction was completed, 'the need for the export of specialised management skills dried up, and was replaced by an external local market for the supply of operational management skills'. The head office lost all management control and the local managing agents ended up controlling the companies whose assets they managed, but they failed to own them outright. Managing agencies would have purchased outright these plants through debenture finance but for the fact that they were partnerships. Hence they were forced to promote nominally independent companies which owned the assets they wanted to manage.

Casson's theory is thus based on the internalisation of the market for project management skills. He argues that a theory of free-standing firms does not require to consider the internalisation of the market for capital. My view is that while Casson's theory is not necessarily incompatible with my own (it is quite possible that free-standing firms arose to internalise the market for other inputs besides financial capital, including property-development know-how),[4] internalisation of expert knowledge does not provide the necessary and sufficient conditions for the emergence of free-standing firms.

III

At the outset, the similarity between the build–operate–transfer (BOT) system and free-standing firms is not clear. The BOT system has evolved as an accommodation to host government demands for ownership of infrastructure projects joined to their inability to contract successfully for and finance the construction of these projects. It is doubtful that it represents an efficient form of contracting that would have evolved without these pressures.

Casson seems to imply that, as in the BOT case, the intention of firms in property development (and hence that of free-standing firms) is always to sell the operations once they are developed. While this may be true for hotels, it does not seem to be the case today for many of the activities that were undertaken by free-standing firms, such as utilities, mines and plantations. Many utilities that design water systems also run them (although they may not construct them).[5] Mining firms carry out the evaluation of deposits, the feasibility studies, and the day-to-day management of the completed mine, while subcontracting the construc-

tion. There is also no evidence that the firms that developed plantations had planned to sell them once they were developed. Many of the original planters still own and manage plantations (Lonrho still owns its sugar cane fields, Unilever its oil palm plantations, the banana MNEs still grow bananas, and the tyre companies still run rubber estates). This is true even when the output of these plantations is not sold to the parent, as in the case of natural rubber. The move by some MNEs away from owning the plantations and towards contracts seems to have been mostly a response to political pressures.[6]

Even if the parallel is valid, property development does not seem to be an accurate way to describe the range of activities of free-standing firms, which extended from banks to breweries. Furthermore, many free-standing firms were established to take over going (that is *already developed*) concerns. This suggests that the reason for these London flotations was to tap finance, not technology or management. Consider the case of the Eastern Trading Company. This modern tin smelter had been built in Penang, Malaya, for Leh Chin Ho, a close associate of the Khaw family.[7] His smelter was purchased by a locally incorporated company, the Eastern Smelting Company Ltd, which was controlled by Chinese and Thai mine owners. The company was in turn sold to a group of Britishers who floated the company as a free-standing firm in London in 1911 'to provide working capital for extending said business'. The Chinese directors argued that by floating the company in the London market 'they could get fresh capital there more easily than they could get locally'.[8]

This pattern of reconstructing a going business into a free-standing company is not an isolated case. Another well-documented example is that of the Lena Goldfields Co., operating in Russia.[9] Likewise, Drabble mentions that a number of the rubber estates that were floated as free-standing firms in London were already planted in rubber.[10]

In his study of British direct investments in Canada between 1890 and 1914, Paterson records that all but one of the British investments in the utilities and service sector were of the free-standing variety, and that in all of these cases a new British free-standing firm was formed to *take over an existing Canadian company*. This was also the case in manufacturing where, with only few exceptions, British free-standing firms arose from the take-over of domestic firms which were failing because of a shortage of working capital, or which lacked capital for expansion. According to Paterson, 'the forming of British direct investment to take over these firms was designed to facilitate access to the British capital market'.[11] In mining, British investors bought *developed* properties. British prospecting and management expertise was unanimously

berated by the Canadian mining press, providing evidence that the British contribution was not in know-how and management, but in access to capital.[12]

The same pattern of buying already developed properties also appears in the case of British free-standing firms in the United States. Between 1888 and 1891 British investors poured $90 million in floating *existing* US breweries into the London stock market. The goal was not technology transfer – the breweries were already built, and as Wilkins notes, 'the British never added anything truly distinctive to American brewery technology, distribution, and management'.[13]

Hence in many cases free-standing companies arose from already developed properties, and this is difficult to reconcile with Casson's view that they internalised the transfer of property-development skills. By contrast, my hypothesis suggests that recourse is made to the free-standing form of organisation whenever the operation experiences a need for equity funding which can be better met from a foreign source. This is likely to be at intermediate stages in the life of the operation (when the project is advanced enough to attract stockholder interest).

There are, of course, many cases where free-standing companies did develop new properties. One example is the Redruth (Cornwall) and London-registered tin-mining concerns which pioneered the new technique of hydraulic mining in Malaya and Siam. Casson's hypothesis that the technical and managerial expertise needed to develop these mines was held by the firm's London staff and that its transfer was internalised within the free-standing firm is, however, not supported in this case. Rather, the historical record suggests that the main contribution of the UK-based headquarters was to facilitate the raising of equity capital.

Hydraulic mining was introduced in Malaya by F.D. Osborne, an Irishman who had witnessed hydraulic methods used in mining gold in California. He thought that he could use the same process to mine tin in Malaya. In 1891 he incorporated in Dublin the Leh Chin Mining Company to work land in Malaya with American equipment. The venture was not immediately successful, and Osborne seemed to have run out of money. Unable to raise the necessary funds in Dublin, he contacted E.R. Pike, the inspector of mines for the state of Perak (in Malaya), who was the son of Walter Pike, a well-respected mine accountant (purser) in Cornwall. Pike enlisted the help of his father, who contacted James Wickett, a Redruth (Cornwall) stockbroker active in the conversion of Cornish tin mines into limited liability companies. The latter persuaded ten of his friends, all major investors in Cornish tin mines, to put up £700 so as to register a new company, Gopeng Ltd, incorporated in Redruth. That flotation was to be the first of many other

UK-based free-standing tin-mining companies.[14] Osborne's mining management firm in Malaya, Osborne & Chappel, became the mine's manager.

This story, which is characteristic of early Western tin mining enterprises in the Far East, does not support the theory set forth by Casson. In our case, the technology used for mine development was not held in Redruth, but instead in Malaya by Osborne & Chappel.[15] The key individuals that floated these firms and became their managing directors were not engineers, but stockbrokers and solicitors.[16] James Wickett and the original stockholders in Gopeng had no expertise in hydraulic mining. They, however, had connections with sophisticated investors eager to diversify, and they had expertise in floating companies on stock exchanges. The UK connection was important, but it was financial, not technological.

IV

Casson's second hypothesis is that in the case of most free-standing firms (except for oil and banking) control from the head office of the free-standing company ceased as soon as the property was developed and was then surrendered to the local managing agent. This explanation raises one question: if this was the case, why was the Board kept in London? Why not incorporate locally, since decisions were made there?

Another question raised by Casson's explanation is why the managing agents did not buy out the companies they managed. Casson argues that it is because they were organised as partnerships and were not fully incorporated: 'if [they] were fully incorporated, and issued [their] own equity, then [they] could use the funds from the equity issue to buy the assets outright'. In fact, most British agency houses in Malaya did incorporate between 1900 and 1910, when they started to float rubber companies.[17] They did not, however, take full control of these rubber companies. It is unlikely that the reason was their inability to borrow for that purpose. Rather, I suspect that the trading companies were interested in generating trade, and in capitalising on their intimate knowledge of the local economy, but not in running a manufacturing or a planting business. It seems logical to assume that after floating they kept for themselves just enough of the stock of the companies they were floating to assure that they would get the contract to handle the trade generated by these firms.

Contrary to Casson's hypothesis, there is evidence that the London boards of free-standing firms continued to attempt to control the foreign operations after they were established. It is important to keep in mind

the difference between strategic and operational control. Given the difficulties of communication, operational control had by necessity to be local. Even today, with much better communications, the day-to-day decisions of foreign subsidiaries are usually taken at the subsidiary, not the corporate level, but this does not usually preclude strategic control from headquarters.

This was also the case for free-standing firms. The London board exercised strategic control, while operational control was the responsibility of the local managing agent. In rubber planting, probably the area where managing agencies had the most control, Stahl notes that the function of agency houses was to act 'as commercial managers and advisers, subject to the major lines of policy which are laid down by the individual directorates, on which a senior partner or director of the agency house usually sits'.[18]

There is considerable evidence of attempts at strategic control by the London boards of free-standing companies. As Wilkins notes, the London Directors 'were expected to select the managers of the business abroad, to receive reports, to ensure prudent and efficient management of the operations'.[19] Writing about British free-standing firms in US ranching, Clements notes that 'in a wide variety of enterprises . . . English control was foremost, whether through directors, special emissaries, technical experts, or resident local managers'.[20] In tin mining, the power of the London Board of Directors was sometimes implemented by naming relatives of chairmen of the Board of Directors as mine managers. C.V. Thomas, for example, had his two sons-in-law, John Henry Rich and George Simms, appointed managers of the three Malayan tin mines (Tronoh, Tronoh South, and Sungei Besi) of which he was Chairman and major stockholder. Similarly, James Wickett floated Kledang and named his son, Fred Wickett, as resident manager.[21] There is, therefore, some evidence that directors of free-standing companies did exercise control over the operations of the companies, even after development had taken place.

V

For Casson, the small number of free-standing firms created after 1914 is due to two main factors: they ran out of projects to undertake with the end of the phase of imperial development; and the agents that managed the overseas operations also failed to incorporate and to buy out the companies they managed, and hence they were unable to rationalise them. Free-standing firms then lost business to their integrated US competitors. Casson's argument seems to assume that free-standing

firms confined themselves to the British Empire. There is no clear reason why London-based property-development experts could not exploit their skills outside the British Empire, and in fact they did.[22] In any case, neither property development in the Empire nor London-based free-standing firms ceased after 1914. For example, the bulk of tin mining investments by free-standing firms took place after World War I.[23] The same is true for rubber growing: 59 new rubber-growing free-standing companies were floated in London between 1923 and 1929.[24]

What is more intriguing are the geographical differences in the creation and survival of free-standing firms. While free-standing firms virtually vanished from the United States after 1914, they prospered for another half-century in Asia and in Africa.

A model based on the internalisation of financial capital flows provides a simple explanation for this pattern. Since free-standing firms existed to internalise the market for equity capital between London and foreign projects,[25] that arrangement, which involved the additional cost of managing at a distance, remained efficient as long as equity capital could be raised more cheaply in London than elsewhere (including the country where the project was located). Three factors, however, could reduce the benefits of such an arrangement.

First, we would expect that the impetus to float a company in London would depend on the efficiency and liquidity of the British relative to the local stock markets. Hence the number of free-standing firms floated in London to operate in a given country should decline as that country develops an efficient stock-market. A fall in the efficiency and liquidity of the London stock market relative to its rivals (for example New York) might also lead to new free-standing companies being incorporated in these emerging financial centres. The decline of the liquidity of London and the growth of local stock markets would also affect the ownership of shares in *existing* free-standing firms. As more shares became locally owned, the benefits of a London domicile would vanish. Hence one would see free-standing firms eventually shifting their domicile to the country where they operate.

The empirical evidence on this is scant, but generally supportive. Compare the fate of British free-standing firms in the US on one hand, and in Malaya and Nigeria on the other. The number of free-standing firms floated in the UK to operate in the US seems to have started to decline after 1900.[26] Most of the existing free-standing firms had failed or had been taken over by Americans by the end of World War I.[27] That fate makes sense when one considers that by 1902 a thriving equity market had developed in the United States.[28] By 1909, Edward

Ashmead could write that 'for years past a really good mine – and there are an abundance of them in the States – never fell into the hands of the English. The United States can always find money to work its own mines when they are worth working'.[29] The development of an efficient American stock market suggests that additional capital could be raised more directly in New York than in London and that a UK-based headquarters, even if skeletal, no longer made sense. Consequently, one would expect to see UK free-standing companies in America sold to local firms, or changing their domicile to the US. Further research is needed to investigate this point.

By contrast, British free-standing tin-mining firms in Malaysia and Nigeria prospered until the late 1960s. Starting in 1912, the United Kingdom was the chief source of capital for the tin-dredging sector of Malaya, with the flow peaking in 1925–27. The Great Depression and the imposition of tin restrictions reduced the flow to a trickle. Then came the Japanese occupation. Between 1954 and 1964, the value of shares of British free-standing firms more than doubled, but all those shares were subscribed to by local, not foreign, residents.[30] By 1974 the majority of the shares of British registered companies were quoted on the Kuala Lumpur and Singapore stock exchanges.[31] Since the Board is the agent of the stockholders, it was inevitable that a shift in stock ownership to Malaysian residents would eventually lead to a shift of domicile to that country, an event which took place in the 1970s.[32]

As in Malaysia, the tin industry of Nigeria was developed by British free-standing firms. Unlike Malaysia, however, there was no development of a local equity market. As a result, as late as 1967, 42 UK-registered free-standing mining companies were producing over 75 per cent of Nigeria's tin output. This changed in 1968, when the Nigerian government required all foreign companies to be incorporated in Nigeria.[33]

The flotation of free-standing firms in New York in the 1920s also supports the view that the decline of British free-standing firms in the US was due to a relative decrease in the efficiency and liquidity of the British stock markets. By 1920 the title of world's premier stock market had passed from London to New York. As a theory based on the internalisation of financial capital would predict, New York became home to new free-standing companies. The initiative for these companies came from both domestic and foreign entrepreneurs. US investors floated companies that owned sugar plantations and mines in Latin America.[34] A number of foreign entrepreneurs also set up US-based free-standing firms to tap equity finance in the US stock market. In 1924 Simon Patino incorporated in Delaware and introduced on the

New York Stock Exchange Patino Mines & Enterprises Consolidated Inc., as a holding company for his main tin-mining properties in Bolivia. Hence what was previously a domestic Bolivian firm became a US-based free-standing company. The reasons for the US incorporation was not to internalise technological expertise, since Patino had already successfully developed and modernised his Bolivian properties; instead it was to obtain US capital to finance further Bolivian stock purchases.[35] Other examples of foreigners floating free-standing firms in New York include the Framerican Industrial Corporation set up to raise money for the French company Schneider-Creusot and Ivar Kreuger's International Match Co.[36]

VI

In this response, I highlight some characteristics of free-standing firms which are difficult to reconcile with a theory of free-standing firms based on the internalisation of property-development know-how. First, what seems common to free-standing firms is not property development, but instead the use of equity financing. One clue is given by the wide range of activities undertaken by free-standing firms, many of them having little to do with property development. Another is that in many cases free-standing firms were established to take over properties that were already developed.

Even when free-standing firms were established to develop new properties, the know-how was not always internalised from London, but was sometimes obtained locally. What motivated free-standing firms to incorporate in London was not generally the available pool of experts, but more basically access to an efficient share market.

The parallel drawn by Casson between property development and free-standing firms is also questionable. Even when free-standing firms undertook property development, there is little evidence that their London boards intended to relinquish strategic control to managing agents after the property was developed.

Casson attributes the decline of free-standing firms after 1914 to the end of the phase of imperial development. But property development did not cease after 1914. British free-standing firms did not limit themselves to the Empire before 1914, and it is not clear why they should have done it after the War. In fact, many free-standing firms were created in London in the inter-war period.

While it is hard to explain why the internalisation of property development skills (and hence free-standing firms) should have abruptly ceased after 1914, it is easier to account for the more complex pattern

that did in fact obtain in terms of the internalisation of financial capital. As the efficiency and liquidity of London declined and local stock markets developed in the countries where free-standing firms operated, the benefit of internalising the transfer of capital from London fell: the firms changed their domicile, or were purchased by local firms. Operations in countries which lacked efficient stock markets came to be increasingly financed through New York-based free-standing firms.

While an explanation based on the internalisation of project development skills held in London does not seem consistent with the historical record, it also fails to answer some of the fundamental questions about free-standing firms. Assuming that all free-standing firms were created to internalise the market for property-development skills, why was that equity obtained in London? The internalisation of the market for know-how does not necessarily imply that of the market for financial capital. Modern day multinationals internalise the market for technological know-how, but they often finance their affiliates by borrowing from local sources. Indeed, as is well known, a multinational firm can expand abroad without any foreign direct investment. If capital is raised by a company registered in one country to be invested under its control in another country, shouldn't we say that it is internalising the market for financial capital? Can one explain free-standing firms without reference to such internalisation?.

The second question that is left unanswered by a theory based on the internalisation of know-how is why free-standing firms seemed to have been heavily reliant on equity financing. This is suggested by the concentration of the headquarters of free-standing firms in countries with efficient stock markets and the heavy representation of those firms in activities (such as mining, new crop planting, and petroleum drilling) which are traditionally financed through equity.[37] Casson does not explain why the internalisation of property-development skills should require a heavy reliance on equity financing. Why did the London based property development firm not finance its foreign activities through debt? My answer is that free-standing firms were financed by equity because they were engaged in activities that offer little collateral to a lender and hence for which a heavy reliance on debt would have been costly. Having UK-based suppliers of financial capital take direct equity into the foreign projects provided investors with greater control over the firm's operations than would have been available through loan transactions.

The third question is why equity in each project was directly sold to the public, as opposed to floated by firms which in turn allocated it among a variety of projects. Casson argues that the low transaction costs

of the London capital markets made it possible for individual investors to diversify their holdings. I agree, but one must still explain how single-project free-standing firms evolved in some (but not all) cases into multiple-project free-standing firms such as mining finance houses. Answering all three of these questions requires an analysis of the factors that determine the level of internalisation and intermediation in international markets for financial capital.[38]

NOTES

I thank Mira Wilkins for her comments and Christopher Schmitz for giving me a copy of his recent unpublished paper. I am also grateful to Justin Brooke, Gillian Burke and Charles Thomas for information on Cornish free-standing tin-mining companies.

1. M. Wilkins, 'The Free Standing Company, 1870–1914: An Important Type of British Foreign Direct Investment', *Economic History Review* (May 1988), pp.259–82.
2. Either by an inside group or by the public at large. Free-standing firms were based in London, Edinburgh, Paris, Brussels, Frankfurt, New York, and possibly other cities. For ease of exposition, I will refer to their place of incorporation as 'London'.
3. In practice, firms make use of both debt and equity, but the mix varies tremendously across industrial sectors. Mining firms, for example, have traditionally had very low debt/equity ratios. Hence, as a first approximation, it is possible to dichotomise projects between those mostly funded by equity and those mostly funded through debt.
4. J.-F. Hennart, 'International Financial Capital Transfers', *Business History*, Vol.36 No.1 (Jan. 1994), p.67.
5. Lyonnaise des Eaux, a French utility company, designs and manages water systems in France and overseas.
6. D. Glover, 'Multinational Corporations and Third World Agriculture', in T. Moran *et al.*, *Investing in Development: New Roles for Private Capital* (Washington, DC, 1986).
7. Leh Chin Ho's smelter had modern reverbatory furnaces of European design and a modern testing laboratory to sample the ores. See A. Wright and H.A. Cartwright, *Twentieth Century Impressions of British Malaya* (London, 1908), p.817.
8. Article on Le Chin Ho, in the centenary number of the *Pinang Gazette*, quoted in Cushman, 'The Khaw Group: Chinese Business in Early Twentieth-century Penang', *Journal of Southeast Asian Studies*, Vol.17 No.1 (March 1986).
9. Lena Goldfields, was originally established as a Russian limited liability company but was unable to provide the necessary capital on its own. The company was then incorporated in London as the Lena Goldfields Company Ltd to provide the required financial backing. See C. White, 'British Business in Russian Asia since the 1860s', in R.P.T Davenport-Hines and G. Jones (eds.), *British Business in Asia since 1860* (Cambridge, 1989).
10. J.H. Drabble, *Rubber in Malaya* (Kuala Lumpur, 1973), p.71.
11. D.G. Paterson, *British Direct Investment in Canada, 1890–1914* (Toronto, 1976), p.105.
12. A Canadian press editorial, noting the re-opening of the 'old Bruce Mines' in Ontario specifically approved the combination of *English capital* and an *American mining engineer*. Paterson, *British Direct Investment*, p.98.
13. M. Wilkins, *The History of Foreign Investment in the United States to 1914* (Cambridge, MA, 1989), p.330.
14. Obituary of James Wickett, *Mining World and Engineering Record*, 19 Nov. 1921, p.467; 'Gopeng Consolidated', *Mining World and Engineering Record* 6 April 1918, p.298.

15. Cornwall's tin mines were underground hard rock mines. The extraction of such ores requires a totally different technology than that used for Malaya's alluvial ores. See J.-F. Hennart, 'Internalization in Practice: Early Foreign Direct Investment in Malaysian Tin Mining', *Journal of International Business Studies* (1986). For more background on the tin industry, see J.-F. Hennart, 'The Tin Industry', in M. Casson (ed.), *Multinationals and World Trade: Vertical Integration and the Division of Labour in World Industries* (London, 1986), pp.225–73.
16. C.V. Thomas, the other main Cornish director of Malayan tin mines, was a Camborne (Cornwall) solicitor.
17. The Borneo Company had been incorporated in London as early as 1856. Harrisons & Crosfield was incorporated in 1908, Guthrie in 1903, Paterson Simons in 1907, and Adamson Gilfillan in 1904. The London flotation of rubber companies by Malayan agency houses started in 1905. See J.H. Drabble and P.J. Drake, 'The British Agency Houses in Malaysia: Survival in a Changing World', *Journal of Southeast Asian Studies*, Vol.12 (1981).
18. K. Stahl, *The Metropolitan Organization of British Colonial Trade* (London, 1951), p.104.
19. As one director wrote in a private letter, 'We [the London Board members] are the men who stand to be shot in the event of anything going wrong'. Quoted in Wilkins, 'The Free Standing Company', p.264.
20. R. Clements, 'British Controlled Enterprises in the West between 1870 and 1900 and Some Agrarian Reactions', *Agricultural History*, Vol.27 (Oct. 1953), p.134, quoted in M. Wilkins, *The History of Foreign Investment*, p.70, n. 61.
21. *Twentieth Impressions*, p.522.
22. Schmitz's database shows that only 56 per cent of all free-standing companies registered in Edinburgh between 1862 and 1914 for which the place of activity is known were operating in the British Empire. See C. Schmitz, *Patterns of Scottish Portfolio Foreign Investment 1860–1914* (University of St. Andrews, 1993), Table 2.
23. Hennart, 'The Tin Industry', p.230.
24. J.P. Drabble and P.J. Drake, 'More on the Financing of Malayan Rubber, 1905–23', *Economic History Review* (1994), pp.108–20.
25. As I show in 'International Financial Capital Transfers', free-standing firms were financing projects that had to rely on equity capital.
26. The only figures we have are on Edinburgh-registered companies. Forty-nine companies registered to do business in the US in the 1885–99 period compared with 23 in 1900–1914. See Schmitz, *Patterns of Scottish Portfolio Investment*, Table 8.
27. Wilkins, 'The Free Standing Company'.
28. T. Navin and M. Sears, 'The Rise of a Market for Industrial Securities', *Business History Review*, Vol.29 (1955), pp.105–38.
29. E. Ashmead, *Mining Journal* (London), 23 Jan. 1909, p.105.
30. Yip Yat Hoong, *The Development of the Tin Industry of Malaya* (Kuala Lumpur, 1969), p.367.
31. D.R. Williamson, 'Tin Shares: Some of the Problems of Marketability and Company Structure Examined', in *Fourth World Conference on Tin* (Kuala Lumpur, 1974), p.144.
32. This took place through the purchase by the Malaysian state oil company Pernas in alliance with Charter Consolidated of the shares of the London Tin Corporation in 1976. Charter had previously bought the shares of the Tronoh group in 1965. The two holdings were merged into the Malaysian Mining Corporation, 70 per cent owned by the government. See J.-J. van Helten and G. Jones, 'British Business in Malaysia and Singapore since the 1860s', in R.P.T. Davenport-Hines and G. Jones (eds.), *British Business in Asia since 1860*, pp.184–5.
33. L. Schatzl, *The Nigerian Tin Industry* (Ibadan, Nigeria, 1971), p.5.
34. M. Wilkins, 'The Free Standing Company', p.279.
35. H. Klein, 'The Creation of the Patino Tin Empire', *Inter-American Economic Affairs* (Autumn 1965), p.16.

36. M. Wilkins, 'Cosmopolitan Finance in the 1920s', forthcoming in a book to be edited by P. Jobert, M. Moss and A. Plessis. International tax considerations may also have played a role in the case of those three firms.
37. See Paterson, *British Direct Investment*, p.28, Table 2.4. See also N. Ramachandran, *Foreign Plantation Investment in Ceylon, 1889–1958* (Ceylon, 1963).
38. Hennart, 'International Financial Capital Transfers'.