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Remote Investing in Latin America, 1869-1929

Gareth Campbell[*], Áine Gallagher[†], Richard S. Grossman[‡]

Abstract

Substantial amounts of British capital flowed to Latin America during the first era of globalisation. Companies financed by this capital were typically headquartered in the UK, but operated thousands of miles away. This paper asks how this geographic separation between governance and business activities affected the valuation of these firms. We find that the location of the headquarters played a more important role than the location of operations. Stock prices tended to fluctuate in line with other equities based in the UK, suggesting that they were still regarded as being, at least partially, British companies.

JEL Classification: F21, F54, F65, G11, G12, G15, G51, N16, N26.

Keywords: Latin America, equity markets, portfolio investing, emerging markets.

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1. Introduction

Many companies are governed from one location but operate in other regions across the globe. How does this separation affect the value of the firm? Does the stock price fluctuate in line with the market conditions in the headquarter location? Or with the business conditions of where it operates? Or do companies with a domestic headquarters, but overseas operations, constitute a unique segment of the market?

An analysis of this question today is complicated by the rise of large multinational enterprises which operate at both home and abroad. However, history provides a useful laboratory in which to examine the effects of remote governance. There is a long tradition of British capital flowing to emerging markets.[1] Much of this was channelled through companies which operated exclusively overseas, but which were governed, listed, and financed in the UK. The split between the location of operations and headquarters in these 'free-standing' companies[2] provides an insightful case study on how remote governance affects firm value.

British investment in Latin America is particularly interesting from this perspective. As well as the asymmetry of information which naturally arises from distance, there were also major differences in culture, language, and legal origins, which academic research has argued affect investor protection rights.[3] During this era, if a company was operating within the British Empire or the United States, an investor based in the UK could have been reassured by important commonalities.[4] They could access information in English, there were similarities in

[1] Cottrell, *British Overseas Investment in the Nineteenth Century*; Ford, 'British Investment in Argentina and Long Swings, 1880–1914'; Hobson, *The Export of Capital*; Kennedy, 'Foreign Investment, Trade and Growth in the United Kingdom, 1870–1913'; Pollard, 'Capital Exports, 1870-1914: Harmful or Beneficial?'; Simon, 'The Pattern of New British Portfolio Foreign Investment 1865–1914'; Stone, 'British Investment in Argentina'; Stone, 'British Long-Term Investment in Latin America, 1865-1913'; Stone, 'British Direct and Portfolio Investment in Latin America Before 1914'. Flores, 'Information Asymmetries and Conflict of Interest during the Baring Crisis, 1880–1890'; Husain and Buchnea, 'Agents, Brokerage and Argentinian Railways 1880–1905'; Vedoveli, 'Information Brokers and the Making of the Baring Crisis, 1857–1890'.
[2] Wilkins, 'The Free-Standing Company, 1870-1914: An Important Type of British Foreign Direct Investment'.
[3] La Porta et al., 'Law and Finance'; Stulz and Williamson, 'Culture, Openness, and Finance'.
[4] Accominotti et al., 'Black Man's Burden, White Man's Welfare'; Accominotti, Flandreau, and Rezzik, 'The Spread of Empire'; Ferguson and Schularick, 'The Empire Effect'.

culture and they could be confident in the enforcement of common-law jurisprudence. However, investments in Latin America would have been substantially different. Obtaining independent and reliable information was complicated by distance, language, and informational asymmetries, forcing institutions and individual investors to rely on agents to provide reliable information.[5] There were likely to have been few cultural or religious bonds between those who lived in Victorian Britain and those who lived in Argentina or Brazil, and British investors would have been faced with an unfamiliar civil-law regime.

We show that, despite these challenges, a large volume of capital was invested in companies which were headquartered in the UK but operated primarily in Latin America. Using the *Investor's Monthly Manual (IMM)*, we estimate that the market value of such investments rose steadily during this era, reaching a peak of about £500m in 1912, equivalent to about 8 per cent of the stock of all corporate capital on the London Stock Exchange (LSE). Using information from the *Stock Exchange Yearbook*, and a small sample of shareholder records from the National Archives, we confirm that not only were the boards of directors based in the UK, but their investors were also almost exclusively based in Britain. This therefore provides a neat case study in which to analyse firms where there was a clear separation between where they where they were governed from and where they operated.

We begin by analysing the ordinary equity of these companies and develop a new stock price index for those firms which operated in Latin America, and compare the movements to an index of firms which operated in the UK. We show that there appears to be a common component between these securities, although they occasionally diverge, especially around the Baring Crisis of the 1890s.

[5] Flores, 'Information Asymmetries and Conflict of Interest during the Baring Crisis, 1880–1890'; Husain and Buchnea, 'Agents, Brokerage and Argentinian Railways 1880–1905'; Vedoveli, 'Information Brokers and the Making of the Baring Crisis, 1857–1890'.

Using both a portfolio approach, and Fama and Macbeth regressions[6], we show that dividend yields for UK headquartered firms operating in Latin America, were significantly higher than equivalent yields on the equities of firms which operated in the UK. This suggests that, ex-ante, such investments were viewed as being higher risk. In terms of total returns, after considering ex-post capital gains, firms with Latin American operations were similar to, but slightly lower than, those on British equities. This finding contradicts earlier work by Edelstein who suggests that there were superior returns to overseas investments.[7]

We also use data from Nakamura and Zarazaga to examine the performance of a sample of 27 Argentinian firms listed on the Buenos Aires Bolsa, and compare it with a sample of 40 Argentinian firms with UK headquarters listed on the London Stock Exchange during 1900-1929. [8] Although there are some similarities in their trends, the monthly correlation of price changes is low, suggesting that performance was often not driven by in-country economic factors. Across the entire period, Bolsa-listed firms also experienced a significantly higher standard deviation on capital gains than their Argentinian counterparts listed on the LSE. This may suggest that there was an association between UK board composition and governance structure[9] and perceptions of lower risk.

We then analyse the extent of integration between the stock price movements of UK headquartered companies operating in Latin America and other parts of the market. The R^2 of these regressions can be considered a measure of integration.[10] We note the R^2 with a portfolio of equities of other firms headquartered in the UK is much higher than that with a portfolio of

[6] Fama and Macbeth, 'Risk, Return, and Equilibrium: Empirical Tests'
[7] Edelstein, 'Realized Rates of Return on U.K. Home and Overseas Portfolio Investment in the Age of High Imperialism'. Edelstein uses an equal weighted methodology, which implies regularly rebalancing portfolios to sell stocks which recently increased in price, and buy stocks which recently decreased in price.
[8] Nakamura and Zarazaga, 'Banking and Finance, 1900-35'.
[9] Turner, 'Three Centuries of Corporate Governance in the United Kingdom'.
[10] Campbell and Rogers, 'Integration between the London and New York Stock Exchanges, 1825–1925'; Pukthuanthong and Roll, 'Global Market Integration: An Alternative Measure and Its Application'.

firms which were headquartered elsewhere. Interestingly, there is not much difference between portfolios which are formed based on the location of their operations.

We extend our analysis to multivariate regressions, following an approach similar to Fama and French[11], including several portfolios based on location. We find that a factor representing the location of operations is not a significant determinant of returns. On the other hand, a factor representing the location of headquarters is significant and suggests that the Latin American stocks moved more like other stocks with British headquarters than those with foreign headquarters.

The results indicate that equities of companies with UK headquarters and Latin American operations often performed similarly to other UK-based companies. This suggests that investors felt that these firms were, to a certain extent, to be regarded as being British, perhaps because they were governed nearby. In terms of operations, there might have been an expectation of a common factor which affected all companies that operated mainly abroad, due to general concerns about remote governance, but there is little evidence of this. Any additional stock price movements were likely due to company specific considerations, rather than general overseas factors. Whilst our main focus is on equities, we repeat our analysis for preference shares and corporate debt as a robustness test. We find very similar results, with a closer connection with UK headquartered firms, but little impact from location of operations.

Our analysis of the performance of Latin American securities contributes to our historical understanding of this emerging market region which was a significant recipient of British capital, and our understanding of the returns to British foreign direct investment (FDI).[12] The results suggest that the valuation of these firms was often affected by market conditions in

[11] Fama and French, 'Common Risk Factors in the Returns on Stocks and Bonds'.
[12] Cottrell, *British Overseas Investment in the Nineteenth Century*; Ford, 'British Investment in Argentina and Long Swings, 1880–1914'; Stone, 'British Long-Term Investment in Latin America, 1865-1913'; Stone, 'British Investment in Argentina'; Stone, 'British Direct and Portfolio Investment in Latin America Before 1914'.

Britain, with a higher correlation in stock price changes between them and UK headquartered firms. The Latin American firms in our sample failed to outperform domestic UK companies, which also contributes to the literature around push and pull factors for overseas capital flows from Victorian Britain.[13] Our findings about the risk of these investments are relevant to the literature on portfolio construction where typically overseas investments provided benefits in terms of lower overall portfolio risk and an expanded mean-variance frontier.[14] Given that the performance of our Latin American companies more closely aligned with UK headquartered companies, and were riskier without the compensatory additional return, this questions the perceived benefits of this type of overseas investment.

2. Capital investment in Latin America

Throughout the nineteenth and early twentieth centuries, Britain was the most important exporter of capital around the globe, with excess savings channelled to a range of colonies, areas of recent settlement and major trading partners.[15] Estimates vary depending on the methodological approach, but approximately £4.1bn was raised by foreign issuers in London between 1865-1914, with about 33 per cent of British wealth placed overseas by 1913.[16] It is estimated that between 4 and 8 per cent of gross national product was exported by investors annually between 1871-1913, with the total amount being roughly equivalent to the United

[13] Cottrell, *British Overseas Investment in the Nineteenth Century*; Edelstein, 'Realized Rates of Return on U.K. Home and Overseas Portfolio Investment in the Age of High Imperialism'; Edelstein, *Overseas Investment in the Age of High Imperialism*; Williamson and O'Rourke, 'International Capital Flows: Causes & Consequences'.
[14] Chabot and Kurz, 'That's Where The Money Was'; Goetzmann and Ukhov, 'British Investment Overseas 1870–1913'; Rutterford and Sotiropoulos, 'Putting All Their Eggs in One Basket?'
[15] According to Cottrell, *British Overseas Investment in the Nineteenth Century*, p. 2, Britain supplied 41% of gross international investment in 1914.
[16] Cottrell, *British Overseas Investment in the Nineteenth Century*; Edelstein, *Overseas Investment in the Age of High Imperialism*; Stone, *The Global Export of Capital from Great Britain: 1865 - 1914 ; a Statistical Survey*.

Kingdom's GDP in 1917.[17] These global capital flows were reflected at the individual investor level with 27.4 per cent of portfolio values on average held in overseas investments.[18]

During the century prior to the First World War, Britain supplied more capital to Latin America than to any other geographical area.[19] By 1913, British holdings in Latin America represented about one fifth of total overseas investments, which was comparable to UK investments in North America.[20] The quantity and timing of flows varied with early (largely unsuccessful) investments of about £25m during the 'Bubble-Mania' of 1824-1825 primarily focusing on government issues and mining ventures.[21] Investment during the 1870s and 1880s supported social overhead capital formation, with a further wave beginning around the turn of the twentieth century adding £500m to British holdings in Latin America, culminating in approximately £1.2bn of total British capital invested in the region by 1913.[22]

Our approach to quantifying British overseas investment in Latin America focuses on using the *Investor's Monthly Manual* (IMM), digitized by Yale University's International Center for Finance.[23] The data consists of approximately 2.3 million security-month observations for all securities listed on the London Stock Exchange during 1870-1929. We identify corporate securities operating in Latin America using the security name, and for

[17] Edelstein, *Overseas Investment in the Age of High Imperialism*; Edelstein, 'Foreign Investment and Accumulation, 1860-1914'; Pollard, 'Capital Exports, 1870-1914: Harmful or Beneficial?'; GDP data are from Hills, Thomas, and Dimsdale, 'The UK Recession in Context—What Do Three Centuries of Data Tell Us?'
[18] Rutterford and Sotiropoulos, 'Putting All Their Eggs in One Basket?'
[19] Cottrell, *British Overseas Investment in the Nineteenth Century*; Stone, 'British Long-Term Investment in Latin America, 1865-1913'.
[20] Stone, 'British Long-Term Investment in Latin America, 1865-1913'; Stone, 'British Direct and Portfolio Investment in Latin America Before 1914'.
[21] Quinn and Turner, *Boom and Bust: A Global History of Financial Bubbles*, chap. 3 Marketability Revived: The First Emerging Market Bubble; Stone, 'British Direct and Portfolio Investment in Latin America Before 1914'.
[22] Cottrell, *British Overseas Investment in the Nineteenth Century*; Edelstein, *Overseas Investment in the Age of High Imperialism*; Ford, 'British Investment in Argentina and Long Swings, 1880–1914'; Stone, 'British Long-Term Investment in Latin America, 1865-1913'; Stone, 'British Direct and Portfolio Investment in Latin America Before 1914'.
[23] *Investor's Monthly Manual, 1869-1929*.

government debt we use the security name and/or country heading under the classification 'Foreign Government Stocks' in the IMM listings.[24]

There are limitations to using the IMM as a primary data source to examine British investment in Latin America, which may mean that the quantities of exported capital are underestimated, including incomplete coverage of smaller companies, the possibility of private sales of securities, and British investors directly accessing securities listed on foreign exchanges.[25] Notwithstanding these limitations, the IMM with approximately 2.3 million observations should provide a representative sample of the investment opportunities available to the average investor.

We are most interested in the 293 firms that operated in Latin America, but were listed in London and headquartered in the UK. Our sample includes 822 securities representing 157,271 security-month observations and is geographically diverse. Securities from Argentina, Brazil and Chile feature most prominently comprising 42 per cent, 23 per cent and 11 per cent respectively of all issues. Another 36 companies operating in the region, the majority of which were railways, and which often only issued preference shares or debentures, were also listed in London but were headquartered elsewhere. A further 56 companies did not have the location of their headquarters reported in the IMM and, although many of these were likely also based in the UK, we exclude them from the analysis.

We confirm that the companies were both governed from Britain, and owned by British shareholders, using several additional sources. Firstly, we inspect the Stock Exchange Yearbooks. Of 224 firms we find operating in Latin America with a UK listing and

[24] Latin American countries represented in the data include: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay & Venezuela.

[25] Cottrell, *British Overseas Investment in the Nineteenth Century,* notes a capital inflow of £140m to Argentina between 1885-1890, of which £70m was raised in London with most of the land-mortgage bonds sold privately to British investors. See Coyle, Musacchio, and Turner, 'Law and Finance in Britain c.1900' and Hannah, 'The London Stock Exchange, 1869-1929: New Statistics for Old?', on the deficiencies of the IMM data.

headquarters, the large majority had solely English directors on their Boards. Only 17 listed a local board or committee in the country of operations and all of these were in addition to a main UK based board.

Secondly, we review the shareholder books of several companies for which information on shareholdings was available from the National Archives.[26] For the Amazon Telegraph, Bahia Gas, Brazilian Street Railways, City of Buenos Ayres Tramways, Columbian Hydraulic Mining, and the Western & Brazilian Telegraph, less than 1 per cent of shareholders had an address in Latin America. The only exception was the Amazon Steam Navigation company, where investors from South America represented about half of all shareholders. Our findings are consistent with the literature which notes the majority of shareholders in foreign companies listed on the London Stock Exchange were British.[27] This suggests that in most cases, the companies were governed by, and owned by, British individuals.

To place the amount of capital invested in Latin America in context, we chart the market capitalization as a proportion of the value of all corporate listings in London in Figure 1. Throughout the period, the total value of firms operating in Latin America was broadly equivalent to the value of the corporations that operated in Canada, Australia, and New Zealand, combined. The market value of securities grew rapidly between 1880 and 1890, declined in the aftermath of the Baring crisis, and remained stagnant during the next decade. It rose rapidly from 1902 to 1912, peaking at about £483m in September 1912, but then declined during the subsequent decade and was stable throughout the 1920s.

<<INSERT FIGURE 1 HERE>>

[26] These are a small Latin American subset of those shareholder records which have been analysed in Acheson et al. 'Corporate ownership and control'.
[27] Davis and Huttenback, *Mammon and the Pursuit of Empire: The Political Economy of British Imperialism, 1860-1912* notes that approximately 80 per cent of shareholders in foreign companies listed on the London Stock Exchange were located in Great Britain.; Stone, 'British Direct and Portfolio Investment in Latin America Before 1914' more generally comments "Great Britain…was the preeminent foreign investor in Latin America from the 1820s until the outbreak of World War I".

Like other regions of the world, British investment in Latin America during this period primarily supported social overhead capital formation including railways, utilities, mining, and associated banking and financial services necessary to facilitate the export of goods.[28] British holdings of Latin American railway securities ranked second to government loans by value between 1865-1913 and were the largest industrial sector throughout the period.[29] Table 1 presents the market value of Latin American corporate securities by industry, and echoes prior findings around the dominance of the railway sector with the proportion of total market capitalization peaking at 83.6 per cent in 1889 before falling back to 70.7 per cent by 1929.[30] Banking and utilities represent 15.6 per cent and 16.3 per cent of total market capitalization in 1869 respectively but their importance in relative terms declines over the period.

<<INSERT TABLE 1 HERE>>

In Table 2 we present the market capitalization of all corporate securities for firms headquartered and listed in London but operating in Latin America by country of operation. We assign a country to each security based on the placename referenced in the security listing in the IMM. In the early decades Brazil represents the largest destination in terms of British capital with a total market capitalization of £8.2m in 1879 but is surpassed by Argentina with a market capitalization of £56.5m in 1889, increasing to £237.4m by 1929. Borrowing by Argentinian firms increased considerably during the 1870s and 1880s and the country was the third largest borrower from the United Kingdom (behind the United States and Australia) during the period.[31] The acceleration in capital demand was driven by political changes, with a new government sympathetic to large scale migration from Europe, and the suppression of

[28] Simon, 'The Pattern of New British Portfolio Foreign Investment 1865–1914' notes that between 1865 and 1914, 69 per cent of new issues raised on British stock exchanges was for social overhead capital formation, which was dominated by railway plant and equipment comprising at least 41 per cent of the total.
[29] Grossman, 'Beresford's Revenge: British Equity Holdings in Latin America, 1869-1929'; Stone, 'British Direct and Portfolio Investment in Latin America Before 1914'.'
[30] Bignon, Esteves, and Herranz-Loncán, 'Big Push or Big Grab?'; Cottrell, *British Overseas Investment in the Nineteenth Century*; Stone, 'British Direct and Portfolio Investment in Latin America Before 1914'.
[31] Edelstein, *Overseas Investment in the Age of High Imperialism*.

indigenous people in the late 1870s opening up the fertile interior Pampas regions to economic development, with British investment focusing on railway expansion.[32]

<<INSERT TABLE 2 HERE>>

3. Latin American Stock Price Index

To compare the performance of firms which were headquartered in the UK and operated in Britain vs those operating in Latin America, we first examine the capital gains of common equities in Figure 2.[33] The results suggest that capital gains on UK equities generally outperformed Latin American equities and were less volatile.

We observe capital losses of 1.1 per cent on Latin American equities during the 1870s connected to the world recession, which started with the stock market crash in Vienna in May 1873.[34] The shock transmitted across Europe and the US, affecting investor appetite for foreign securities in London.[35] The reduction in international capital flows and trade to Latin America precipitated fiscal and balance of payment issues, and by 1876 eight Latin American countries had defaulted on their sovereign debt.[36]

The decade beginning in 1890 is notable for average annual capital losses of 4.2 per cent on Latin American equities, reflecting the impact of the Baring crisis. A further notable period of Latin American underperformance begins in September 1912 with capital gains on equities declining by 45 per cent to March 1917. The index then rebounds to reverse almost half of the losses by February 1920, before a further decline of 46 per cent to a low point in

[32] Edelstein; Paolera and Taylor, *A New Economic History of Argentina*.
[33] Total returns are calculated as $R_{i,t} = (Pi_{,t}-P_{i,t-1})/P_{i,t-1} + D_{i,t}/P_{i,t-1}$, where $P_{i,t}$ equals the price of security *i* at the end of month *t* and $D_{i,t}$ is the dividend accruing to security *i* during month *t*. The first term represents the capital gain accruing to security *i* in month *t*, and the second term represents the dividend yield in month *t*. Returns at the individual security level are aggregated using market capitalization weights where we weight returns on security *i* during month *t* ($R_{i,t}$) by its market capitalization in month *t-1*.
[34] Della Paolera and Taylor, 'Sovereign Debt in Latin America, 1820-1913'; Kaminsky and Vega-García, 'Varieties of Sovereign Crises: Latin America 1820-1931'; Sater, 'Chile and the World Depression of the 1870s'.
[35] Marichal, 'La Crisis Global de 1873: Consecuencias a Corto y Mediano Plazo En Chile, Argentina y Perú'.
[36] Kaminsky and Vega-García, 'Varieties of Sovereign Crises: Latin America 1820-1931'.

October 1921 and continued to significantly underperform British capital gains thereafter until the end of the period in 1929.

<<INSERT FIGURE 2 HERE>>

Across the 60-year period under consideration, the performance of capital gains on Latin American equities is mixed, outperforming British equities in three decades: the 1880s; the 1900s; and the 1920s, although the outperformance is only significant for the decade beginning in 1900. During the 1880s there were substantial inflows of capital into Latin America, primarily to support the development of the railways, and we observe capital gains to Latin American equities of 3.1 per cent, 1.65 percentage points higher than capital gains on British equities. The end of the decade is marked by the onset of the Baring Crisis in November 1890. Baring Brothers and Co. an important London based merchant banking firm, had longstanding financial ties to Latin America, having written its first loan in the region in 1824, and by the 1880s loans to Argentina and Uruguay accounted for about three quarters of Baring's loan book.[37] Following the collapse of the 1880s investment boom, Argentina experienced a balance of payments crisis beginning in 1888. An associated fiscal deficit with high inflation averaging 17 per cent, and the local paper peso depreciating at an average rate of 19 per cent between 1884 and 1890, resulted in an eventual partial sovereign default in 1889, civil disturbances and a change in government in 1890.[38]

Barings was heavily exposed to economic conditions in the region and the failed issuance of a Buenos Ayres Water Supply and Drainage loan in London which the bank underwrote pushed the bank to the brink of default in November 1890.[39] The Bank of England co-ordinated with the private sector to save the bank from collapse by securing an emergency

[37] Batchelor, 'The Avoidance of Catastrophe: Two Nineteenth-Century Banking Crises', p. 52.
[38] Batchelor, pp. 49–54; Hawtrey, *Century of Bank Rate*, pp. 105–10; Mitchener and Weidenmier, 'The Baring Crisis and the Great Latin American Meltdown of the 1890s'.
[39] Ford, 'Argentina and The Baring Crisis of 1890'; Mitchener and Weidenmier, 'The Baring Crisis and the Great Latin American Meltdown of the 1890s'.

line of credit, but the impact was nonetheless consequential for the region with capital losses on equities of 4.2 per cent for the subsequent decade, and sovereign yields also increasing by more than 200 basis points relative to the rest of the world.[40]

The 1900s were notable as the capital gains on Latin American equities were significantly higher than their UK counterparts, although this was a result of lower than average performance on UK equities which reported capital losses of 1.8 per cent for the decade.[41] Overall, the returns on capital gains from Latin American equities throughout the period do not suggest a superior performance on these securities as would have been expected according to Edelstein.[42] We do, however, observe a significantly higher standard deviation on the capital gains to Latin American equities vs UK equities, which suggests that investors were exposed to higher risk on these securities but not necessarily compensated in the form of higher ex post realised returns.

<<INSERT TABLE 3 HERE>>

We also calculate capital gains indices by country of operation, splitting the overall Latin American portfolio into separate portfolios for Argentina, Brazil, Chile, and others, shown in Appendix A - Figure A1. Given the smaller sample sizes there is some further volatility observed, but the general patterns across countries are somewhat similar.

[40] Mitchener and Weidenmier, 'The Baring Crisis and the Great Latin American Meltdown of the 1890s'; Triner and Wandschneider, 'The Baring Crisis and the Brazilian Encilhamento, 1889–1891'; Turner, *Banking in Crisis: The Rise and Fall of British Banking Stability, 1800 to the Present*.
[41] The poor performance of capital gains on UK equities between 1900-1909 was largely driven by railway stocks which recorded capital losses of 4 per cent for the decade. This is in line with the findings of Mitchell, Chambers, and Crafts, 'How Good Was the Profitability of British Railways, 1870-1912?'
[42] Edelstein, 'Realized Rates of Return on U.K. Home and Overseas Portfolio Investment in the Age of High Imperialism'; Edelstein, *Overseas Investment in the Age of High Imperialism*.

4. Dividends and Total Returns

Using our main sample of equities listed in the UK, we now move on to consider dividends. They were a primary concern of investors and were an important signalling mechanism in early nineteenth century British capital markets.[43] In addition, a laissez-faire approach to legal investor protections in Victorian Britain provided a role for dividends to act as a substitute governance mechanism by signalling value to investors, limiting managerial expropriation via excess cash flow bonding, and exposing companies to capital market discipline.[44]

In line with ex ante investor expectations of higher dividends on riskier securities, Table 3 illustrates that Latin American equities had a significantly higher dividend yield in every sub-period except for the decade 1910-1919.[45] The average dividend yield on Latin American equities was 5.7 per cent across the period 1870-1929, compared to 5.0 per cent earned on British equities. Latin American railways benefitted from government guarantees in the form of fixed rates of dividends or minimum returns on capital deployed which may have inflated dividend yields on common equity.[46] However, the average dividend yield for non-railway firms throughout the period was 6.2 per cent compared to 5.3 per cent for the railways, and there was no significant difference in yields for railway vs non-railway firms across the entire period.

[43] Cheffins, 'History and the Global Corporate Governance Revolution: The UK Perspective'; Cheffins, *Corporate Ownership and Control : British Business Transformed*; Grossman and Shore, 'The Cross Section of Stock Returns before World War I'; Lowenfeld, *All about Investment*; Turner, Ye, and Zhan, 'Why Do Firms Pay Dividends?'

[44] Braggion and Moore, 'Dividend Policies in an Unregulated Market: The London Stock Exchange, 1895–1905'; Cheffins, 'Dividends as a Substitute for Corporate Law: The Separation of Ownership and Control in the United Kingdom'; Cheffins, *Corporate Ownership and Control : British Business Transformed*; Campbell and Turner, 'Substitutes for Legal Protection'.

[45] Rutterford and Sotiropoulos, 'Putting All Their Eggs in One Basket?'; Rutterford and Sotiropoulos, 'Financial Diversification before Modern Portfolio Theory'.

[46] Bignon, Esteves, and Herranz-Loncán, 'Big Push or Big Grab?'; Diaz, 'Railway Investment in Uruguay before 1914'; Stone, 'British Long-Term Investment in Latin America, 1865-1913'. A review of Latin American railway company prospectuses from The Times between 1891-1896 also details government support for railway issuances in Argentina, Bolivia, Brazil, Chili, Mexico and Venezuela.

Dividends on Latin American and British equities were significantly less volatile than capital gains, but the standard deviation on Latin American dividends was significantly higher than UK dividends for every decade up until 1910. Although investors in Latin America would have benefitted from a higher dividend yield, total returns were lowered by poor ex-post performance on capital gains.

Combining stock price capital gains, and dividends, Table 3 compares value weighted average annual total returns and standard deviations on common equities which were headquartered and listed in London, and operated in either Britain or Latin America, throughout the period 1870-1929. It shows that across the entire period, Latin American equities underperform their British comparators by 0.3 percentage points, although the difference is not statistically significant. The observed volatility in capital gains noted in Section 3 is reflected in total returns where we observe Latin American equities outperforming UK listed equites in only 3 of the sub-periods (the 1880s, 1900s and 1920s), with the outperformance only being significant during the 1900s.[47] Our finding that Latin American equities do not outperform across the full period somewhat contradicts earlier findings of Edelstein who notes that foreign returns to equities average 8.28 per cent between 1870-1913, compared to returns of 6.3 per cent for British equities over the same period.[48]

There are two key differences in our approach, compared to Edelstein, in that we calculate returns with higher frequency (on a monthly basis) and our returns are value weighted using market capitalization.[49] The methodology adopted by Edelstein was constrained by data

[47] We also compare returns to the railways which were headquartered and listed in London but operating in Latin America vs Britain and observe similar results with Latin American railways outperforming UK railways in only three out of six decades (the 1880s, 1900s and 1920s), with the outperformance only significant during the 1900s. Again, we note significantly higher volatility on total returns to Latin American railways across the entire sample period, and in four out of six of the sub-sample periods (1870s, 1880s,1890s and 1910s), which is consistent with prior findings.

[48] Edelstein, 'Realized Rates of Return on U.K. Home and Overseas Portfolio Investment in the Age of High Imperialism'.

[49] Acheson, Campbell, and Turner, 'Who Financed the Expansion of the Equity Market?'; Acheson and Turner, 'Investor Behaviour in a Nascent Capital Market'; Rutterford and Sotiropoulos, 'Putting All Their Eggs in One Basket?'; Rutterford and Sotiropoulos, 'Financial Diversification before Modern Portfolio Theory';

availability (analysing 556 home and overseas securities) and computational methods at the time, calculating returns on an annual basis, and equally weighting returns within a specific sector, with each sector weighted by its fixed share in the national portfolio in 1913. As a robustness test, we replicate the Edelstein methodology of equally weighting returns and find that Latin American equities headquartered and listed in the UK return 10.0 per cent on average between 1870-1929 compared to UK returns of 8.2 per cent over the same period. This difference is likely due to two factors. Firstly, an equal weighting methodology implicitly requires investors to continually rebalance their portfolio, by selling any stocks that have previously risen in value, and buying any stocks that have fallen in price. In contrast, value weighting represents a traditional buy and hold strategy. Secondly, equal weighting means that small volatile stocks have substantial influence, whereas value weighting places much more emphasis on the largest companies.

Although our findings contradict Edelstein's across the entire period, when considering returns on a more granular level across sub-periods he notes significant time variation to returns and in particular there are only 2 periods of foreign outperformance on equities between 1877-1886 and 1897-1909, which largely correspond to our periods of superior Latin American returns.

We also consider whether our findings may be driven primarily by the predominance of railway securities in our Latin American sample. Excluding railway ordinary shares from our analysis, Latin American equities headquartered and listed in London returned 5.9 per cent between 1870-1929 which was 0.3 percentage points lower than comparable returns to UK non-rail equities, although the difference is not statistically significant. The underperformance is observed in every decade except for the 1880s and the 1900s, however, the difference is only

Sotiropoulos and Rutterford, 'Financial Diversification Strategies before World War I: Buy-and-Hold versus Naïve Portfolio Selection'.

significant at the 1% level during the latter period when non-rail Latin American equities returned 12.3 per cent compared to 4.4 per cent on UK non-rail equities.

We cannot consider returns without also assessing the associated risk of investments. One important observation from Table 3 is that regardless of the period under consideration, Latin American equities were riskier than UK equities. Standard deviations on returns to Latin American equities were significantly higher than UK equities, by almost a factor of 2 across the entire period. Using the Sharpe ratio to quantify the risk-return trade-off (the average annual excess return divided by the standard deviation of the excess return), UK equities report a ratio of 0.26 for the entire period, while the ratio for Latin American equities is substantially lower at 0.16. The Sharpe ratio on Latin American equities is lower than the UK equities for every sub-sample in our time period except for the 1900s and 1920s (with the difference in the latter period minimal at 0.06), highlighting that not only did Latin American equities represent a lower return on investment, but they were also riskier than UK equities.

5. Cross-Sectional Variation in Returns

The analysis in the previous sections has focused on market indices, which aggregate all of the stocks into portfolios and examine their performance over time. We can also consider cross-sectional variation in returns between stocks at given points in time.

To do this, we run a series of Fama-Macbeth regressions[50], as shown in Table 4. For each month, there is a cross-sectional regression performed which explains returns in terms of other variables. The coefficients from each of these regressions is saved, and the average over time is then calculated, and tested for significance. We begin by explaining total returns in terms of variables related to the location of the company. *OperLA* is a dummy variable which equals one if the company operated in Latin America. *HQLA* is a dummy variable which equals

[50] Fama and Macbeth, 'Risk, Return, and Equilibrium: Empirical Tests'

one if the company had its headquarters in that region, although only a small number of companies at any given time were in this position. Similarly, *OperForeign* and *HQForeign* equal one for locations which were outside the UK but not in Latin America.

<<INSERT TABLE 4 HERE>>

The univariate Fama-Macbeth regressions, in Table 4 column 1, indicate that companies which operated in Latin America had slightly lower returns than those that operated in the UK. This is consistent with the portfolio level results in Table 3 which indicated that firms operating in Latin America had marginally lower average returns than UK firms.

We then control for other variables which may also influence returns. Size is measured by the market capitalisation of the company, with a small positive coefficient indicating that larger firms earned slightly higher returns overall. Age is proxied by how many years it has been since the company first appeared in our dataset. It has a positive coefficient, suggesting that older firms typically earned higher returns than more recently listed companies. Liquidity is calculated as the proportion of months in a year that the stock price of the company changed, as a change in price may be an indicator that the stock traded during that month. The results suggest that higher liquidity tended to be associated with lower overall returns. We also include industry dummy variables for railways, and financial companies, with the coefficients indicating that banks and insurance firms earned higher returns than the broader market. Most notably for our analysis, after controlling for these variables, the results on the dummy variables for location are no longer significant, suggesting that simply investing overseas would not have led to higher abnormal returns for British investors.

We then break down total returns into its components, namely capital gains from price changes, and dividend yields. This is a useful decomposition, as higher returns which come from price increases may reflect successful ex-post performance of the company, whereas higher dividend yields are more likely to reflect a perception of higher ex-ante risk. The results

suggest that for Latin American stocks, there was not a significant difference in stock price performance compared to UK stocks. In contrast, companies which operated in other regions of the world typically had lower capital gains, but this was offset if those companies were also headquartered overseas.

The strongest results are observed when explaining variation in dividend yields (for those companies that paid a dividend). This is to be expected, as price changes can be erratic and difficult to predict, whereas yields are a clear and observable measure which can be used to assess the pricing of a stock at any given time. The results suggest that stocks which operated in Latin America had significantly higher dividend yields than UK stocks, and this result is robust to controlling for other variables.

We also repeat the analysis in Appendix A - Table A1, where we break down the dummy variable for companies operating in Latin America into four separate dummies, with one each for Argentina, Brazil, and Chile, and another covering the remaining countries in Latin America. The results are similar to the overall results, with each of the dummy variables being significant and positive, suggesting that each of them had significantly higher dividend yields than UK focused stocks. In terms of the sizes of the coefficients, there is some suggestion that Argentina was closest to the UK yields, followed by Brazil and Chile, with other Latin American regions being higher.

These results are also consistent with the patterns previously discussed in Table 3, where the overall dividend yield on a portfolio of stocks operating in Latin America was considerably higher than a portfolio of stocks operating primarily in the UK. This suggests that those stocks which operated overseas in Latin America were perceived ex-ante as being riskier, with the higher yield being necessary to attract investors. Ex-post, the capital gains were

modest, so the overall returns to investors was quite similar to what was available from companies which operated mainly in the UK.[51]

6. Equities listed on Latin American Stock Markets

The analysis has so far considered firms which, although they may have operated in Latin America, were listed in London. In this section we compare those stocks to a sample of indigenous firms based in Latin America, which issued shares on newly formed Latin American exchanges, several of which were established during the 19th century.[52] Listing on local exchanges might have been advantageous for firms if the listing requirements were less stringent, in terms of minimum capitalization, or if the costs associated with listing were lower.[53] Alternatively, it may have been beneficial for firms that required specialist local knowledge to understand their business model. Hence, we would expect locally listed firms on average to provide higher returns, at the cost of greater risk, than those listed in a major foreign market.[54] A complementary hypothesis may be that firms operating in Latin America that were listed and controlled from London (sometimes referred to as a free-standing company) benefitted from a British institutional framework that minimized the risks of operating overseas, and therefore we would expect these companies to have a lower level of risk.[55]

[51] To check for the possibility that railway firms may be driving some of our findings we run the same Fama-Macbeth regressions, excluding all railway firms from our sample. The results are largely the same for total returns with a small negative coefficient for firms operating in Latin America, which disappears when controlling for other factors like size, age and liquidity, indicating no abnormal returns to investing overseas in non-railway firms. Again, the location variables are not a significant determinant of capital gains to non-railway firms. The location of operations is a significant positive determinant of dividend yields for non-railway firms, consistent with prior results, which is partially offset by a small negative effect for those non-railway firms which were also headquartered in Latin America.

[52] The website for the Bolsa de Valores do Rio de Janeiro notes that formal operations commenced in 1845. The website of the Bolsa de Comercio de Buenos Aires reports that it was established in 1854 and began trading shares in 1856. According to the Bolsa de Valores website the Montevideo Stock Exchange was established in 1867. Per Goetzmann and Jorion, 'Re-Emerging Markets', the stock exchange in Chile was established in 1892, and in Venezuela in 1893.

[53] Blass and Yafeh, 'Vagabond Shoes Longing to Stray: Why Foreign Firms List in the United States',

[54] Merrett, 'Capital Markets and Capital Formation in Australia, 1890–1945', suggests that domestically traded Australian securities in the 19th century were dominated by high-risk mining shares.

[55] Wilkins, 'The Free-Standing Company, 1870-1914: An Important Type of British Foreign Direct Investment'.

The data on equities traded on Latin American exchanges during the late 19th and early 20th centuries is sparse. However, we can use Argentina as a case study to make some form of comparison between Argentinian listings and equities listed in London using a sample of data gathered by Nakamura and Zarazaga for equities traded on the Buenos Aires Bolsa between 1900 and 1929.[56] The data contains monthly price information on ordinary shares for 27 local companies, including banks, insurance companies, utilities, land companies, building, manufacturing, and oil firms. None of the firms in our sample cross-listed on the LSE. As we do not have market capitalisation data for the Bolsa stocks, Figure 3 presents monthly price weighted capital gains indices for Argentinian equities listed on the Bolsa.

Our comparable sample of Argentinian equities headquartered and listed in London consists of 46 firms, of which approximately 28 per cent were railways. The remaining firms were mainly comprised of land, mortgage and financial firms (28 per cent), utilities (17 per cent) and food, drink and tobacco companies (9 per cent). Given that railway equities were issued exclusively in the UK, presumably due to their high capital requirements, we exclude them from the comparable analysis.[57] To improve comparability with the Bolsa stocks, we also calculate a price weighted capital gains index for these stocks, which seems to outperform a market capitalisation weighted index of stocks listed on the Bolsa.

<<INSERT FIGURE 3 HERE>>

[56] Nakamura and Zarazaga, 'Banking and Finance, 1900-35'.

[57] The returns to London listed Argentinian railways were lower than non-rail firms although the difference is not statistically significant, however the standard deviation on London listed Argentinian rail firms is significantly higher than non-rail firms. When we include the railways in our sample of London listed Argentinian firms, our findings are consistent in that there was no significant difference in returns compared to firms listed on the Bolsa except for the 1920's when we observe a significant underperformance on Bolsa listed equities. Including the railways does alter the findings in relation to risk profile as we no longer observe a significantly higher standard deviations for firms listed on the Bolsa vs London, due to the inclusion of higher risk railway firms in the sample.

We observe that Argentinian equities listed on the Bolsa provided higher capital gains but were also more volatile. The capital gains index for Bolsa listed firms increased by 171 per cent between January 1900 and its first peak in December 1912, while the comparable index of non-rail Argentinian equities listed and headquartered in London increased by only 88 per cent over the same period. The Bolsa index then declined by 41 per cent to March 1915 while the index of LSE listed firms declined by only 19 per cent.

Pre-1915 capital gains on Bolsa and London listed Argentinian equites appeared to follow similar trends albeit with different magnitudes, however, we note a divergence after 1915 with London listed equities recording a 43 per cent decline to May 1921, before recovering steadily throughout the 1920s. Bolsa listed equities on the other hand increased by 58 per cent over the period between 1915 and 1921, indicating that although these firms were operating in the same region, there were different factors influencing their performance post 1915. This divergence is reflected in statistical tests of differences in mean capital gains across each of the three decades with no significant difference for the 1900s or 1910s, but with Bolsa listed equities recording a significant underperformance vs London listed equities throughout the 1920s.

Over the entire period we note that the standard deviation on Bolsa listed equities was significantly higher than comparable non-rail Argentinian firms listed and headquartered in London. For the first two decades of the sample, we observe the standard deviation on capital gains on Bolsa-listed equities averages 1.6 times the standard deviation on UK listed equities operating in the same region. This suggests that locally listed firms were on average riskier than firms listed on the LSE.

We also calculate an index which adjusts for movements in the exchange rate between Argentina and Britain. This presents the index in terms of what would have been experienced by a British investor in the Bolsa. We hand-collect the exchange rate on a monthly basis from

the *Economist*. It was quite stable for much of the period, but the pound weakened in 1919-20, before recovering. For a British investor in Argentinian companies, this would initially have led to higher returns, with a higher peak in 1920, but then a steeper reversal, as shown in Figure 3.

There is also some dividend data for the Bolsa companies. The average dividend yield was high for those companies that paid a dividend, but as about half of companies were non-dividend payers the overall contribution to returns was just 3.6%. Combined with the capital gains from price changes, the overall return was 6.5% per year. It should be noted that we assume for Bolsa companies that lack of a dividend being reported reflects a zero dividend payment by the company, but acknowledge that it may sometimes be due to missing data. If some of the Bolsa companies did pay a dividend which is not included in the calculations, then the total returns for them would be higher.

Although the average dividend yield on Argentinian companies listed in the UK was lower, more companies paid a dividend, giving a 5.9% contribution to returns. Capital gains from a price-weighted index of these stocks were also positive, so the overall return for these companies was an impressive 9.4% per year for this period from 1900 to 1929.

We also run Fama-Macbeth regressions to explain cross-sectional differences between stocks, shown in Table 5. We include all of the stocks listed on the Bolsa, and the Argentinian non-railway stocks listed in Britain. Given the limited amount of supplementary data available on Bolsa companies, we cannot include as many control variables, such as market capitalisation. However, we calculate an Age variable, which is the number of years since the stock first appeared in our dataset (using 1900 as the first possible observation year). We also calculate a Liquidity variable, based on the proportion of months that we observe a price change within a given year. We also include a dummy variable to identify financial companies.

The results follow a similar pattern to those discussed previously between UK stocks and Latin American stocks listed in Britain, namely that there is little evidence of significant differences in overall returns. The portfolio level analysis, discussed above, suggested that UK listed stocks may have earned higher returns, and simple averages also imply this. However, due to large standard deviations and a comparatively small sample size of companies, this is not significant. There is some suggestion of higher capital gains on the Bolsa after controlling for other variables, but this is only weakly significant.

However, Bolsa stocks are seen to have a significantly higher yield than Argentinian non-railway stocks listed in Britain (for those companies that paid a dividend). This may reflect a perception of higher ex-ante risk, which the higher yields help to compensate for. Both types of firms were operating in the same economic and political environment, but Argentinian firms listed in London had lower dividend yields, possibly indicating a perception of lower risk. They were typically registered under the UK Companies Acts, maintained their headquarters in England and had predominantly English directors on the boards.[58] It is possible that British shareholders regarded this as helping to reduce the risks involved with investing.

Due to a lack of primary sources, it is difficult to ascertain the exact disclosure requirements for firms listing on the Bolsa, and there was no external auditing of public companies in Latin American until the 1970s.[59] Although public companies in Britain were not required to be externally audited until the advent of the Companies Act in 1900, many voluntarily adopted disclosure provisions which enhanced information and shareholder protections during the 19th century.[60]

[58] Stone, 'British Long-Term Investment in Latin America, 1865-1913'.
[59] Haber, 'The Political Economy of Industrialization'.
[60] Acheson, Campbell, and Turner, 'Private Contracting, Law and Finance'. The UK Companies Act of 1862 contained voluntary disclosure provisions in the form of the standard 'Table A'.

The Argentinian stock market has been characterised as underdeveloped, inefficient at channelling private funds, and lacking liquidity, factors associated with a higher risk profile.[61] Investors in the region also faced significant informational asymmetries, with agents and underwriters only partially able to address the gaps, which may have also influenced the risk profile for companies listed on the Bolsa.[62]

Most firms listed in London, even those with Argentinian operations, were registered under the UK Companies Acts, maintained their headquarters in England and had predominantly English directors on the boards.[63] Companies seeking a listing on the London Stock Exchange were required to publicly advertise a copy of their prospectus, and accounts were to be sent to shareholders before the annual general meeting, among other disclosure requirements.[64] Therefore, there is a possibility that the disclosure requirements associated with UK company registration, and the enhanced governance procedures associated with a listing on the LSE, led to a perception of them being lower risk investments.

[61]Guy, 'Dependency, the Credit Market, and Argentine Industrialization, 1860–1940'; Haber, 'The Political Economy of Industrialization'; Nakamura and Zarazaga, 'Banking and Finance, 1900-35'; Pineda, 'Sources of Finance and Reputation: Merchant Finance Groups in Argentine Industrialization, 1890–1930'.

[62] De Long, Bradford, 'Did J.P. Morgan's Men Add Value? A Historical Perspective on Financial Capitalism'; Flandreau and Flores, 'Bonds and Brands: Foundations of Sovereign Debt Markets, 1820–1830'; Flores, 'Information Asymmetries and Conflict of Interest during the Baring Crisis, 1880–1890'; Husain and Buchnea, 'Agents, Brokerage and Argentinian Railways 1880–1905'; Vedoveli, 'Information Brokers and the Making of the Baring Crisis, 1857–1890'.

[63] Stone, 'British Long-Term Investment in Latin America, 1865-1913'.

[64] Morgan and Thomas, *The Stock Exchange : Its History and Functions / (by) E. Victor Morgan & W. A. Thomas. Foreword by Lord Ritchie of Dundee.* The *Stock Exchange Official Intelligence*, 1882. Companies seeking a listing were required to present a statement of capital, the nominal value of shares, and whether any shares authorised but not issued were vendors' shares. Companies were also required to disclose the amount of shares allotted and paid up by the public; the number of shares allotted other than for cash; the number of allottees and the largest single allotment; and to produce their allotment book for inspection. Not less than half the authorised capital must have been issued and 10 per cent paid. Two-thirds of any issue must have been subscribed for and unconditionally allotted to the public. Company articles of association had to include provisions that no funds of the company should be used for loans or for purchasing its own shares; directors must hold a share qualification; and that the borrowing powers of the board should be limited.

6. Time Series Co-Movement

We now move on to consider how closely connected the value of Latin American firms were with other segments of the market between 1869 and 1929. In Table 6, we regress the time-series returns of a portfolio of companies which operated in Latin America (but were listed and headquartered in the UK) on a variety of portfolios.[65]

<< INSERT TABLE 6 HERE >>

We begin with a very broad portfolio which contains all other securities traded in UK markets, including both debt and equity. In column 1, there is a highly significant positive relationship, with a beta of about 1.3, suggesting that Latin American equities moved with other securities but were more volatile.[66] The R^2 of the regression can be regarded as a measure of integration, and is 0.341, suggesting that over one-third of stock price movements of these firms can be explained by movements in the LSE market as a whole. It also implies that the correlation is about 0.584.

We then consider different segments of the market separately, beginning with some debt portfolios, in columns 2 to 4. It may be expected that Latin American equities would share a common factor with Latin American government bonds or municipal loans, given the common geographical territory. In column 2, we find that there is a highly significant relationship, but the R^2 is considerably lower at 0.255. We repeat with other portfolios of bonds, namely other foreign government bonds, and also with UK Consols, but the R^2 is even lower at 0.126 and 0.075 respectively.

Moving on to equity portfolios, we begin with an overall index which this time consists only of ordinary equities, in column 5. The beta of our portfolio of firms operating in Latin

[65] The other portfolios exclude all corporate securities which operated in Latin America so that the same securities will not be simultaneously present in both the dependent and independent variables.
[66] Campbell and Rogers, 'Integration between the London and New York Stock Exchanges, 1825–1925'; Pukthuanthong and Roll, 'Global Market Integration: An Alternative Measure and Its Application'.

America, but based in the UK, is about 0.9, suggesting that they were slightly less exposed to systematic risk, and the R^2 is about 0.335.

We then break down the equity market into several components, based on location. We begin by splitting companies based on where they operated, in columns 6 and 7. Notably, there is not much of a difference based on this measure. The R^2 when compared to firms with UK operations was 0.287, and for other foreign operations was 0.230. This suggests that where the firm operated did not have much impact on returns, and firms operating in Latin America were more highly correlated with firms operating in the UK than with firms operating elsewhere.

We then split the firms which operated abroad into two portfolios based on where their headquarters was, in columns 8 and 9. We begin with a portfolio of companies which had their headquarters in the UK. The equities with Latin American operations, but which were listed and headquartered in the UK, had a strong positive relationship with this portfolio, with an R^2 of 0.323. We then analyse the relationship with firms which had their headquarters elsewhere and find a much lower R^2 of 0.095. To examine the robustness of this relationship over time, we run rolling regressions with a 10-year window starting in January 1869, with the coefficients and R^2 values presented in Figure 4. The R^2 for a portfolio of Latin American equities regressed against other overseas firms with UK headquarters is significantly higher than the regression including overseas firms with foreign headquarters throughout the period. These results suggest that the location of the headquarters played a substantial role in the valuation of the firms. Firms operating in Latin America which had a UK headquarters, moved like other UK headquartered companies, rather than those which were headquartered and operating overseas.

<< INSERT FIGURE 4 HERE >>

We also include a portfolio of stocks on the Bolsa as a separate regression, in column 10. There are caveats to this, as it is only available for half of the period (1900-1929), and is price-weighted. Nevertheless, it is still notable that although it is significant, there is a very low R^2 with the portfolio of firms with Latin American operations but based in the UK. This again re-enforces the view that headquarters played an important role, with the firms on the Bolsa moving in a very different way to those in the UK, despite operating in the same region.

To place the returns within a multivariate framework, we follow an approach similar to Fama and French, which forms long-short portfolios to remove the common market trend across variables which could cause multicollinearity.[67]

For operations we create a variable, *OperFMD*, which is calculated as the returns of a portfolio of all companies with foreign operations minus the returns of domestic British firms. To capture the impact of headquarters we create another variable, *HQFMD*, which takes all of the firms operating overseas and calculates the returns to a portfolio of firms with foreign headquarters minus the returns to those which were headquartered domestically in Britain. The correlation between *HQFMD* and *OperFMD* is 0.301.

We then include several equity factors, as well as some bond factors, in an approach similar to the original Fama and French approach.[68] We include a factor for the equity market return (*EquityRf*), a term structure variable (*Term*), and a variable capturing changes in regional default risk (*BondsLMD*).[69] Factors capturing the size premium (*SMB*) and value premium (*HML*) are also included.[70] We also include a variable for price movements on the Bolsa, but as the data is only available after 1900 it is included in a separate regression.

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[67] Fama and French, 'Common Risk Factors in the Returns on Stocks and Bonds'.
[68] Common Risk Factors in the Returns on Stocks and Bonds'
[69] *EquityRf* is calculated as total monthly returns on all equities listed in the IMM minus the risk-free rate which is the discount rate on prime bills. *Term* is calculated as the excess return on Consols above the risk-free rate. *BondsLMD* is calculated as the monthly returns on Latin American government and municipal debt minus the returns on UK Consols.
[70] The size premium, small minus big (*SMB*) is calculated as the portfolio of monthly equity returns on small firms (30^{th} percentile market capitalization and below) less monthly returns on large firms (70^{th} percentile market capitalization and above). The value premium, high minus low *(HML*) is proxied with the portfolio of

<<INSERT TABLE 7 HERE>>

For the purposes of our analysis, the most interesting result is the significant negative coefficient on *HQFMD*. This confirms the earlier findings that firms with Latin American operations, but were listed and headquartered in the UK, moved more like other companies based in Britain than those which were based in foreign countries. These results are robust even when including the various bond and equity risk factors and suggest that headquarters played an additional role above and beyond any connections with the overall market.

In contrast, *OperFMD*, is not significant, suggesting that the location of operations was not a major driver of returns. Companies with Latin American operations did not move any more like other companies operating in other countries than those operating in the UK. These results suggest that headquarters mattered, and that investors regarded these firms as being at least partially British, even though their operations were thousands of miles away.

We also note from Table 7 the statistical significance of the factors for term structure and Latin American government and municipal default, which is indicative of stock returns in Latin America being influenced by sudden changes in discount rates and a risk premium associated with sovereign risk factors. The size premium is positive and significant, suggesting that Latin American securities moved more like smaller companies traded on the market.

The constant term, or alpha, in the regression specification indicates the degree of any excess return after controlling for risk. For Latin American equities the alpha coefficient is notably not statistically significant. This may raise the question as to why investors continued to invest in companies operating in this region. One potential explanation is that although Latin American equities may not have offered superior returns, from a rational investor perspective they may still have been beneficial in an overall portfolio context due to the benefits of

monthly equity returns of high dividend yield firms (70th percentile and above) minus low dividend yield firms (30th percentile and below) given that we do not have accounting information on book values.

diversification and lower overall portfolio variance.[71] Modern portfolio theory and the mean-variance approach to asset allocation was not formalised in this period, however, there is a consensus that general principles of diversification were being adopted at least from the last quarter of the nineteenth century.[72]

7. Conclusion

Latin America was a major destination for British overseas investment throughout the period 1870-1929. Much of this was channelled through companies which were headquartered and listed in Britain, which provided benefits in terms of higher liquidity in UK markets and a British institutional framework which provided governance protections for shareholders. We find that the returns to firms listed and governed in London, but operating in Latin America, did not provide superior returns to investors and were riskier than British investments. We note that dividend yields to firms operating in Latin American were higher than UK firms which suggests an ex-ante expectation of higher risk and returns from investing overseas. However, lower overall returns driven by disappointing capital gains questions the rationale of a pull factor of higher returns attracting overseas capital to this region.

Our analysis of firms operating in Argentina shows that those firms with a local listing had a higher risk profile than firms operating in the same region but with a London headquarters and listing. This suggests that there may have been some benefits to the enhanced governance structures provided by the UK institutional framework associated with a UK company registration, board of directors and listing on the London Stock Exchange.

[71] Chabot and Kurz, 'That's Where The Money Was'; Goetzmann and Ukhov, 'British Investment Overseas 1870–1913'; Rutterford and Sotiropoulos, 'Putting All Their Eggs in One Basket?'
[72] Cheffins, *Corporate Ownership and Control: British Business Transformed*; Rutterford and Sotiropoulos, 'Putting All Their Eggs in One Basket?'; Rutterford and Sotiropoulos, 'Financial Diversification before Modern Portfolio Theory'.

We find that the value of companies listed and headquartered in London but operating in Latin America moved in a similar way to other UK based companies, as opposed to other firms which were based overseas. There is little evidence of a factor based on companies operating abroad. These results suggest that the distinction between the headquarters and the operations of a firm is important. The valuation of firms is heavily affected by where they are headquartered, even if they operate elsewhere. Agency problems between shareholders and directors may be mitigated if the investors can monitor the firm nearby. In recent years, several firms have moved their corporate headquarters, either to different countries, or to other states within the US. Historical experience suggests that such decisions on where to locate can have a major influence on the valuation of firms.

Our analysis has established that the location of governance for the firm has a more material impact on valuation than the location of operations. Future avenues for research include a closer examination of the internal governance structures of the board including the role of director and agency networks and the extent of local expertise represented on the board. Other regions could also be examined, in particular whether governance structures differed between countries within the British Empire and other recipient countries of British capital flows.

References

Accominotti, O., M. Flandreau, R. Rezzik, and F. Zumer. 'Black Man's Burden, White Man's Welfare: Control, Devolution and Development in the British Empire, 1880-1914'. *European Review of Economic History* 14 (2010), pp. 47–70.

Accominotti, O., M. Flandreau, and R. Rezzik. 'The Spread of Empire: Clio and the Measurement of Colonial Borrowing Costs'. *The Economic History Review* 64 (2011), pp. 385–407.

Acheson, G.G., G. Campbell, and J.D. Turner. 'Private Contracting, Law and Finance'. *The Review of Financial Studies* 32 (2019), pp. 4156–95.

———. 'Who Financed the Expansion of the Equity Market? Shareholder Clienteles in Victorian Britain'. *Business History* 59 (2017), pp. 607–37.

Acheson, G.G. and J.D. Turner. 'Investor Behaviour in a Nascent Capital Market: Scottish Bank Shareholders in the Nineteenth Century'. *The Economic History Review* 64 (2011), pp. 188–213.

Batchelor, R.A. 'The Avoidance of Catastrophe: Two Nineteenth-Century Banking Crises'. *Financial Crises and the World Banking System*, (1986), pp. 41–76.

Bignon, V., R. Esteves, and A. Herranz-Loncán. 'Big Push or Big Grab? Railways, Government Activism, and Export Growth in Latin America, 1865-1913: Railways and Governments in Latin America'. *The Economic History Review* 68 (2015), pp. 1277–1305.

Blass, A. and Y. Yafeh. 'Vagabond Shoes Longing to Stray: Why Foreign Firms List in the United States'. *Journal of Banking & Finance* 25 (2001), pp. 555–72.

Braggion, F. and L. Moore. 'Dividend Policies in an Unregulated Market: The London Stock Exchange, 1895–1905'. *The Review of Financial Studies* 24 (2011), pp. 2935–73.

Campbell, G. and M. Rogers. 'Integration between the London and New York Stock Exchanges, 1825–1925'. *The Economic History Review* 70 (2017), pp. 1185–1218.

Campbell, G. and J.D. Turner. 'Substitutes for Legal Protection: Corporate Governance and Dividends in Victorian Britain'. *The Economic History Review* 64 (2011), pp. 571–97.

Chabot, B.R. and C.J. Kurz. 'That's Where The Money Was: Foreign Bias and English Investment Abroad, 1866–1907'. *The Economic Journal* 120 (2010), pp. 1056–79.

Cheffins, B. 'History and the Global Corporate Governance Revolution: The UK Perspective'. *Business History* 43 (2001), pp. 87–118.

Cheffins, B.R. *Corporate Ownership and Control : British Business Transformed*, (Oxford, 2008).

Cheffins, B.R. 'Dividends as a Substitute for Corporate Law: The Separation of Ownership and Control in the United Kingdom'. *Washington and Lee Law Review* 63 (2006), p. 1273.

Cottrell, P.L. (Philip L. *British Overseas Investment in the Nineteenth Century*, 1975. https://cir.nii.ac.jp/crid/1130000797675178112.

Coyle, C., A. Musacchio, and J.D. Turner. ‘Law and Finance in Britain c.1900’. *Financial History Review* 26 (2019), pp. 267–93.

Davis, L.E. and R.A. Huttenback. *Mammon and the Pursuit of Empire: The Political Economy of British Imperialism, 1860-1912*, (1986).

De Long, Bradford, J. ‘Did J.P. Morgan’s Men Add Value? A Historical Perspective on Financial Capitalism’. *NBER Working Paper Series*, 1990, p. 3426.

Della Paolera, G. and A.M. Taylor. ‘Sovereign Debt in Latin America, 1820-1913’. *Revista de Historia Economica-Journal of Iberian and Latin American Economic History* 31 (2013), pp. 173–217.

Diaz, G. ‘Railway Investment in Uruguay before 1914: Profitability, Subsidies, and Economic Impact’. *European Review of Economic History* 21 (2017), pp. 280–301.

Edelstein, M. ‘Foreign Investment and Accumulation, 1860-1914’. *The Economic History of Britain since 1700*, 2nd ed. Vol. 2, 1994.

———. *Overseas Investment in the Age of High Imperialism: The United Kingdom, 1850-1914*, (London, 1982).

———. ‘Realized Rates of Return on U.K. Home and Overseas Portfolio Investment in the Age of High Imperialism’. *Explorations in Economic History* 13 (1976), pp. 283–329.

Fama, Eugene F., and James D. MacBeth. "Risk, return, and equilibrium: Empirical tests." *Journal of Political Economy* 81, no. 3 (1973): 607-636.

Fama, E.F. and K.R. French. ‘Common Risk Factors in the Returns on Stocks and Bonds’. *Journal of Financial Economics* 33 (1993), pp. 3–56.

Ferguson, N. and M. Schularick. ‘The Empire Effect: The Determinants of Country Risk in the First Age of Globalization, 1880–1913’. *The Journal of Economic History* 66 (2006), pp. 283–312.

Flandreau, M. and J.H. Flores. ‘Bonds and Brands: Foundations of Sovereign Debt Markets, 1820–1830’. *The Journal of Economic History* 69 (2009), pp. 646–84.

Flores, J.H. ‘Information Asymmetries and Conflict of Interest during the Baring Crisis, 1880–1890’. *Financial History Review* 18 (2011), pp. 191–215.

Ford, A.G. ‘Argentina and The Baring Crisis of 1890’. *Oxford Economic Papers* 8 (1956), pp. 127–60.

———. ‘British Investment in Argentina and Long Swings, 1880–1914’. *The Journal of Economic History* 31 (1971), pp. 650–63.

Goetzmann, W.N. and P. Jorion. ‘Re-Emerging Markets’. *Journal of Financial and Quantitative Analysis* 34 (1999), pp. 1–32.

Goetzmann, W.N. and A.D. Ukhov. ‘British Investment Overseas 1870–1913: A Modern Portfolio Theory Approach*’. *Review of Finance* 10 (2006), pp. 261–300.

Grossman, R. ‘Beresford’s Revenge: British Equity Holdings in Latin America, 1869-1929’. *IDEAS Working Paper Series from RePEc*, 2017.

Grossman, R.S. and S.H. Shore. ‘The Cross Section of Stock Returns before World War I’. *Journal of Financial and Quantitative Analysis* 41 (2006), pp. 271–94.

Guy, D.J. ‘Dependency, the Credit Market, and Argentine Industrialization, 1860–1940’. *Business History Review* 58 (1984), pp. 532–61.

Haber, S. ‘The Political Economy of Industrialization’. in V. Bulmer-Thomas, J. Coatsworth, and R. Cortes-Conde, eds., *The Cambridge Economic History of Latin America: Volume 2: The Long Twentieth Century*, (Cambridge, 2006), 2:pp. 537–84. https://doi.org/10.1017/CHOL9780521812900.015.

Hannah, L. ‘The London Stock Exchange, 1869-1929: New Statistics for Old?’ *The Economic History Review* 71 (2018), pp. 1349–56.

Hawtrey, R. *Century of Bank Rate*, (2013).

Hills, S., R. Thomas, and N. Dimsdale. ‘The UK Recession in Context—What Do Three Centuries of Data Tell Us?’, (2010). https://www.bankofengland.co.uk/quarterly-bulletin/2010/q4/the-uk-recession-in-context-what-do-three-centuries-of-data-tell-us.

Hobson, C.K. (Charles K. *The Export of Capital*, (Constable and Company, ltd, 1914).

Husain, T. and E. Buchnea. ‘Agents, Brokerage and Argentinian Railways 1880–1905’. *Business History*, 2024, pp. 1–33.

Investor’s Monthly Manual, 1869-1929, n.d.

Kaminsky, G.L. and P. Vega-García. ‘Varieties of Sovereign Crises: Latin America 1820-1931’. *NBER Working Paper Series*, 2014, p. 20042.

Kennedy, W.P. ‘Foreign Investment, Trade and Growth in the United Kingdom, 1870–1913’. *Explorations in Economic History* 11 (1974), pp. 415–44.

La Porta, R., F. Lopez-de-Silanes, A. Shleifer, and R.W. Vishny. ‘Law and Finance’. *Journal of Political Economy* 106 (1998), pp. 1113–55.

Lowenfeld, H. *All about Investment*, (1909).

Marichal, C. ‘La Crisis Global de 1873: Consecuencias a Corto y Mediano Plazo En Chile, Argentina y Perú’. *Boletín Del Instituto de Historia Argentina y Americana Doctor Emilio Ravignani* (2023), pp. 65–99.

Merrett, D.T. ‘Capital Markets and Capital Formation in Australia, 1890–1945’. *Australian Economic History Review* 37 (1997), pp. 181–201.

Mitchell, B., D. Chambers, and N. Crafts. ‘How Good Was the Profitability of British Railways, 1870-1912?’. *The Economic History Review* 64 (2011), pp. 798–831.

Mitchener, K.J. and M.D. Weidenmier. ‘The Baring Crisis and the Great Latin American Meltdown of the 1890s’. *The Journal of Economic History* 68 (2008), pp. 462–500.

Morgan, E.Victor. and W.Arthur. Thomas. *The Stock Exchange : Its History and Functions / (by) E. Victor Morgan & W. A. Thomas. Foreword by Lord Ritchie of Dundee.*, (London, 1962).

Nakamura, L.I. and C.E.J.M. Zarazaga. 'Banking and Finance, 1900-35'. *A New Economic History of Argentina*, (2003), pp. 295–323.

Paolera, G. and A.M. Taylor. *A New Economic History of Argentina*, (2003). https://books.google.co.uk/books?id=1PxjcoYAohcC.

Pineda, Y. 'Sources of Finance and Reputation: Merchant Finance Groups in Argentine Industrialization, 1890–1930'. *Latin American Research Review* 41 (2006), pp. 3–30.

Pollard, S. 'Capital Exports, 1870-1914: Harmful or Beneficial?' *The Economic History Review* 38 (1985), pp. 489–514.

Pukthuanthong, K. and R. Roll. 'Global Market Integration: An Alternative Measure and Its Application'. *Journal of Financial Economics* 94 (2009), pp. 214–32.

Quinn, W. and J.D. Turner. *Boom and Bust: A Global History of Financial Bubbles*, (2020).

Rutterford, J. and D.P. Sotiropoulos. 'Financial Diversification before Modern Portfolio Theory: UK Financial Advice Documents in the Late Nineteenth and the Beginning of the Twentieth Century'. *The European Journal of the History of Economic Thought* 23 (2016), pp. 919–45.

———. 'Putting All Their Eggs in One Basket? Portfolio Diversification 1870–1902'. *Accounting History Review* 26 (2016), pp. 285–305.

Sater, W.F. 'Chile and the World Depression of the 1870s'. *Journal of Latin American Studies* 11 (1979), pp. 67–99.

Simon, M. 'The Pattern of New British Portfolio Foreign Investment 1865–1914', (1967), pp. 33–70. https://EconPapers.repec.org/RePEc:pal:intecp:978-1-349-15238-4_2.

Sotiropoulos, D.P. and J. Rutterford. 'Financial Diversification Strategies before World War I: Buy-and-Hold versus Naïve Portfolio Selection'. *Business History* 61 (2019), pp. 1175–98.

Stone, I. *The Global Export of Capital from Great Britain: 1865 - 1914 ; a Statistical Survey*, (1999). https://books.google.co.uk/books?id=l7NOvwEACAAJ.

Stone, I. 'British Direct and Portfolio Investment in Latin America Before 1914'. *The Journal of Economic History* 37 (1977), pp. 690–722.

———. 'British Investment in Argentina'. *The Journal of Economic History* 32 (1972), pp. 546–47.

———. 'British Long-Term Investment in Latin America, 1865-1913'. *Business History Review* 42 (1968), pp. 311–39.

Stulz, R.M. and R. Williamson. 'Culture, Openness, and Finance'. *Journal of Financial Economics* 70 (2003), pp. 313–49.

Triner, G.D. and K. Wandschneider. ‘The Baring Crisis and the Brazilian Encilhamento, 1889–1891: An Early Example of Contagion Among Emerging Capital Markets’. *Financial History Review* 12 (2005), pp. 199–225.

Turner, J.D. *Banking in Crisis: The Rise and Fall of British Banking Stability, 1800 to the Present*, Cambridge Studies in Economic History - Second Series, (Cambridge, 2014). https://doi.org/10.1017/CBO9781139380874.

———. ‘Three Centuries of Corporate Governance in the United Kingdom’. *The Economic History Review* n/a (2024).

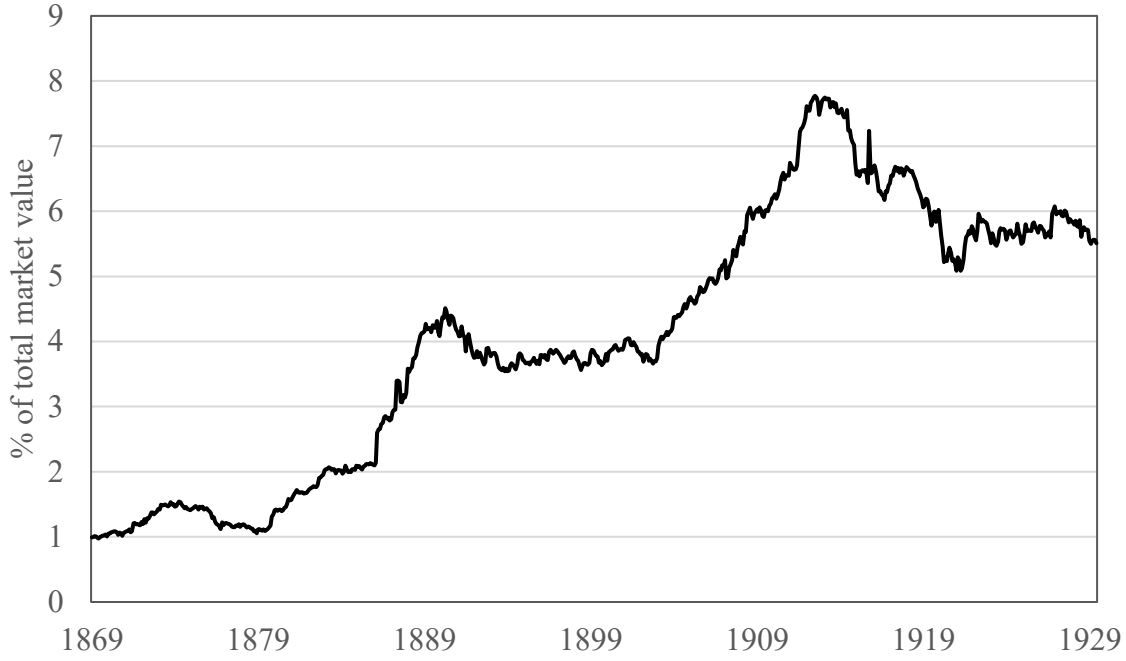
Turner, J.D., Q. Ye, and W. Zhan. ‘Why Do Firms Pay Dividends?: Evidence from an Early and Unregulated Capital Market*’. *Review of Finance* 17 (2013), pp. 1787–1826.

Vedoveli, P. ‘Information Brokers and the Making of the Baring Crisis, 1857–1890’. *Financial History Review* 25 (2018), pp. 357–86.

Wilkins, M. ‘The Free-Standing Company, 1870-1914: An Important Type of British Foreign Direct Investment’. *Economic History Review*, 1988, pp. 259–82.

Williamson, J.G. and K.H. O’Rourke. ‘International Capital Flows: Causes & Consequences’. *Globalization and History: The Evolution of a Nineteenth-Century Atlantic Economy*, The MIT Press, (Cambridge, 1999).

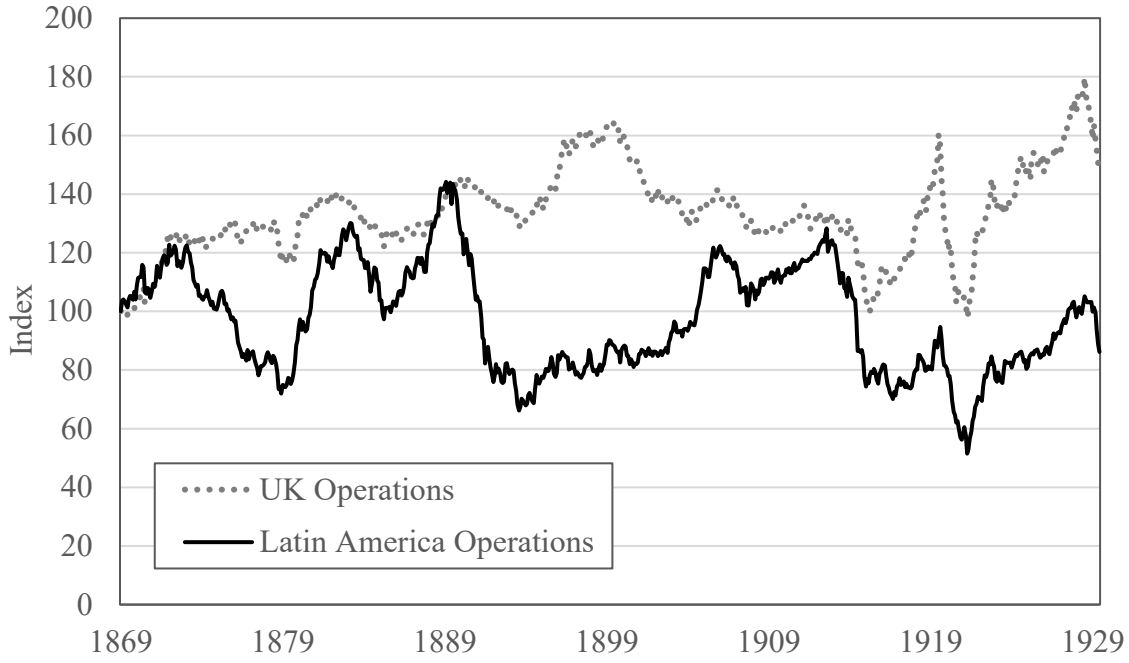
Figure 1: Market Value of Firms operating in Latin America with UK headquarters, as a proportion of total Market Value of all firms listed in London, 1869-1929



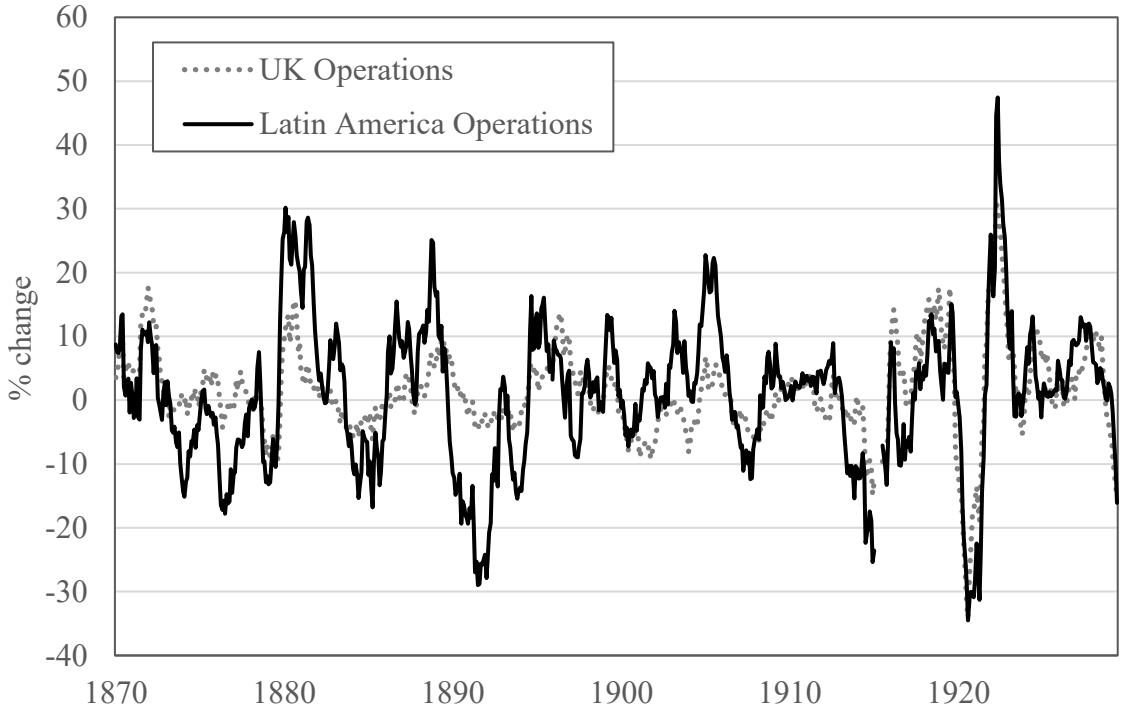
Notes: Includes all ordinary equity, preference shares, and corporate debt

Figure 2: Capital Gains on common equity of London listed firms operating in the UK vs. Latin America, 1869-1929

Panel A: Capital Gains Indices, Base Year=1869



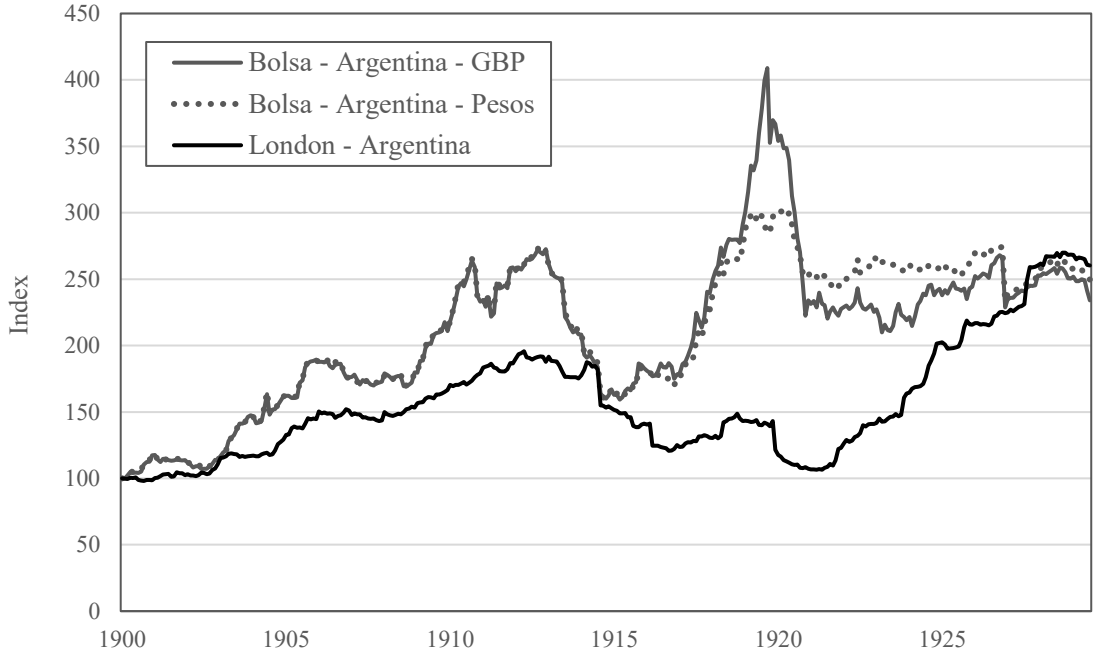
Panel B: Rolling 12 Month percentage change in Capital Gains Indices



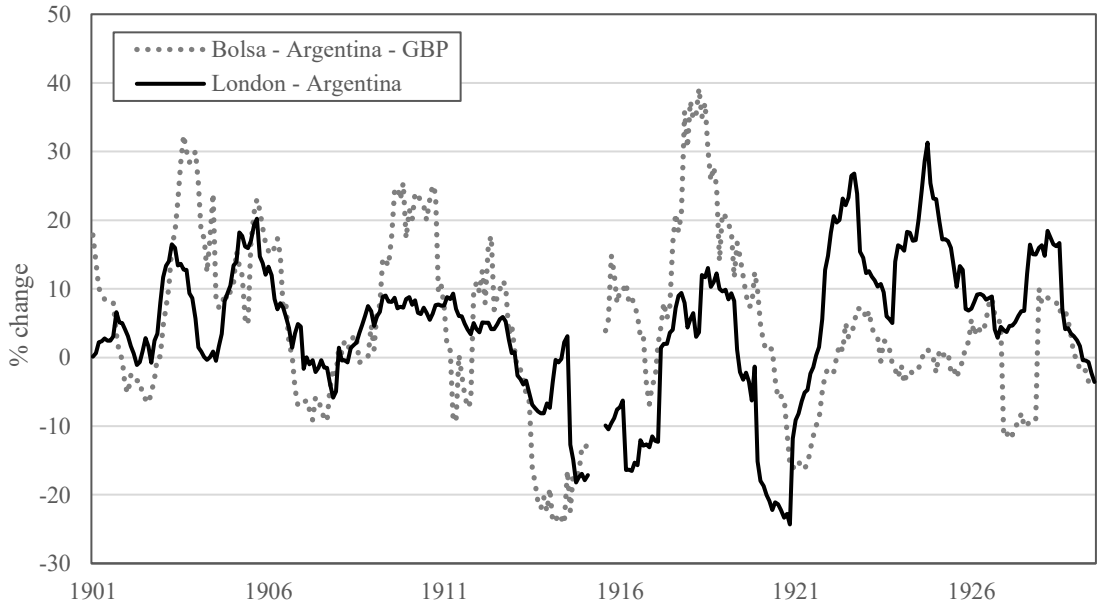
Notes: All firms are listed and headquartered in the UK but are separated by region of operations.

Figure 3: Capital Gains Indices on equities for firms operating in Argentina, with stock market listing in UK vs Argentina

Panel A: Capital Gains Indices, Base Year=1900



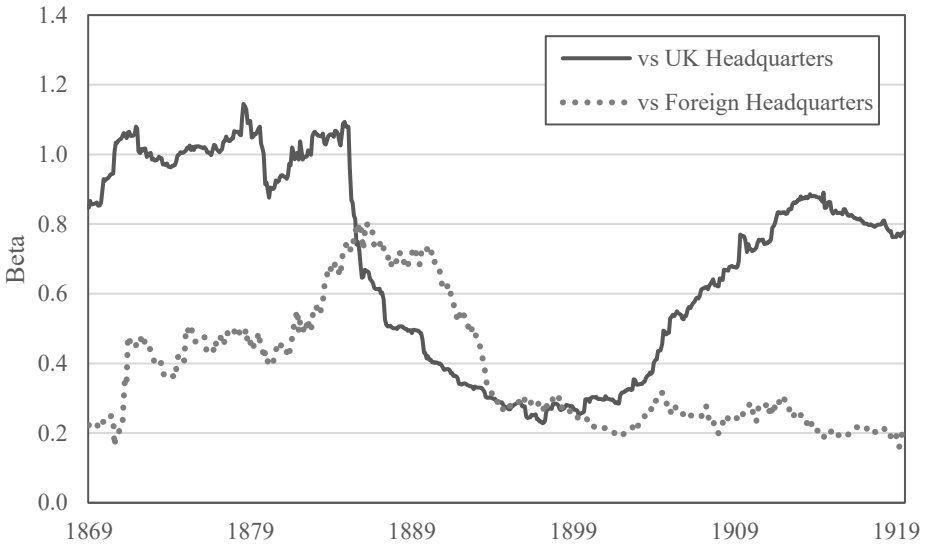
Panel B: Rolling 12 Month percentage change in Capital Gains Indices



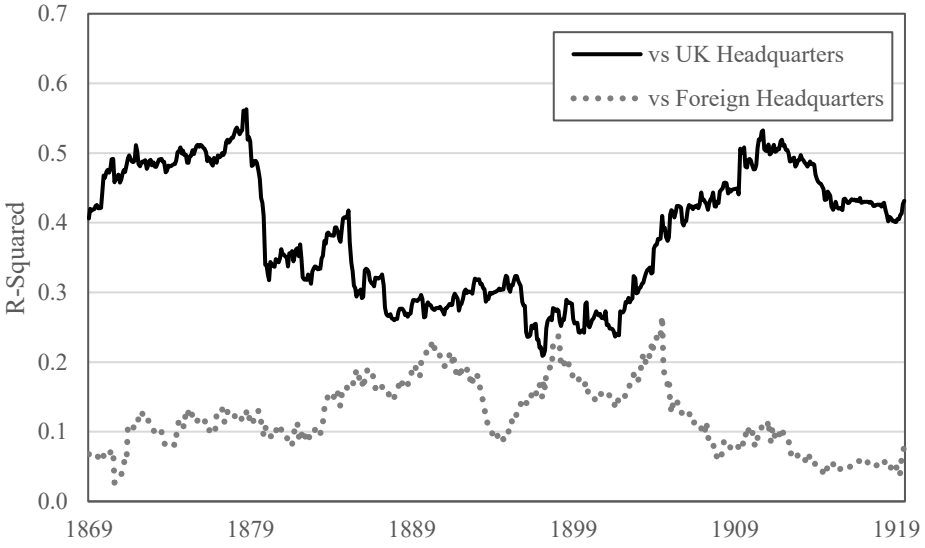
Notes: Bolsa includes firms which were listed on the local Bolsa exchange in Argentina. London includes firms with operations in Argentina but were headquartered and listed on the London Stock Exchange, excluding Railways. Bolsa indices are calculated in terms of their original pesos, and also when converted to British Pounds (GBP) using exchange rate data from the Economist.

Figure 4: Rolling 10 year window regressions explaining returns on a portfolio of equities of firms operating in Latin America with UK headquarters,
against portfolios of companies headquartered in the UK or other Foreign countries.

Panel A: Coefficient on Rolling 10 Year Regression



Panel B: R-Squared on Rolling 10 Year Regression



Notes: Rolling Regressions explaining the Returns on a portfolio of companies operating in Latin America and headquartered in the UK. 10 year window used, with the start date shown.

Table 1: Market capitalization by industry for firms operating in Latin America with UK headquarters and listings (%)

	1869	**1879**	**1889**	**1899**	**1909**	**1919**	**1929**
Total (£m)	10.0	26.9	124.5	159.3	350.1	353.1	406.9
Banks	15.6	7.3	4.1	3.7	3.4	3.1	3.0
Extractive	11.1	6.1	3.8	2.5	3.4	6.2	9.2
Food	-	-	0.3	0.6	0.6	2.3	1.2
Land	-	0.3	1.1	3.7	5.6	6.1	6.3
Other	2.9	-	-	0.2	0.3	2.2	2.0
Rail	52.1	66.5	83.6	83.1	79.2	72.4	70.7
Transport	2.0	1.5	0.4	0.2	0.2	0.9	0.7
Trusts	-	-	0.4	0.3	2.4	1.7	1.6
Utilities	16.3	18.4	6.2	5.7	4.8	5.1	5.3

Notes: All corporate securities including equities, preference shares and debt. Top line indicates the total market capitalization in £m, remaining figures are a % of the total.

Table 2: Market capitalization by country for firms operating in Latin America with UK headquarters and listings (%)

	1869	**1879**	**1889**	**1899**	**1909**	**1919**	**1929**
Total (£m)	10.0	26.9	124.5	159.3	350.1	353.1	406.9
Argentina	35.7	30.5	50.9	59.2	58.5	56.5	63.9
Brazil	48.6	33.0	18.4	16.3	13.2	15.2	12.3
Chile	1.4	2.1	8.9	6.3	5.8	6.5	7.8
Mexico	12.0	23.4	9.4	6.2	7.6	4.9	3.9
Uruguay	-	6.0	8.1	5.4	4.2	4.1	3.2
Venezuela	0.1	2.2	1.5	0.8	0.4	0.9	0.2
Other	2.2	2.8	3.0	5.8	10.4	11.9	8.8

Notes: All corporate securities including equities, preference shares and debt. Top line indicates the total market capitalization in £m, remaining figures are a % of the total. Other countries include Bolivia, Colombia, Costa Rica, Cuba, Ecuador, Nicaragua, Panama, Paraguay and Peru.

Table 3: Breakdown of average annual returns on common equities for firms headquartered and listed in the UK, comparing firms with operations in the UK vs Latin America 1870-1929 (%)

	Full	Decades					
	1870-1929	1870-1879	1880-1889	1890-1899	1900-1909	1910-1919	1920-1929
Panel A: UK Returns							
Capital Gains	0.6	1.8	1.4	0.8	-1.8	1.7	-0.3
	(1.5)	(1.3)	(1.0)	(1.0)	(1.0)	(1.7)	(2.5)
Dividend Yield	5.0	5.0	4.5	4.2	4.7	5.9	5.7
	(0.1)	(0.0)	(0.0)	(0.0)	(0.0)	(0.2)	(0.1)
Total Returns	5.6	6.9	6.0	5.0	2.8	7.7	5.4
	(1.5)	(1.3)	(1.0)	(1.0)	(1.0)	(1.6)	(2.5)
Sharpe Ratio	0.26	0.50	0.78	0.54	-0.10	0.38	0.05
Panel B: Latin American Returns							
Capital Gains	-0.3	-1.1	3.1	-4.2	3.1	-2.5	-0.1
	(2.6)	(2.4)	(2.3)	(3.0)	(1.9)	(2.6)	(3.0)
Dividend Yield	5.7	5.5	5.2	5.2	5.7	5.5	6.7
	(0.1)	(0.0)	(0.0)	(0.1)	(0.0)	(0.2)	(0.1)
Total Returns	5.3	4.3	8.5	0.9	8.9	2.9	6.6
	(2.6)	(2.5)	(2.3)	(3.1)	(1.9)	(2.6)	(3.0)
Sharpe Ratio	0.16	0.10	0.57	-0.10	0.74	-0.13	0.10

Notes: Standard deviations reported in parentheses. T-tests at the 5% level of significance for the difference in mean returns show no statistically significant difference between Latin American and UK total returns and capital gains for every period except 1900-1910, when Latin American returns exceed those on UK equities. Latin American dividend yields are significantly greater than dividends on UK equities throughout all periods except 1910-1919. The standard deviations on Latin American total returns and capital gains are significantly greater than the returns on UK equities throughout all periods, while the standard deviation on Latin American dividend yields are significantly greater between 1870-1909.

Table 4: Fama-Macbeth Regressions Explaining Returns of Stocks Listed in the UK

	(1) Returns	(2) Returns	(3) Cap Gains	(4) Cap Gains	(5) Div Yield	(6) Div Yield
OperLatAm	-0.002*	-0.000	-0.001	0.000	0.136***	0.158***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.005)	(0.005)
HQLatAm	0.000	0.000	0.001	0.001	-0.008	-0.005
	(0.002)	(0.002)	(0.002)	(0.002)	(0.005)	(0.005)
OperForeign	-0.002***	-0.001	-0.002***	-0.001**	0.191***	0.167***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.003)	(0.003)
HQForeign	0.002*	0.001	0.004***	0.002*	-0.285***	0.000
	(0.001)	(0.001)	(0.001)	(0.001)	(0.005)	(0.005)
Size		0.000*		0.000		-0.058***
		(0.000)		(0.000)		(0.001)
Age		0.001***		0.001***		-0.008***
		(0.000)		(0.000)		(0.001)
Liquidity		-0.004***		-0.004***		0.125***
		(0.001)		(0.001)		(0.004)
IndRailway		0.000		0.002***		-0.223***
		(0.000)		(0.000)		(0.004)
IndFinance		0.002***		0.003***		-0.151***
		(0.000)		(0.000)		(0.004)
Constant	0.003***	0.000	-0.002***	-0.004***	-5.349***	-5.222***
	(0.000)	(0.001)	(0.000)	(0.001)	(0.005)	(0.005)
Observations	877,119	828,878	877,119	828,878	714,156	681,539
R-squared	0.014	0.030	0.014	0.030	0.052	0.187
Number of groups	725	714	725	714	725	714

Notes: Fama-Macbeth regressions are used to explain returns, capital gains, and dividend yields of equities listed in the UK. Each month a cross-sectional regression is performed, the coefficients are saved, and averaged over time to test for significance. The dependent variables are expressed in logs to better approximate a normal distribution. OperLatAm equals 1 if the company operated in Latin America, and HQLatAm equal 1 if the company was headquartered in Latin America. OperForeign and HQForeign apply the same approach for companies operating or based in other countries outside the UK. The size, age and liquidity variables are lagged by 12 months to ensure all information is available before the returns occur. Dividend yield regressions exclude non-dividend payers. *** p<0.01, ** p<0.05, * p<0.1

Table 5: Fama-Macbeth Regressions Explaining Returns of Argentinian Stocks
Listed in the UK vs Argentina

	(1) Return	(2) Return	(3) Cap Gains	(4) Cap Gains	(5) Div Yield	(6) Div Yield
Bolsa	0.001	0.005	0.002	0.007*	0.181***	0.193***
	(0.002)	(0.003)	(0.002)	(0.004)	(0.011)	(0.021)
Liquidity		-0.007		-0.008*		0.062**
		(0.005)		(0.005)		(0.024)
Age		0.000		0.000		0.020***
		(0.001)		(0.001)		(0.005)
IndFinance		-0.002		-0.003		-0.142***
		(0.002)		(0.002)		(0.010)
Constant	0.005***	0.006	0.001	0.004	-5.323***	-5.406***
	(0.001)	(0.004)	(0.001)	(0.004)	(0.008)	(0.023)
Observations	13,421	12,649	13,490	12,705	9,753	9,238
R-squared	0.050	0.159	0.051	0.159	0.117	0.259
Number of groups	355	343	355	343	355	343

Notes: Fama-Macbeth regressions are used to explain returns, capital gains, and dividend yields of equities listed on the Bolsa, and also those equities listed in the UK but which operated in Argentina. Each month a cross-sectional regression is performed, the coefficients are saved, and averaged over time to test for significance. The dependent variables are expressed in logs to better approximate a normal distribution. Bolsa is equal to 1 if the stocks were listed in Argentina. The age and liquidity variables are lagged by 12 months to ensure all information is available before the returns occur. Dividend yield regressions exclude non-dividend payers.
*** p<0.01, ** p<0.05, * p<0.1

Table 6: Regressions explaining time-series returns on a portfolio of equities of firms operating in Latin America with UK headquarters and listings UK, using portfolios of market segments

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
All Securities	1.334***									
	(0.088)									
Latin CityGovt Bonds		0.652***								
		(0.058)								
Foreign CityGovt Bonds			1.204***							
			(0.135)							
UK Consol Bonds				0.487***						
				(0.082)						
All Equities					0.902***					
					(0.051)					
Operations UK						0.921***				
						(0.061)				
Operations Foreign							0.511***			
							(0.037)			
HQ UK								0.551***		
								(0.040)		
HQ Foreign									0.281***	
									(0.037)	
Bolsa										0.197***
										(0.059)
Constant	-0.001	0.001	0.001	0.004***	0.000	0.000	0.002**	0.002***	0.003***	0.005***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Observations	725	725	725	725	725	725	725	725	725	355
R-squared	0.341	0.255	0.126	0.075	0.335	0.287	0.230	0.323	0.095	0.054

Notes: Dependent variable is the returns on a portfolio of equities which were operating in Latin America which had their headquarters and stock market listing in the UK. The independent variables are portfolios of other securities which were listed in the UK. Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table 7: Regressions explaining time series returns on a portfolio of equities for firms operating in Latin America with UK headquarters and listings, using long-short portfolio risk factors

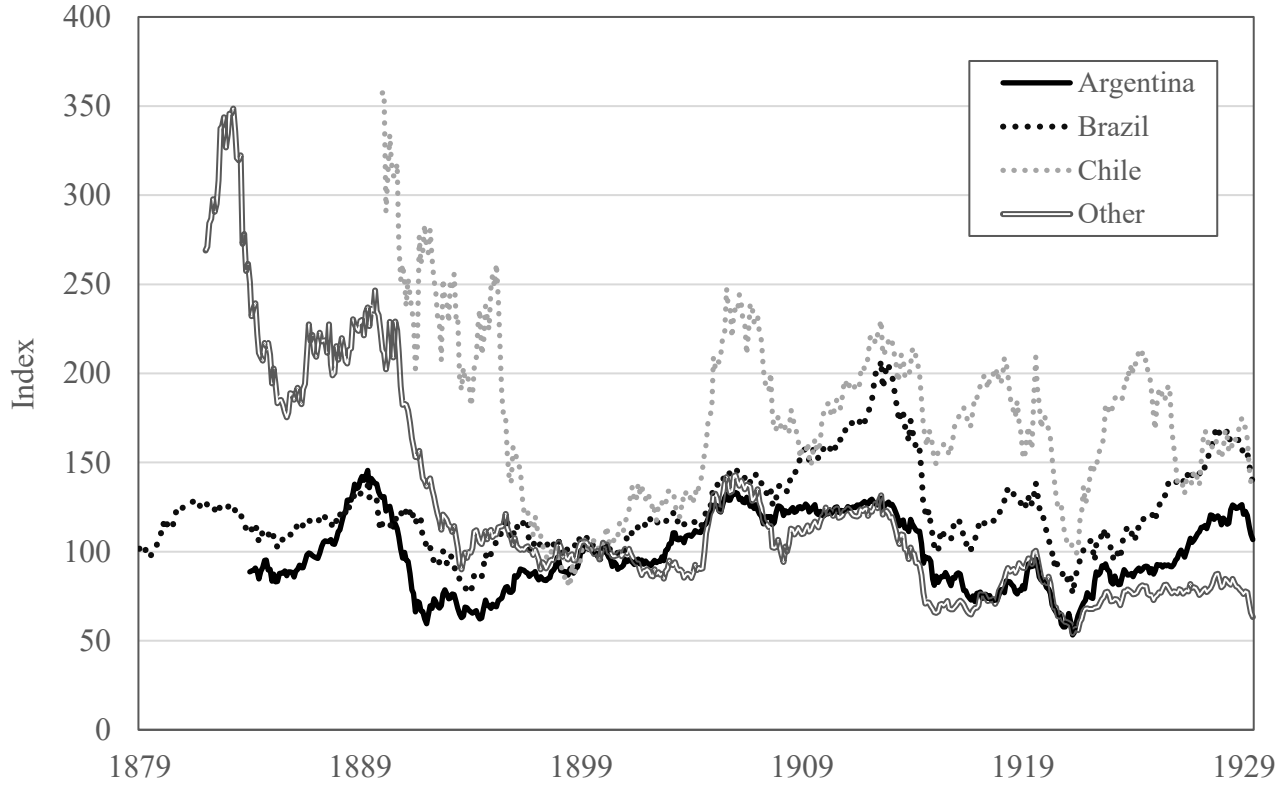
	(1)	(2)	(3)	(4)
HQFMD	-0.177***	-0.125***	-0.080***	-0.113**
	(0.032)	(0.034)	(0.031)	(0.046)
OperFMD	-0.050	-0.055	-0.040	-0.029
	(0.044)	(0.047)	(0.046)	(0.064)
EquityRf	0.931***	1.013***	0.785***	0.713***
	(0.057)	(0.058)	(0.062)	(0.084)
SMB		0.209***	0.164***	0.136*
		(0.046)	(0.048)	(0.079)
HML		0.067	0.045	0.022
		(0.045)	(0.042)	(0.054)
Term			0.509***	0.490***
			(0.069)	(0.121)
BondsLMD			0.396***	0.379***
			(0.051)	(0.119)
Bolsa				0.072
				(0.045)
Constant	0.000	-0.000	-0.001	-0.000
	(0.001)	(0.001)	(0.001)	(0.001)
Observations	725	713	713	355
R-squared	0.390	0.414	0.494	0.490

Notes: Dependent variable is the returns on a portfolio of equities which were operating in Latin America which had their headquarters and stock market listing in the UK, minus the risk-free rates. The independent variables are long-short portfolios of other securities which were listed in the UK. For example, HQFMD is the returns on a portfolio of equities which had foreign headquarters minus those which had British headquarters. OperFMD is the returns on a portfolio of equities which had foreign operations minus those which had British operations. Robust standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1

APPENDIX A: COUNTRY ANALYSIS

The main analysis focuses on the whole region of Latin America. To consider possible differences between countries within the region, this Appendix repeats some of the analysis for Argentina, Brazil, Chile, and Other countries separately.

Appendix A - Figure A1: Capital Gains indices of Companies Operating in Latin America by Country



Notes: Capital gains indices are shown for firms which are listed and headquartered in the UK, but which operated in particular countries in Latin America. Indices calculated when a country had at least 15 companies listed in the UK.

Appendix A - Table A1: Fama-Macbeth Regressions Explaining Returns using Country-Level Variables

	(1) Return	(2) Return	(3) Cap Gains	(4) Cap Gains	(5) Div Yield	(6) Div Yield
OperArgentina	0.001	0.001	0.001	0.002	0.047***	0.110***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.006)	(0.007)
OperBrazil	-0.000	0.001	-0.000	0.001	0.157***	0.182***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.005)	(0.005)
OperChile	-0.002	-0.000	-0.002	0.000	0.164***	0.128***
	(0.003)	(0.003)	(0.003)	(0.003)	(0.011)	(0.011)
OperOtherLatAm	-0.003***	-0.002	-0.003*	-0.001	0.184***	0.211***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.008)	(0.007)
HQLatAm	0.001	0.001	0.002	0.002	-0.022***	-0.026***
	(0.002)	(0.002)	(0.002)	(0.002)	(0.006)	(0.005)
OperForeign	-0.002***	-0.001	-0.002***	-0.001**	0.191***	0.167***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.003)	(0.003)
HQRegionForeign	0.002*	0.001	0.004***	0.002*	-0.285***	0.001
	(0.001)	(0.001)	(0.001)	(0.001)	(0.005)	(0.005)
Size		0.000*		0.000		-0.057***
		(0.000)		(0.000)		(0.001)
Age		0.001***		0.001***		-0.008***
		(0.000)		(0.000)		(0.001)
Liquidity		-0.003***		-0.004***		0.123***
		(0.001)		(0.001)		(0.004)
IndRailway		0.000		0.002***		-0.227***
		(0.000)		(0.000)		(0.004)
IndFinance		0.002***		0.003***		-0.152***
		(0.000)		(0.000)		(0.004)
Constant	0.003***	0.000	-0.002***	-0.004***	-5.349***	-5.221***
	(0.000)	(0.001)	(0.000)	(0.001)	(0.005)	(0.005)
Observations	877,119	828,878	877,119	828,878	714,156	681,539
R-squared	0.020	0.036	0.020	0.036	0.058	0.192
Number of groups	725	714	725	714	725	714

Notes: Fama-Macbeth regressions are used to explain returns, capital gains, and dividend yields. Each month a cross-sectional regression is performed, the coefficients are saved, and averaged over time to test for significance. The dependent variables are expressed in logs to better approximate a normal distribution. OperArgentina equals 1 if the company operated in Argentina, with a similar approach used for Brazil, Chile, and other countries ,HQLatAm equal 1 if the company was headquartered in Latin America. OperForeign and HQForeign apply the same approach for companies operating or based in other countries outside the UK. The size, age and liquidity variables are lagged by 12 months to ensure all information is available before the returns occur. Dividend yield regressions exclude non-dividend payers. *** p<0.01, ** p<0.05, * p<0.1

APPENDIX B: PREFERENCE SHARES AND CORPORATE DEBT

Our analysis to this point has focused on common equities for firms operating in Latin America. However, investors had access to a range of asset classes including corporate debt and preference shares and government debt securities. British investors were typically risk averse in our period under consideration, and due to their fixed interest component, many high-grade foreign bonds were viewed as better substitutes for safe investments than some British equities.[73] Kennedy describes the aggregate British portfolio of foreign investments as, 'bond-laden, conservative, and chosen to suit the tastes of discriminating rentiers'.[74]

Given that the returns to equities were influenced by the location of company headquarters rather than location of operations, we now consider whether this relationship holds for preference shares and corporate debentures. Considering the market capitalization of corporate securities in Appendix B – Figure B1 we note the market capitalization of common equities and corporate debt is broadly similar in scale until 1885, when we observe a significant increase in the amount of corporate debt issued in London, with this form of finance continuing to dominate throughout the remainder of the period. The use of preference shares is limited prior to the 1880s when we start to observe increasing usage of more fixed-income type securities which were tailored to attract conservative investors with guaranteed coupons and asset backed collateral.[75]

<<INSERT APPENDIX B - FIGURE B1 HERE>>

Appendix B – Table B1 outlines the average returns to the various Latin American and UK asset classes available to investors. Similar to equities, Latin American preference shares

[73] Kennedy, 'Foreign Investment, Trade and Growth in the United Kingdom, 1870–1913'.
[74] Kennedy.
[75] Edelstein, 'Foreign Investment and Accumulation, 1860-1914'.

underperform their comparators across the entire period, although the difference is not statistically significant. The standard deviation on Latin American preference shares was significantly higher and averaged more than double that on UK preference shares indicating a poor risk-return trade-off for investors with an overall Sharpe ratio of 0.03 across the period compared to 0.20 on UK preference shares. Latin American debentures significantly outperformed UK debentures by 1.5 percentage points across the period. Latin American debentures had a significantly higher standard deviation than UK debentures over the period, but this risk was compensated for in the form of higher returns, with an average Sharpe ratio across the period of 0.19 compared to 0.11 on UK debentures.

<<INSERT APPENDIX B – TABLE B1 HERE>>

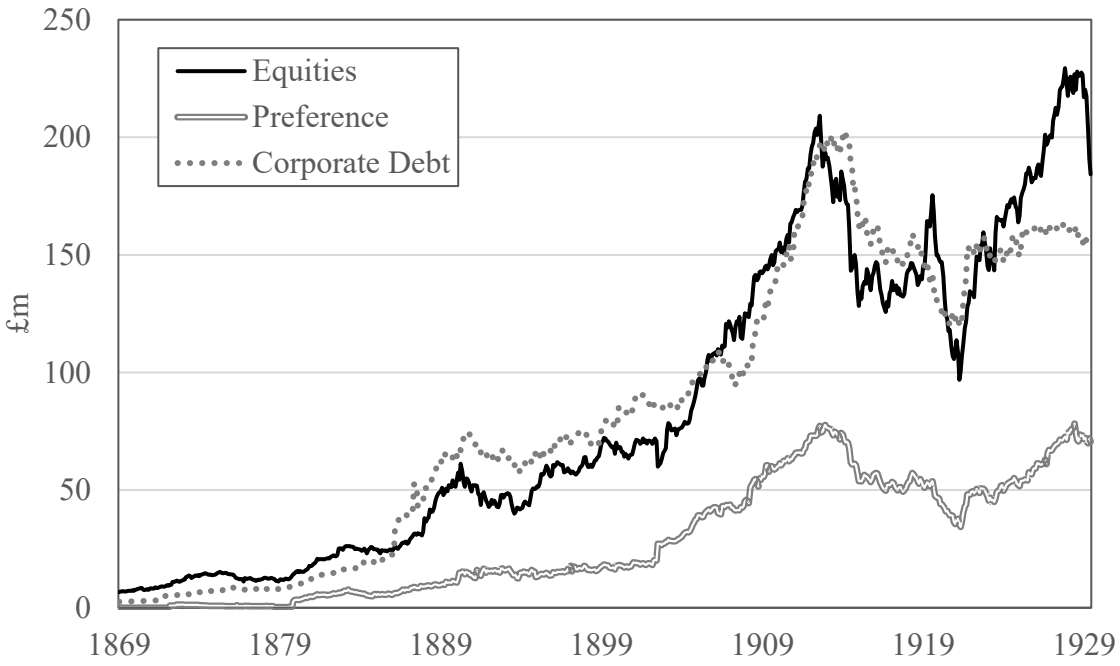
Interestingly, while UK securities generally follow the expected risk-return profile in that debentures offer the lowest returns followed by preference shares and then ordinary equities, the returns to Latin American securities do not follow this expected pattern. Per Appendix B – Figure B2 we observe that the total returns to debentures outperform equities for most of the period, and preference shares offer the lowest total returns to investors. One possible explanation for this could be a market segmentation argument where the returns to debentures are driven by firms only issuing this type of security. However, we rerun the analysis on total returns using only firms that issued all three types of securities in their capital structure and the unusual ordering of returns still holds. An alternative explanation may be that in light of disappointing ex post performance debentures outperformed equities due to their higher ranking priority in the cash waterfall with fixed coupon repayments vs uncertain dividend payouts which relied on residual cash being available.

<<INSERT APPENDIX B - FIGURE B2 HERE>>

We consider risk-adjusted returns in Appendix B – Table B2 which presents Fama-French regressions of the excess returns to each asset class against the various stock and debt risk factors discussed previously, and include all asset types in the construction of our headquarters and operations variables. For both preference shares and corporate debt, we find similar results to those which have been discussed for ordinary shares. Headquarters therefore played a similar role for these classes of securities, with those issued by UK based firms operating in Latin America moving in a similar way to other UK based firms.

<<INSERT APPENDIX B – TABLE B2 HERE>>

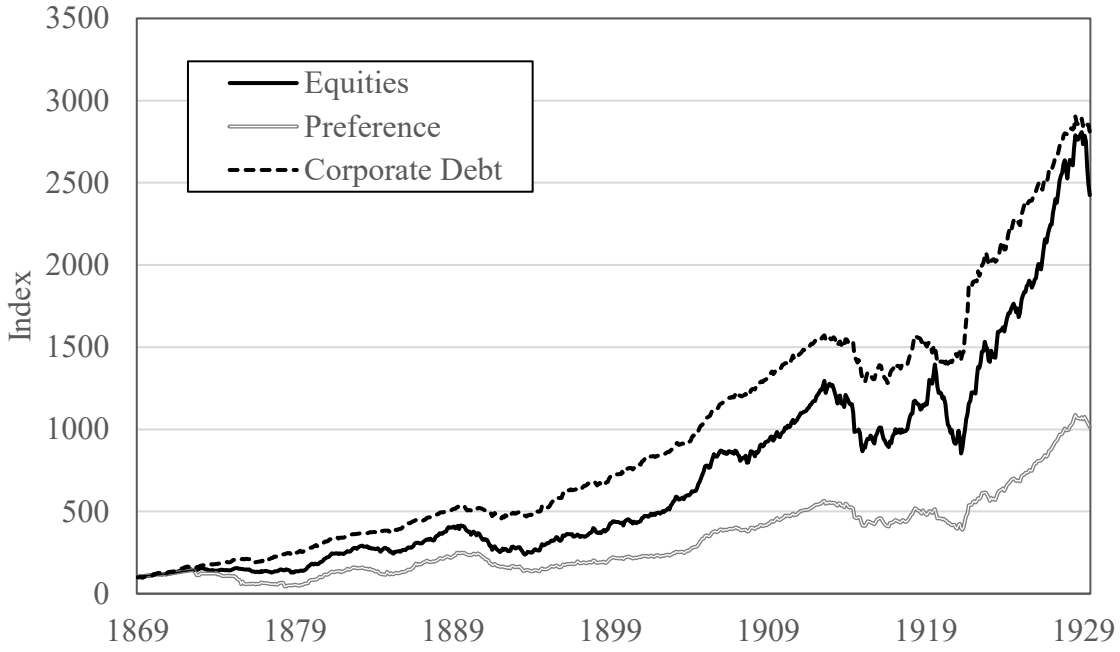
Appendix B - Figure B1: Market capitalization of securities issued by firms operating in Latin America with UK headquarters (£m)



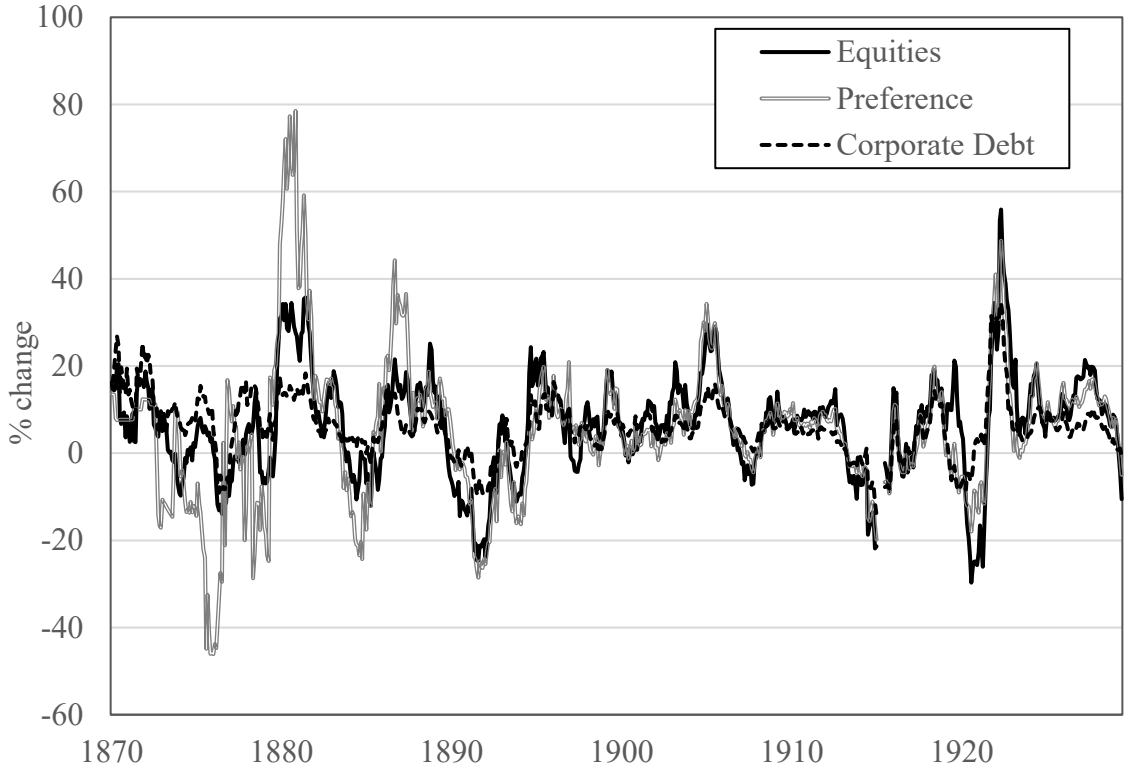
Notes: Total market value of securities of firms operating in Latin America and headquartered in UK.

Appendix B - Figure B2: Total return indices by asset class for companies operating in Latin America with UK headquarters, 1869-1929

Panel A: Total Return Indices, Base Year=1869



Panel B: Rolling 12 Month percentage change in Total Returns



Notes: Indices have base of 100 in January 1869. Returns include both capital gains and dividends.

Appendix B - Table B1: Average annual returns by asset class for firms with UK headquarters and listings, comparing firms with operations in the UK vs Latin America, 1870-1929 (%)

	Full	Decades					
	1870-1929	1870-1879	1880-1889	1890-1899	1900-1909	1910-1919	1920-1929
Panel A: UK Returns							
Equity	5.6	6.9	6.0	5.0	2.8	7.7	5.4
	(1.5)	(1.3)	(1.0)	(1.0)	(1.0)	(1.6)	(2.5)
Preference	4.5	6.8	6.1	3.8	1.5	2.3	6.3
	(1.1)	(0.7)	(0.8)	(0.8)	(0.8)	(1.1)	(1.9)
Debentures	4.1	6.0	5.6	3.6	1.5	1.8	6.4
	(0.9)	(0.5)	(0.9)	(0.8)	(0.6)	(1.0)	(1.5)
Panel B: Latin American Returns							
Equity	5.3	4.3	8.5	0.9	8.9	2.9	6.6
	(2.6)	(2.5)	(2.3)	(3.1)	(1.9)	(2.6)	(3.0)
Preference	3.8	-3.7	11.9	-1.3	8.0	0.8	7.6
	(3.5)	(6.4)	(3.5)	(3.0)	(1.7)	(2.1)	(2.4)
Debentures	5.6	9.9	6.2	3.7	6.5	0.7	6.7
	(1.5)	(2.1)	(1.1)	(1.5)	(0.8)	(1.4)	(1.7)

Notes: Standard deviations reported in parentheses, monthly geometric returns annualised.

Appendix B - Table B2: Regressions explaining returns on a portfolio of securities for firms operating in Latin America with UK headquarters and listings, using long-short portfolio risk factors

	Ordinary Shares (1)	Preference Shares (2)	Corporate Debt (3)
HQFMDAll	-0.159***	-0.163***	-0.077**
	(0.061)	(0.056)	(0.035)
OperFMDAll	0.026	0.054	-0.036
	(0.071)	(0.067)	(0.047)
EquityRf	0.751***	0.505***	0.258***
	(0.060)	(0.070)	(0.053)
SMB	0.173***	0.096*	0.041
	(0.047)	(0.055)	(0.032)
HML	0.030	0.015	-0.025
	(0.042)	(0.041)	(0.024)
Term	0.517***	0.566***	0.406***
	(0.069)	(0.070)	(0.046)
BondsLMD	0.399***	0.458***	0.290***
	(0.051)	(0.047)	(0.031)
Constant	-0.001	-0.000	0.000
	(0.001)	(0.001)	(0.000)
Observations	713	521	642
R-squared	0.493	0.477	0.440

Notes: Dependent variable in each regression is the returns on a portfolio of securities (either ordinary shares, preference shares, or corporate debt) which were operating in Latin America which had their headquarters and stock market listing in the UK, minus the risk-free rate The independent variables are long-short portfolios of other securities which were listed in the UK. For example, HQFMDAll is the returns on a portfolio of securities (including ordinary shares, preference shares, and corporate debt) which had foreign headquarters minus those which had British headquarters. OperFMDAll is the returns on a portfolio of securities (including ordinary shares, preference shares, and corporate debt) which had foreign operations minus those which had British operations. Robust standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1