The First Global Emerging Markets Investor: Foreign & Colonial Investment Trust 1880-1913

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Abstract: The Foreign and Colonial Investment Trust (FCIT) is the oldest surviving closed end fund in the world today and was established fully half a century before similar funds appeared in the US of the 1920s. Its early success was related to its identification of a missing market, namely, the provision of a wholesale diversified investment vehicle for the investing public. Whilst much research has been conducted on aggregate international capital flows in this First Era of Globalisation, little work has been undertaken on the prime investment institutions. This micro-study seeks to fill this gap by undertaking detailed quantitative analysis of the leading investment trust investing widely in emerging markets during the First Era of financial globalisation before WWI. The history of this flagship fund over more than three decades provides an insight into the relative success of this institutional innovation as well as into the risk and returns of investing in global emerging markets over a century ago.

The Foreign and Colonial Investment Trust (FCIT) is the oldest surviving closed end fund in the world today and made its first investments in 1868 fully half a century before such funds first appeared in the US. Established as the Foreign and Colonial Government Trust, it was substantially reorganised a decade later. An analysis of the annual portfolios from 1879, when its shares first became listed on the London Stock Exchange, until 1913 provides an insight into how one sophisticated investor approached the rapidly expanding world of international investment during the First Era of Globalisation (O'Rourke and Williamson 1999, Obstfeld and Taylor 2004). In contrast to previous research on the First Era which concentrates on the character and determinants of the aggregate capital flows from Europe (Edelstein 1982, Stone 1999, Esteves 2007), this paper is a micro-study of one of the pioneering investment institutions.

The contribution of this study is fourfold. First, the early success of FCIT derived from its identification of a missing market – that for wholesale investment in diversified portfolios by the general public – particularly at a time when domestic securities were yielding historically low returns. Improving upon the collective fund structure, first adopted by the Dutch in the 18th century (Rouwenhorst 2004), the closed end fund or investment trust model gained in popularity such that there were 61 investment trusts operating in London and quoted on the Stock Exchange on the eve of World War I with a combined market capitalization of over £60 million. FCIT's success also stemmed from the fact that it delivered on what it promised - attractive returns to the investing public at very modest cost and with low volatility. The fund's net asset value (NAV) averaged returns of 5.2% per annum, well in excess of the 2.2% return on British Consols with a better risk-return trade-off. The FCIT deferred shares performed even better delivering an attractive 6.9% return, thanks to the leverage provided by the issue of preference shares. FCIT shareholders experienced only one substantial downturn in the early 1890s.

Second, FCIT maintained its investment focus on emerging markets throughout the period. From its beginnings as a portfolio of "well-selected Government Stocks" it added

colonial government securities and then US railroad stocks. After 1890 the fund moved to a 90% exposure to the New World outside Europe. FCIT provides new insights into the risks and opportunities confronting international investors over a period of 33 years by a rapidly expanding developing world and invites comparison with emerging market investing in the very recent past since its re-emergence in the early 1990s.

Third, in estimating the NAV of FCIT's underlying investments, we can see the extent to which the deferred shares traded at a discount or premium to its NAV. To the best of our knowledge, no such estimates have been made before those for US closed end funds in the late 1920s made by De Long and Shleifer (1992) until now. Despite our doubts as to whether the average investor would have made such a calculation, we discover that the level of discount was not out of line with what investors a century later experience and most likely reflected the exposure to illiquid securities in the portfolio. Fluctuations in the discount before and at the time of the 1890 Baring crisis appear consistent with this being an indicator of the ebb and flow of investor sentiment, also in keeping with experience over the 20th century.

Lastly, our analysis of FCIT trading during the two most significant financial panics of this era, 1890-93 and 1907, shows that the managers displayed no evidence of contributing to any emerging market contagion. Instead, FCIT continued with its careful buy-and-hold approach based on its ability to pursue a long-term investment horizon consequent upon its choice of a closed end fund structure. Unlike mutual funds which emerged on both sides of the Atlantic in the 1930s and offered shareholders the facility to redeem units on a daily basis, this structure diverted the pressure of shareholders withdrawing their funds into the secondary trading of its shares on the LSE and left the managers free to hold onto their investment positions through the crisis.

The rest of the paper begins with a review of the literature on global capital flows and international investment during the First Era of Globalisation. Section 2 then describes the origins of the investment trust industry and FCIT in particular. Section 3 describes our data

and presents summary statistics on the FCIT portfolios. Section 4 discusses the extent of diversification achieved by the FCIT portfolios. In section 5, we first review the performance based on both NAV and share price and estimate the discount to NAV. We also benchmark the performance of FCIT to the investment trust industry and then discuss contagion and how the fund invested during the two major financial crises of 1890 and 1907. We finally compare and contrast emerging debt returns during this first age of globalisation with the returns generated during the more recent period since the 1980s. Section 6 concludes.

1. Global Investment Before World War I

The First Era of financial globalisation is of considerable interest both to historians of international finance and to those engaged in the current debate on the virtues and pitfalls of international financial integration. Even by today's standards, this was a period of remarkable capital mobility, whereby a restricted group of nations – the UK, France, Germany, Belgium, and Netherlands – exported a significant share of their national savings to the emerging market countries of the time (Obstfeld and Taylor 2004). Intuitively, this was a mutually favourable trade, as surplus countries gained access to better investment opportunities, and emerging nations financed rapid capital deepening, mainly through investment in infrastructure complementary to their pattern of specialisation in international trade.

Such a claim is supported by the evidence on *de jure* financial liberalisation during the four decades before 1914, a period remarkable for an absence of legal barriers, imposed either by capital-exporting or capital-receiving nations, to the unfettered flow of capital across borders (Quinn 2003, Esteves 2011). Studies identifying the determinants of European investor attitudes toward emerging markets before WW1 in general find that capital flows to

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¹ We adopt the Mauro, Sussman and Yafeh's (2006) definition of *emerging market countries* which relies not simply on GDP *per capita*, but also distance from the industrial core of Europe, reliance on capital inflows and relatively undeveloped capital markets. Their sample includes Argentina, Australia (from 1901), Brazil, Canada, Chile, China, Mexico, Portugal, Russia, Sweden, Turkey, Uruguay and the United States (up to 1900). We make only one departure from this list by including the US up to WW1.

these markets were mainly driven by natural resource abundance, human capital availability, and local institutional quality – all preconditions for long-run growth (Clemens and Williamson 2004, Esteves 2007). More recently, Faria et al. (2011) confirmed this result from the dual perspective of the yields at which investors were willing to lend to emerging countries for both the pre-1913 and post-1970 periods of financial globalisation. The similarity with the empirical results for the modern period is also striking (Alfaro et al. 2008, Bekaert and Harvey 2003, Gelos and Wei 2005).

There was, to be sure, a 'dark side' of capital market integration. As emerging nations became increasingly dependent on foreign finance, they also became unable to choose the currency in which they borrowed from abroad ('original sin') and were subject to 'sudden stops' of external finance due to their own deteriorating fundamentals or the onset of 'contagion' from other emerging countries (Catão 2006; Bordo, Cavallo and Meissner 2010; Kaminsky, Reinhart and Végh 2003). Furthermore, there is evidence that the credit cycle in core capital-exporting nations also had a direct impact on financial stability along the periphery, as it does today (Bordo 2006). A number of authors have tried to compare the frequency, nature, and costs of financial crises across time (Bordo et al. 2001, Eichengreen and Bordo 2003, Adalet and Eichengreen 2005, Reinhart and Rogoff 2009). The main result from this literature is that the frequency and type of crises are not independent from the underlying policy regime and, hence, cannot be explained fully by the degree of financial globalisation. In particular, crises were much less frequent before 1914 than today, despite comparable levels of financial integration, largely thanks to the operation of the classical gold standard.

Although less frequent, there is no evidence that pre-1914 crises were less severe in terms of lost output than in the recent past. However, this in itself is not conclusive, as we have to subtract the costs of volatility from the income gains, either through accelerated convergence (in a Solow world) or even permanently higher growth rates, in models with investment externalities. Meissner and Bordo (2007) make this comparison explicitly and

conclude that, over the long-run, capital openness contributed to higher per capita income growth, despite being associated with more frequent crises and output losses in the short-run. Everything considered, emerging economies seem to have gained in net terms over the long run from exposure to international finance.

What of the investing nations, led most notably by Britain? Here, overseas investment was often condemned by contemporaries and by later historians for exhibiting reverse home bias and forsaking investment in domestic industry. British investors were criticised for taking excessive risk on 'exotic' foreign securities, regarding which little reliable information and meagre protection were available due to differences in jurisdiction and sovereign immunity. In the UK, domestic industrial interests blamed the reverse home bias on the 'gentlemanly capitalists' in the City and the government's deferential treatment of financial and banking interests (Cain and Hopkins 1980, Rubinstein 1987). This state of affairs, it is argued, contributed to the 'decline' of the British economy during the late Victorian and Edwardian periods relative to Germany and the US as the new technologies of the Second Industrial Revolution took hold (Kennedy 1987). This view has been questioned by Edelstein (1982) who found that British investors appeared to have been perfectly rational in allocating so much capital overseas. Recent research employing mean-variance portfolio analysis and richer data on security returns has gone on to show that in aggregate British investors reaped the benefits of portfolio diversification (Goetzmann and Ukhov 2006, Chabot and Kurz 2010), although some groups of investors remained overweighted in the underperforming domestic railway stocks (Mitchell et al. 2011).

Markets, however, do not exist in an institutional vacuum, and we cannot understand the rise and expansion of a global capital market without considering the prime movers in financial intermediation. Compared to the literature on the micro-structure of stock exchanges (Davis and Neal 2005) or the role of investment banks in marketing foreign securities (Carosso 1970, DeLong 1991, Coffee 2001, Ramirez 2005), little detailed quantitative analysis has been undertaken on the investment institutions of this period. The

median investor at the time did not have the funds or the inclination to invest directly in a portfolio as diversified as the aggregate statistics of capital flows imply. Banks frequently advised their clients directly on investment opportunities, especially on the Continent.

In Britain, however, arms-length capital markets were more prevalent and the role of investment intermediation was provided in its purest form by the investment trusts. Herbert Feis duly singled them out as one of the four mainstays of the London market for long-term foreign securities, next to the powerful merchant bankers, the smaller private banks, acceptance houses and issuing brokers, and the financial and land investment companies. In his perhaps over-optimistic words:

"Offering steady support to all were the investment trusts, grown powerful through a combination of daring faith and careful judgment – absorbing, in particular, a large part of the loans of the governments and enterprises of the American continent."²

This institutional innovation afforded to the median investor a convenient vehicle for diversified investment, and quickly attracted considerable attention and success. The FCIT is both the pioneer and the longest-standing representative of this industry. The history of the rise of this flagship investment trust over the long and diverse span of time from 1868 to 1913 therefore provides an insight into this successful financial innovation.

2. FCIT and the Investment Trust industry

2.1 Origins and development of the industry

Our detailed micro study is complementary to earlier and broader studies of the development of investment trusts in Britain and the US (Scratchley 1875, Burton and Corner 1968, Bullock 1959, DeLong and Shleifer 1992, Newlands 1997, and Rutterford 2009). Although there had been early experiments in collective investment funds in the 18th century Dutch Republic (Rouwenhorst, 2004), Britain became the original home of a flourishing

² Feis (1930: 8-9).

investment trust sector a century later with the very first trust, the Foreign and Colonial Government Trust (FCGT), launched in 1868.³ The launch of FCGT prompted the first wave of new trust issues. By 1875, there were 20 investment trusts quoted on the London Stock Exchange, split between the London trusts concentrating on foreign government securities similar to the FCGT, and the Scottish trusts specialising in US securities.⁴ In contrast, the US did not establish its investment trust industry until the late 1920s.⁵

The Companies Act of 1862 greatly simplified the procedures for establishing limited liability companies whether finance companies or industrial companies.⁶ This legislation led to a surge in new company flotations many of which failed during the Overend Gurney crisis of 1866. In an attempt to avoid the increasingly unpopular company form, the common law trust structure with a board of trustees and listed on the London Stock Exchange was adopted.⁷

As the original name implied, the FCGT was to invest in overseas government stocks. According to the prospectus, this was the first investment vehicle of its kind "to give the investor of moderate means" the opportunity to invest in dividend-paying foreign stocks. Such trusts offered several advantages: a diversified portfolio (hence they were known as "average" investment trusts); a secure place for holding bearer bonds; the collection of foreign currency coupons and dividends; and superior information on foreign investment opportunities (Scratchley, 1875).

The trust was designed to offer a considerable yield pick-up over the modest 3.3% running yield on British Consols available in 1868 and invested in a fixed "schedule" of 18 foreign government bonds diversifed across Austria, Egypt, Italy, Latin America, New South Wales, Nova Scotia, Portugal, Russia, Spain, Turkey and the US. The intention was to buy

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^{.3} Burton and Corner (1968:15). There were earlier collective investment schemes such as the Cornish tin mines of the 1830s but these did not possess limited liability, Newlands (1997, chapter 2).

 ⁴ Ibid, p.17, Table 2-1.
 ⁵ Bullock (1959, ch.2), Burton and Corner (1968, ch.10).

⁶ Newlands (1997: 45).

⁷ Burton and Corner (1968: 15), quoting *The Economist.*

⁸ F&C prospectus.

and hold these bonds to maturity. The portfolio yielded around 8% and was funded by issuing trust certificates of £100 par value paying a coupon of 6% per annum at an offer price of £85.9 The certificates possessed an embedded lottery feature according to which any reserves accruing after payment of the 6% coupon were used for a sinking fund under the terms of which certificates were randomly drawn each year and repurchased at par. It was originally intended that the trust have a life of 24 years and that its investments be held to maturity and only be sold under exceptional circumstances such as the approach of financial distress. Over the next 5 years FCGT made a further 5 issues of certificates to invest in foreign government bonds and a sixth in 1873 to create the American Investment Trust dedicated to US railroads.

In 1879, following the ruling in *Sykes v. Beadon* which declared the common law trust structure illegal, FCGT along with almost all the rest of the investment trust industry converted themselves into joint-stock companies and adopted a capital structure more familiar to investors in investment trusts or closed end funds today. Just as importantly, the trust was also keen to put an end to its embedded lottery feature by this restructuring. These improvements on the original 18th century Dutch design enabled the British investment trust sector to flourish.

Under the reorganisation, all outstanding £100 certificates were exchanged for a combination of preferred stock and deferred stock.¹⁰ Both securities carried equal voting rights but the former paid a fixed dividend of 5% and ranked ahead of the latter in paying dividends; the deferred stock then received any dividends declared in excess of the 5%. In 1879, there were approximately £1.2m and £1.1m of nominal preferred and deferred stock respectively. Hence, such a capital structure introduced a substantial element of gearing into

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⁹ McKendrick and Newlands (1999: 32-34).

¹⁰ McKendrick and Newlands (1999, ch.3).

the trust at slightly over 100% which remained virtually unchanged throughout this period.11 One feature of the fund did not change and that was the buy-and-hold investment approach.

A second new issue boom occurred between 1887 and 1890 when 72 new trusts were floated on the LSE.12 This boom saw the creation of a new breed of "financial" trust which sought to boost investment returns by earning fee income from underwriting new issues, by investing in illiquid securities and by specialising in particular sectors of the market, particularly Argentina and Latin America. 13 The Baring crisis of 1890 brought this boom to an end and exposed the fragility of many of the newest trusts. A total of 24 trusts were wound up between 1892 and 1896.14 Amid this turmoil, the FCGT widened its investment powers in 1891 to include foreign railway and industrial corporate securities and changed its name to Foreign and Colonial Investment Trust (FCIT), in response to the decline in the yields offered by foreign government or municipal stocks. 15

The reputations of the trusts surviving the Baring Crisis, among them FCIT, were substantially enhanced, although it took a considerable time for investors to recover their confidence in the sector. Hence, a third new issue boom did not begin until 1905 lasting until the outbreak of war in 1914. Even then the trust sector still represented less than 1% of the total market capitalisation of the foreign, colonial and corporate securities quoted on the London Stock Exchange. 16

2.2 Managers and Shareholders of FCIT

At this point, natural questions arise about the fund's corporate governance and what sort of investors were attracted to the fund.

¹¹ The only subsequent change was a modest further issue of £47,500 nominal value of preferred stock in 1891.

¹² Burton and Corner (1968: 28), Table 3.1.

¹³ Rutterford (2009: 162); Newlands (1997, ch.7).

¹⁴ Newlands (1997: 141)

¹⁵ McKendrick and Newlands (1999: 67-68).

¹⁶ Burton and Corner (1968: 327). Table A2.

There was no separately appointed investment manager until 1924. The Board of Directors was collectively responsible for managing the portfolio and comprised the four original trustees with between 6 and 10 additional directors. The four trustees retained a veto over all transactions. Trustees were appointed for life and although directors had to seek reelection every 2 years there was considerable stability in board membership. Fach director was required to hold a minimum of £1,000 of nominal value in FCIT shares. Hence, the incentives of the trustees and directors as investment managers were well aligned with the shareholders and would have helped to mitigate any principal-agent problems.

The FCIT board was well-connected. In total, the Board held a total of 113 directorships in the years 1880, 1890 and 1900 for which we checked all listings in Thomas Skinner's *Directory of Directors*. The majority of these directorships were of other investment trusts (55), insurance companies (12) and banks (6). A number also served on the boards of US railroads (14) such as the Alabama Great Southern Railroad and Alabama, New Orleans, Texas etc Railroad, as well as in British railways (16). Furthermore, there were some well-connected individuals. Sir Philip Rose who remained a trustee through the whole period was a City lawyer and Disraeli's personal financial advisor. Joseph Sebag (on the board in 1880-1903), William Trotter (1880-1908) and Arthur Clarke (1891-97) were all London stock brokers. Trotter was also a member of the Corporation of Foreign Bondholders. The case of FCIT would therefore appear consistent with the view that City and social connections of the trust directors and their interlocking directorships were important in bringing about a judicious selection of investments.

Turning to the investors, the shareholders in FCIT seem to have been extracted from the well-to-do upper and professional middle classes. Rutterford (2009) sampled shareholders in FCIT for the years 1882, 1892, 1902, and 1912. Whilst this dataset does not

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¹⁹ Cassis (1994: 150-52).

¹⁷ The average term served by the 9 trustees and 21 directors between 1880 and 1913 was 14 and 12 years respectively.

¹⁸ Foreign American and General Investment Trust (18) and the American Investment Trust (15) were the most numerous. The latter was a sister trust to FCIT, as mentioned.

tell us the total number of shareholders, it does allow us a glimpse of the type of investor attracted to the fund by including information on the personal identity, gender, professional and class status, and the additional security holdings of around 190 shareholders in each year. Professional status was only recorded for men, with the most frequent category reported being that of 'Esquire,' although the military, religious, and legal professions were also represented. **Table 1** lists summary statistics of the shareholdings in these samples and compares them with a separate source for 1912, the *Investors Four Shilling Yearbook*, which stated the total number of shareholders for that year as 4000.

As the distribution of individual holdings was typically skewed to the right, it is more informative to concentrate on the median holdings, which avoid the impact of a few large outliers on the mean figures. Throughout our period, the median holdings fell by about a quarter from £400 to £300, which although not a small sum for the time implies that FCIT served the modestly well-off investment public and was not simply a vehicle for the extremely wealthy.²⁰ Equally interesting is the fact that the vast majority of investors held both types of shares (deferred and preferred) in roughly equal proportions, although this pattern seems to have abated over time, such that by 1912 the majority of investors sorted into just one type of share. This may have come from an increase in risk appetite among investors after the turn of the century, which is consistent with a narrowing in FCIT's discount to NAV (see section 5.2).

It is worth summarising the main features of FCIT as it evolved up to 1913 discussed in this section. First, diversification was a primary objective together with the provision of a yield premium to that available in British Consols. Second, although FCIT disclosed its portfolio holdings annually and therefore transparency was relatively good compared to

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²⁰ We had no control over the sampling method, but we do not think that Rutterford (2009) introduced any obvious bias in the data. We are unable, however, to discard the alternative interpretation of the data according to which the shareholders of FCIT were very rich individuals who spread their investments among 60 odd investment trusts operating in 1912, as opposed to mid-sized savers who mostly invested through one trust.

many other trusts at that time (Newlands 1997: 149-150), all holdings were nonetheless stated at book cost and investors were not told the market value of the underlying investments to which they were entitled. Third, the investment approach was to buy and hold securities to maturity, unless the prospect of financial distress created a need to sell early there was no attempt at market-timing. Fourth, with no appointment of a specialist portfolio manager until 1924, the trust was managed by the board. Both these last two features would account for an overall expense ratio revealed in the annual accounts to be very low at between 0.2% and 0.25% of total assets which compares to a level today at least four or five times this figure. Lastly, the extensive connections, the lengthy average tenure of board members and their shareholdings in the fund whilst not conclusive suggest that the management in general had their eyes fixed on the long-term investment horizon.

3. Data and Descriptive Statistics

3.1 Data Description

Our main data source is the security holdings of the FCGT and subsequently FCIT, disclosed at book cost in the annual reports distributed in early January each year from 1880 to 1913. The total number of security holdings increases from 94 in 1880 to 312 in 1913 (**Table 2**). Neither FCGT nor FCIT provided a market valuation of the portfolio holdings at any time during this period. Hence, we set about the considerable task of pricing each of these holdings every year up to 1913. In so doing, we obtain the market prices of each security at the prior December year-end from the *Investors Monthly Manual*, the London *Stock Exchange Daily Official List*, the *Commercial and Financial Chronicle* and *Burdett's Stock Exchange Official Intelligence*. Interest and dividends paid are taken from the latter two publications. Benchmark security returns data is taken from Chabot and Kurz (2010) and

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²¹ Foreign and Colonial Archives.

²² In the case of Burdett's, the price was quoted as a high/low for the year and we used the simple average.

from Edelstein (1982).²³ Investors would not of course have had knowledge of such benchmark data and would have relied upon benchmarking any investment against the performance of British Consols.

Whilst we make every effort to price the FCIT portfolios, we are unable to locate market prices for between 10 and 15% of the portfolio across the period. It is likely that these securities were traded infrequently, were traded on a regional stock exchange for which prices were not collected or were unquoted investments privately placed with FCIT. Since we believe that the portfolio characteristics analysis which follows below is more informative when expressed in market values, we value these holdings at the initial offer price where disclosed, at par when coupon payments have been paid, or at zero value when they have not. ²⁴

We estimate net asset value (NAV) of the fund once a year by summing the market values of the liquid holdings and our estimated values of the illiquid "stub" investments and deducting any borrowings, including the preferred shares. Hence, an important contribution of this paper is that we can now estimate the performance of the underlying investments in FCIT since the NAV can diverge from the market valuation of its shares.

Furthermore, we track any balance sheet and share capital changes of FCIT over this period in order to estimate the NAV per deferred share by dividing the total NAV by the number of deferred shares outstanding at each December year end. A deferred share price below (above) the NAV per share measures the fund discount (premium) to NAV. We discuss the evolution and significance of the annual time series of this discount (premium) measure in section 5.2 below.

In making such estimates of the net asset value (NAV) of the fund, one must bear in mind that it is extremely unlikely that the average investor would have had the time and

²⁴ The portfolio characteristics analysis has also been done in terms of par values and our main findings remain unaltered.

²³ We deflated the Chabot & Kurz nominal returns and reestimated the Edelstein real returns using the deflator from Feinstein (1972), tabs. 2 and 5.

energy to price the whole portfolio and therefore to do the same, particularly after 1890 given the increase in the number of holdings to over 200. Hence, whilst investors could check the price of the deferred (and the preferred) shares traded on the LSE on a daily basis, they in all probability would not have known how far the price of the deferred share diverged from the underlying NAV per share.

Unfortunately, we have not as yet uncovered any minutes or other documents which provide any commentary on the investment decisions which were taken by FCIT. In addition, we have been unable to locate the transaction records of FCIT and hence we infer transactions in any given year from changes in security holdings year-on-year. The very low turnover implied by FCIT's buy-and-hold investment approach means that it is unlikely that the fund was trading in and out of securities on a regular basis within any given year and we therefore believe these annual changes in holdings to be a reasonable approximation to the actual trading undertaken by the fund.

3.2 Portfolio characteristics

FCIT spearheaded the development of the investment trust industry by exploiting the opportunities for portfolio diversification to the full. In keeping with the investment orthodoxy of the times, the trust was predominantly invested in fixed-income securities (**Table 2**). On average less than 10% of the portfolio (by number of securities or market value) was invested in preferred and common stocks. By industrial sector, stockholdings were concentrated in railways and especially manufacturing. Furthermore, FCIT invested mainly in long-dated bonds. Over the whole period, the average maturity of redeemable bonds stood at 35 years. In the 1880s, this exposure was initially driven by holdings of government perpetual bonds, which remained around two thirds until 1889, thereafter declining to 22% on the eve of WW1.

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²⁵ On average, 16% of railway investments were held as stock, while the corresponding figure for manufacturing and other industries was 40%.

FCIT's investments displayed a distinct international focus as its name implied. The extent of the regional breakdown is summarised in **Table 3** which displays the cumulative number of stocks and the corresponding total value invested across the whole period. Whilst FCIT did invest in British securities, the total amount was very modest at only £8 million and was dwarfed by the investments in the US (£103 million) and Argentina (£78 million).

Increasingly, the primary focus of the fund was the emerging New World, with both North and South America leading the way, and this represented at least 70% of the total market value following the change in investment guidelines in 1891, (**Figure 1**). Notwithstanding the dramatic Baring crisis of 1890 and the substantial contagion in emerging markets that it brought about (Mitchener and Weidenmier 2008), FCIT maintained a heavy allocation to the Americas. In contrast and despite the trust's name, the allocation to British Empire securities trended down over time from 22% in the mid-1880s to below 4% by 1910 (see **Table 4** below).

In the period 1880-1913, FCIT invested in 882 different securities, sold by 443 issuers spread across 46 countries, territories and colonies. The impact of the 1891 enlargement of the object of the trust to non-government issues is also evident in the stepwise increase in the number of securities, rising to over 300 on the eve of WW1. As the number of securities increased, portfolio concentration, measured by the percentage of the portfolio invested in the 10 largest securities, declined from 42% in the 1880s to 24% in the 1890s and then to 17% after the turn of the century. Portfolio turnover, defined as the ratio of the lower of purchases and sales on each year over the total portfolio value, was extraordinarily low, averaging below 20%.

Regarding sector allocation, FCIT distributed its investments in the 1880s between sovereign and colonial government bonds and government-guaranteed corporate bonds, particularly railway bonds (**Figure 2**). The enlargement of the trust's investment scope allowed investment in the securities of "companies or corporations not guaranteed by any

Government, State, or Municipality" as reported by Lord Eustace Cecil to the 1891 AGM.²⁶ Although this led to a growing interest in public utilities and in industrial ventures, the trust in large part used this added flexibility to increase its exposure to railways.

In summary, FCIT's large number of holdings, low portfolio concentration and low turnover are entirely consistent with its stated buy-and-hold investment approach which emphasized holding investments to maturity, other things being equal, and eschewing opportunities to switch actively between issues.

4. Portfolio diversification

Given the large number of security holdings as we saw above, FCIT was on the face of it well-diversified. Based on aggregate market indices, the literature has underscored the gains from diversification implied by the composition of the aggregated security portfolio available to British investors (Goetzmann and Ukhov 2006, Chabot and Kurz 2010). In this section, we seek to identify these gains for the FCIT by comparing the portfolios with three different benchmarks: (i) a GDP-weighted global benchmark; (ii) the aggregate patterns of foreign portfolio investment by British investors; and (iii) the optimal portfolios implied by the historic risks and returns available to investors during this period.

4.1 GDP-weighted benchmark

In the absence of a market-capitalisation-weighted global benchmark for the historical period, we make use of Maddison's (2006) data on the distribution of global GDP to create a GDP-weighted benchmark for the years 1900 and 1913. Europe accounts for 47% (46%) of world GDP in 1900 (1913), Asia 28% (25%), North America 18% (21%), South America and Africa 4% and 3% each for both years. Compared to this distribution, FCIT was heavily overweight in each of North America (28% in 1900 and 31% in 1913) and South

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²⁶ Cit. in McKendrick and Newlands (1999: 66).

America (28% in 1900 and 31% in 1913). Correspondingly, the portfolios had large underweights in Europe and Asia-Pacific, approximately 40% and 20% respectively.

FCIT was truly the first diversified emerging markets investor. Using our modified Mauro, Sussman and Yafeh definition of an emerging market, we can classify slightly less than 70% of world GDP in 1900 and 1913 as of "emerging" status.²⁷ This weighting probably exceeded by a wide margin the market capitalisation weights which by definition reflect the underdeveloped nature of the local capital markets in these emerging countries. FCIT allocated considerably more to these markets (88% in 1900, and 93% in 1913) than even the higher GDP weighting.

4.2 Comparison with Cumulative Capital Flows

Stone (1999) compiled and edited the aggregate statistics on British capital exports between 1865 and 1913. We make use of his data by cumulating the aggregate annual capital flows but, in so doing, there are two caveats to keep in mind. First, we do not have information on the changes in investment positions for the whole British portfolio and so are forced to ignore reinvestment of income or divestment of previously acquired securities. A second caveat concerns the pricing of the securities. Since Stone (1999) compiles the funds effectively paid by British investors for new foreign issues, all flows are valued at issue price and ignore any subsequent valuation changes. Nevertheless, any bias introduced by this omission is likely to be modest over the period considered here due to capital gains being

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²⁷ Unfortunately, we cannot apply the same emerging market definition in sections 4.2 and 4.3 below given the lack of granularity in these alternative benchmark data.

²⁸ One option would be to reconstitute the evolution of the stock of British investments abroad by using a version of the permanent inventory methodology. That would require some assumptions about rates of return and attrition which would be open to criticism. There is, to be sure, a long literature on the estimation of the total return on the composite British portfolio (Edelstein 1982, Davis and Huttenback 1986, Chabot and Kurz 2010). However, it is practically impossible to identify which fraction of income was reinvested and in which securities. It is also virtually impossible to identify divestitures after the flotation of foreign securities and initial capital calls.

small relative to income returns for both domestic and foreign securities and across the different markets.²⁹

Bearing these caveats in mind, we compare the regional and sector breakdown of the FCIT portfolios with the British capital exports cumulated from 1880 at 5 yearly intervals beginning in 1885 and show the differences between the FCIT allocation and the regional share of cumulative capital flows (**Tables 4 and 5**).

Broadly speaking, FCIT replicates the characteristics of British investment abroad documented in the literature, namely, a preference for investments in the regions of new European settlement and for such infrastructure investments as railways and public utilities (Feis 1930, Fishlow 1985, Davis and Gallman 2001). Yet, there are also marked differences in asset allocation. Regionally, FCIT was heavily underweight in the Asia/Pacific region, and correspondingly overweight in American securities, especially South American (**Table 4**, **Panel C**).³⁰ Second, somewhat ironically, FCIT had a much lower exposure to the British Empire than the aggregate of capital exports with an underweighting which ranged between 19% and 39% over the period (**Table 4**, **Panel C**).³¹ Third, FCIT preferred a more conservative allocation of investments by industrial sector, favouring railways over natural resources and manufacturing after it modified its investment guidelines in 1891 (**Table 5**).³²

This allocation policy seems to reflect the self-proclaimed preference of FCIT trustees for the most liquid emerging market securities. Moreover, railway investments were made more attractive by the frequent official guarantees attached to them, and also by the relatively better disclosure of information to investors thanks to the many trade publications

²⁹ On Britain see Grossman (2002), on France Le Bris and Hautcoeur (2010), Annaert et al. (2010) on Belgium, and on the US Goetzmann et al. (2001).

³⁰ The interest of the FCIT promoters in American investment is further underscored by the creation of a dedicated vehicle, the "American Investment Fund, Ltd," in 1873 with a capital of £1 million.

³¹ This is not an artifact of our inability to value the aggregate British portfolio at market prices. Woodruff (1966) attempted to do so for two benchmark years, 1896 and 1913, and the share of imperial investments is even larger than on the cumulated flows.

There is likely to be an interaction between FCIT's preference for fixed-income securities and the sectors in which it invested. For instance, mining companies mainly floated ordinary shares, which limited the ability of a fund with the approach of FCIT to invest in them.

of the period that publicised construction rates, and traffic and income returns from railways around the globe (Bordo et al. 2001).

4.3 Optimal Portfolios

Following Goetzmann and Ukhov (2006) we employ mean-variance optimisation to estimate portfolios which maximised the return per unit of risk as expressed by the Sharpe Ratio at particular points in time. We make use of the Chabot and Kurz's (2010) data set from 1866 to 1907 and assume investors knew the historic annual returns beginning in 1866 for the 6 sectors of the investment universe: Empire bonds, Empire stocks, US bonds, US stocks, Other Foreign Bonds and Other Foreign Stocks.³³ We exclude British government bonds, corporate bonds and stocks since the stated investment objective was to invest offshore and in aggregate these sectors were never more than a few percent of the whole portfolio.

Since the optimal weights resulting from this type of portfolio optimisation technique are sensitive to minor changes in the expected returns of the assets we employ a bootstrapping procedure to improve the precision of our estimates. According to this procedure, we make 1000 random draws from the distribution of returns for each sector. On each draw, the vector of expected returns and the variance-covariance matrix is estimated, and the optimal portfolio weights computed. From the resulting distribution of optimal weights, we estimate their mean values based on the historic annual returns for 1866 to 1890, 1900, and 1907 and for 1880 to 1900 and 1907. The choice of 1886 reflects the start date of the Chabot and Kurz data set and that of 1880 synchronises with the start date of the reorganised FCIT. Five sets of mean optimal weights are therefore reported in **Table 6**, Panel B, the corresponding actual FCIT portfolio weights in Panel A and the difference between the two in Panel C.

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³³ We extract the returns on Other Foreign Bonds and Other Foreign Stocks from the Chabot & Kurz returns for Non-Empire Bonds and Non-Empire Stocks respectively by making use of the nominal market capitalisation weights for US and Foreign bonds and stocks in Michie (2001), Table 3.3, p.88.

There are two interesting conclusions to be drawn from this analysis. First, in general, bonds were more attractive than shares on a risk-adjusted basis. Second, the large weighting of Empire bonds in the optimal portfolio in 1890 is a reflection of their attractive risk-adjusted returns to that point. However, the sharp decline in this weighting in 1900 and 1907 in favour of US and Other Foreign bonds supports FCIT's decision to sell down its Empire exposure after 1890. The optimal portfolios derived from historic returns for the periods beginning 1880 show a more modest allocation to Empire bonds with US bonds and Other Foreign bonds dominating the portfolio.

Broadly speaking FCIT is reasonably close to the allocations of the rational investor by the end of the period reflecting the diversification benefits of making substantial allocations to the bonds of North America and countries outside the British Empire.

5. Performance

5.1 Buy-and-hold returns

We estimate FCIT performance in terms of the buy-and-hold portfolio returns over each year from 1880 to the end of 1912. Given FCIT's buy-and-hold investment strategy and its very low portfolio turnover, we believe it is appropriate to calibrate performance in this way.

We can test our hypothesis that FCIT pursued a long-term buy-and-hold investment approach in two ways. The first regresses individual holdings of portfolio securities at book values on the contemporary and lagged prices of the same securities.³⁴ Since we measure prices at the end of each year, this model tests, in effect, whether the managers of FCIT reacted to price changes during the year. The results in **Table 7**, column (1) show that the board did not directly react to short-term price movements. In addition and perhaps surprisingly, when we control for whether a security was in default during each year, FCIT

³⁴ We naturally exclude securities when they were included for the first time in the portfolio.

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did not change their allocations away from securities temporarily in default.³⁵ We obtain the same results when we estimate the model regressing any changes in the holdings of a particular security on its price change during the year. Columns (2) and (3) of **Table 7** show that the decisions to increase or decrease the exposure to a given security were not reactions to short-run price movements.

The buy-and-hold total return for each security in a given year comprises the income return (interest and dividends) plus capital appreciation for each security held by FCIT. Using the weightings of each security in the overall portfolio at the start of the year, we sum the weighted returns to arrive at portfolio income returns, capital gains (and losses) and total returns in both nominal and real terms. The results are summarised in **Table 8**.

Over the whole period, FCIT investors earned an average nominal return of 5.2% p.a. with a very modest standard deviation of 4.1%, despite the considerable variance in yearly returns across individual securities. Real returns were very similar. Since capital gains averaged only 0.6% per year, FCIT delivered on their promise to shareholders of a premium return over the 2.2% annual return offered by British Consols without unduly risking their capital.

The major financial crises and panics are identifiable in **Table 8** - the French crises of 1882, 1888, and 1893, the Barings collapse of 1890, and the 1907 US stock market crash. FCIT total returns turned negative in real terms in 1890, 1892, 1906, and 1912 and all classes of securities underperformed, except for 1892 when sovereign bonds, unlike private securities, recovered into positive territory. The sharpest fall occurred in 1890 (-7.9%) but by the standards of more recent financial crises this is a modest decline. There is even less evidence of the 1907 panic in FCIT returns. Such performance during both episodes are indicative of the relatively small contagion from Latin America and the US to the other emerging markets (Mauro, Sussman and Yafeh 2006).

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³⁵ FCIT noted which securities were in default in its annual reports. Note that we run a FGLS panel model because of the presence of panel autocorrelation.

Decomposing total returns by industry, it is clear that FCIT performance was driven by its investments in government and railroads securities, especially after the change in investment guidelines (**Figure 3**). The late 1890s and early 1900s in particular were especially profitable for overseas railway investments. Likewise, although the 1890 Baring crisis, starting with Argentina's default, is usually associated with the sovereign bond market, the FCIT portfolio was mostly adversely affected through its holdings of Argentine and other South American railway bonds and preferred stock. Consistent with its patient long-term investment approach, the managers of FCIT on occasions pursued a deep value strategy by investing in securities with very depressed prices. Accordingly, they made substantial purchases of US and South American common and preferred railway stocks trading at large discounts to par. These securities gained value in the following years to such an extent that FCIT departed from its typical buy-and-hold strategy and realised some of their capital gains.³⁶

We compare FCIT returns to the total return indices for foreign bonds and foreign stocks from Chabot and Kurz (2010) for 1880-1907 and Edelstein (1982) for 1908-12 (**Figure 4**). We splice the two data series and create a composite index, weighting the bond and stock index returns by the annual FCIT bond and stock allocations listed in Table 2.³⁷

Over the period 1880-1912, FCIT returned 5.2% p.a. in real terms versus 4.9% for the composite index displaying a slightly higher standard deviation of 4.1% versus 3.7% and a slightly better Sharpe Ratio of 0.68 against 0.66. The higher volatility is largely due to the adverse effect of the 1890 Baring crisis, despite coming through the 1893 Panama panic and especially the 1907 crisis relatively unscathed. As already mentioned above, the FCIT returned considerably more than the 2.2% p.a. offered by British Consols over the same time horizon.

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³⁶ The largest appreciations were registered for the stock of the St Louis and San Francisco Railway Co. (between +200% and +300%, depending on the issues), and the Oregon Railway and Navigation Co. (+30%), with similar performances for the bonds of the Atchison, Topeka and Santa Fé Railroad (some of which doubled in value), and the Calgary and Edmonton Railway Co (+56%).

³⁷ Specifically, we used the yearly split of the FCIT portfolio between shares and bonds (**Table 1**) to weigh Chabot and Kurz's (2010) and Edelstein's (1982) global indices of foreign shares and bonds.

Although volatility was low, one concern of any FCIT shareholder would be the extent to which he might suffer a period of low or even negative returns. We calculate the average annual portfolio real returns for all possible periods beginning in 1880 from one year up to a maximum of 33 years (**Figure 5**). The results reflect well on FCIT which over any 5 year period managed to generate a positive real return. The closest comparator we have for this performance comes from the 111 years of returns of the US stock market since 1900, studied by Dimson et al. (2011). In the case of the US, an investor would have had to hold on to common stocks for at least 15 years to make a real return with certainty, whereas the equivalent horizon for a pure-bond investment was longer than 60 years.³⁸

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³⁸ We are aware that the two periods are not entirely comparable, especially in the case of the bond returns as these securities offer little protection against inflation which was much more prevalent in the US after World War II than before World War I.

5.2 Share price and NAV

Since FCIT's preference and deferred shares were quoted on the LSE from 1880, we can also monitor share price performance. Figure 6 charts the annual fluctuations in the total returns, both capital gains (losses) and dividends, to owning deferred shares from 1880 to 1912. There were four years of negative returns in 1890, 1891, 1893 and 1907, with only 1891 generating a double-digit fall (-14.6%); otherwise, total returns were positive throughout. Consistent therefore with their right to residual cash flows and bearing greater financial risk, investors in the deferred shares earned a higher total return of 6.9% p.a., thanks largely to a higher income return of 5.6%. The preference shares returned a steadier 4.5% p.a., with the income return and capital appreciation averaging 4.0% and 0.5% respectively.

In keeping with industry practice, FCIT shareholders were not told the net asset value (NAV) of the underlying investments by the trust managers until publication of the accounts in 1936. An extremely diligent shareholder with lots of time on their hands might have been able to price the underlying portfolio once per year as we have done here. As explained in section 3.1 above, in estimating the NAV of FCIT, we treat the preference shares as a prior fixed claim on the net assets of the trust. We then compare the NAV attributable to deferred shareholders with the deferred share price at each December year end, to determine whether the shares traded at a premium/discount to NAV.

The deferred shares according to the results graphed in Figure 7 appeared to trade at a discount throughout 1880-1912 averaging 17%. Despite Delong and Shleifer (1992) uncovering substantial premia among US closed end funds in the late 1920s, fund discounts have become common in both the US and the UK in the modern era, especially in the UK where the average discount reached 50% in the late 1970s.³⁹ Several explanations have

³⁹ Dimson and Minio-Kozersky (1999), p.7, Figure 1.

been put forward for such persistent discounts, among them illiquid securities, tax and agency problems with the investment managers (Dimson and Minio-Kozerski, 1999). The latter two rationales are less applicable to the pre-1913 era. However, the presence of illiquid securities representing between 10% and 15% of the total portfolio does seem a plausible explanation for the level of discount observed. Whilst contemporary investors did not pay any attention to NAV as such, it is interesting that the shares did not appear to trade outside the bounds of what modern investors have come to expect.

Investor sentiment, then as now, offers a partial explanation for the observed fluctuations in the discount. The FCIT discount reached a low of 32% in 1900 and narrowed to 2% in 1890. According to Dice (1929), English investors' 'infatuation' with the prospect of large yields offered by investment trusts led to an investment trust mania. However, many trust managers, encountering difficulty in finding attractive securities, were forced to invest in more speculative propositions or even in the shares of other trusts, leading to "pyramiding". This investment frenzy climaxed in the Barings crisis of 1890 and the trusts subsequently experienced substantial losses. We should add that the FCIT managers never bought a single share in any other investment trust. Despite such prudence, FCIT did not remain immune to these waves of investor sentiment and the narrowing of its discount in 1889 and its widening in 1890-91 seem somewhat consistent with this market episode.

5.3 Peer Performance Comparison

The literature on mutual fund performance has long disproved the idea that active portfolio management outperforms the market.⁴⁰ Studies of US equity mutual funds by Jensen (1968), Carhart (1997), Malkiel (2003) and Fama and French (2010) all consistently show that the average mutual fund has no 'alpha' and that there is little persistence in the best performing funds from one period to the next. Similar results apply to bond mutual funds, a category closer to the FCIT in the period we are studying (Blake et al. 1993, Detzler

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⁴⁰ For a recent survey see Jones and Wermers (2011).

1999). Moreover, on average, the margin of underperformance is equal to the management fees charged by active funds. In this context, the low fees charged by FCIT take on greater importance as a source of added value for shareholders.

Nonetheless, in an era before Exchange Traded Funds, Blake et al. (1993) suggest that modern actively managed mutual funds are still useful to individual investors because of higher transaction costs from investing in small batches of bonds. This argument has even greater relevance in the period we are covering, given the transaction costs that a British investor would face in replicating the degree of diversification contained in the FCIT portfolio.

Unfortunately, at present, we lack suitable global bond benchmarks with which to undertake similar performance analysis for the pre-1913 period. Therefore, we compare FCIT performance with that of its peer quoted investment trusts. Since estimating the NAV's of all these trusts once a year would be a gargantuan task, we rely on estimating share price performance whilst recognising that share prices do not precisely reflect underlying NAV's. Sourcing data from the *Investors Monthly Manual*, we identified ordinary and deferred share prices and associated dividends of 5 investment trusts quoted on the LSE in 1880 growing to 45 by 1913.

Equally weighting each trust, the annual total returns over the 30 years, 20 years and 10 years to 1913 was 5.2%, 5.3% and 5.1% respectively compared to 6.5%, 7.2% and 8.2% for the FCIT. However, FCIT was most certainly not the best performer. A comparison over the same three periods to 1913 placed the FCIT 4th, 24th, and 28th out of 8, 37 and 45 funds respectively on average total returns. However, the FCIT was ranked 1st, 7th and 14th respectively over the same three periods on Sharpe Ratio. Among the initial 7 peer funds, the Railway Debenture & General Trust along with the Foreign American & General Trust, a sister fund to FCIT, generated returns superior to the FCIT over all three periods. Hence,

⁴¹ It is less clear whether this is still true today when the availability of internet discount brokers substantially reduced the bid-ask spreads paid by individual investors.

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based on these two measures at least, there were other well-managed investment trusts accessible to the general investor in addition to FCIT.

5.4 Crises and Contagion

When comparing the degree of co-movement between sovereign spreads before World War I and in the 1990s, Mauro, Sussman and Yafeh (2006) conclude that the bonds of emerging sovereigns exhibit a larger degree of co-movement today than those in the earlier period. This ordering is preserved even when accounting for the greater homogeneity of the economic structure of today's emerging nations, likely to impose a greater co-movement in macro fundamentals than in the past, when emerging nations typically specialized in a small number of export commodities.

Even though this evidence is limited to the sovereign debt market, the authors adumbrate three possible explanations for the low-contagion scenario prior to World War I. The first is the absence of multilateral institutions that by seeking to prevent financial crises from harming international stability would relieve investment bankers, underwriters and investors from parsing different countries' characteristics.⁴² A second factor arises from the possibility that the vastly slower trading technology of the pre-1914 period may have reduced the propagation of financial panics.

Finally, the authors contrast the relatively atomized investor marketplace in the earlier period with the contemporary role of large institutional investors, whose investment decisions are seemingly less guided by discriminating analysis of individual sovereign credits than by risk and liquidity considerations that may force them to liquidate whole classes of emerging securities simultaneously (Eichengreen 1999, Kaminsky and Végh 2000).⁴³ This claim, however, is purely based on circumstantial evidence, namely, the smaller size of the institutional investor segment of the market and the large number of individual investors in

⁴² Not everyone agrees with this interpretation of low contagion – on the contagion of the Barings crisis to Latin American sovereigns see Mitchener and Weidenmier (2008).

⁴³ On the observationally equivalent interpretation based on 'noisy traders' and 'herd behaviour' see Shleifer (2000).

the Victorian and Edwardian period (Michie 1987). As virtually nothing is known about the behaviour of institutional investors in this period, our security-level analysis of the FCIT portfolio therefore allows a first look at the question of whether investment trusts also contributed to the spread of financial contagion among emerging nations.

Specifically, we investigate whether the FCIT board reacted to instances of financial crises involving emerging countries by selling the securities of other emerging country issuers in an attempt to raise precautionary cash balances with a view to reinvesting at lower prices. The evidence is graphically summarized in Figures 8-10.

Figure 8 displays the annual net security purchases (disposals) valued at par made by the FCIT portfolio across the period. We are forced to use par values in the absence of the FCIT transaction records. Some of the periods of net divestment coincide with known episodes of financial trouble - the French crises of 1888 and 1893. However, the correspondence between financial panic and net disposals is far from perfect. On the occasion of two of the most dramatic financial disturbances, the Barings collapse of 1890 and the 1907 American stock market crash, FCIT reconstituted its portfolio by buying more securities than it sold.

We next try to probe a little further into FCIT's investment strategy during these two crisis periods, 1890-93 and 1907, by decomposing total purchases and in turn total disposals in each year across the main geographic regions. The results summarised in **Figure 9** reveal that FCIT did not divest from emerging markets, particularly Argentina and the other Latin American markets, despite the severe capital losses it withstood on these investments during these years. In fact, the board invested substantial sums in US railroads, whilst divesting significantly from European securities (representing half of the 'Other' column in Figure 9).⁴⁴ One likely explanation for these portfolio shifts could be the board's

⁴⁴ The remaining half was split between one third of Asia/Pacific securities and one sixth of African colonial issues.

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determination to follow through on FCIT's change in investment guidelines in 1891. The largest net gainer in the process was the US, particularly the railroad sector.

A similar pattern is evident during the 1907 crash (**Figure 10**). The board acquired North American as well as Latin American securities at depressed prices, rather than reduce exposure to these troubled markets. We are therefore led to conclude that "average investment trusts," such as FCIT, with a long investment horizon and a buy-and-hold strategy could not only withstand the most widespread financial panics without being forced into fire sales, but that they also used these sell-offs as opportunities to rebalance their portfolios by buying securities at depressed prices.

That the FCIT was able to do so was a consequence of their gearing being below the industry average and their practice of accumulating invisible reserves, which guaranteed the payment of dividends to their shareholders even when the portfolios performed less well (Rutterford 2009).⁴⁵ No doubt the board was also helped by the knowledge that the FCIT was immune from the threat of takeover which today greets any underperforming closed end fund experiencing a widening in its share price discount to NAV and a loss of investor confidence.

Of course, not all investment trusts were as well managed as FCIT. Some trusts failed in the wake of financial crises, as already mentioned, and we cannot be sure of how representative FCIT was of the surviving investment trusts. Nonetheless, the FCIT case hints at the contribution to financial stability in the pre-WW1 period made by the closed end fund innovation due to its long-term investment horizon. In contrast, mutual funds which experience inflows and outflows on a daily basis and which did not yet exist in this period grew to dominate the closed end funds on both sides of the Atlantic from the 1930s. This development may partially explain the relative absence of contagion in emerging markets before 1913 compared to the modern era.

⁴⁵ In 1912, FCIT gearing was about half of the average in the industry, as calculated from the 57 investment trusts listed with some form of gearing in the *Investors Monthly Manual*.

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5.5 Comparison with Emerging Markets Today

Following the first era of financial globalisation, global capital markets experienced a "great reversal" along with the prospects for investing in emerging markets in the interwar years (Rajan and Zingales 2003). As Goetzmann and Jorion (1999) put it, some of these markets now became "submerged" markets. The opportunity to diversify portfolios by investing in emerging market debt did not re-present itself until the aftermath of the second great reversal when Brady Bonds were created in 1989 out of defaulted Latin American debt. As a consequence, in 1993, Templeton and Morgan Stanley launched the first closed end funds on the NYSE specialising in emerging market debt and sovereign bonds in particular. At the end of the same year, the generally recognised emerging market debt benchmark, the J.P. Morgan Emerging Markets Composite Index (EMBI), was initiated.

Templeton Emerging Markets Income Fund and Morgan Stanley Emerging Markets Debt Fund are the two oldest closed end funds listed on the NYSE investing in emerging market bonds today. The stated investment objective of both funds is very similar to that of FCIT, namely, to seek high, current income with capital appreciation as a secondary objective. However, there the similarity ends. Both the current funds have fewer holdings and higher portfolio concentration than FCIT before 1914. According to their most recent filings, Templeton had 81 holdings with its largest 10 holdings accounting for 42%; and Morgan Stanley 110 holdings with its largest 10 holdings accounting for 27%. In addition, the annual portfolio turnover of both funds was much higher averaging 80% and 180% respectively. These figures are representative of the modern institutional investor pursuing a much more active management approach and contrast sharply with the FCIT high-diversification low-turnover strategy.

From inception through the end of 2010, the EMBI returned 11.7% p.a. in US dollars compared to 8.6% and 3.3% for US Treasury 30-year Bonds and Bills respectively. EMBI volatility was slightly lower at 15.8% versus 16.8% for the US long bond. Hence, in the

modern era spanning a period of 17 years, emerging market debt generated a return of 3.1% p.a. in US dollars in excess of the US government bond alternative, a premium which is identical to that returned by FCIT over Consols in sterling pounds in the pre-WW1 era spanning a period almost twice as long (see section 5.1). Moreover, the FCIT return premium was earned with much lower volatility, only 4.7% compared to 15.8% in the recent past and as a result, the Sharpe Ratio was higher at 0.67 in the earlier period compared to 0.53 today. The greater return volatility recently largely reflects the poor performance of emerging debt in the difficult years of 1994 (Peso crisis -23%), 1998 (LTCM, -19%) and 2008 (sub-prime crisis, -26%).

In short, emerging market debt securities as packaged by the FCIT in the first era of financial globalisation offered investors a similar substantial return premium but with substantially less risk.

6. Conclusion

There could be no higher testament to FCIT's attractions than the fact that this was the only investment trust share which John Maynard Keynes included in the security portfolio he managed for his father before WW1. FCIT stands as a shining example of a highly successful financial innovation.

Its success was based on the idea of providing the average investor with the opportunity to invest in a globally diversified portfolio at an extremely low cost. Back in the late 19th century, when it would be too costly both in time and money for individual investors to try and replicate such a portfolio, this proved to be a highly attractive and convenient solution for the majority of the investment public.

The investment trust structure permitted the FCIT to exploit fully the benefits of a long-term investment horizon and to pursue its buy-and-hold investment approach. This in

turn allowed the board to make heavy investments in emerging market bonds and in the American continent in particular, an investment approach which paid off handsomely. The fund's NAV averaged returns in excess of British Consols and of the global ex-UK benchmark whilst also offering a better risk-return trade-off. The trust's deferred shares delivered an attractive 6.9% annual return, exceeding its NAV performance thanks to the leverage provided by the issue of preference shares. Whilst the deferred shares consistently traded at a discount to the NAV of the underlying investments, the level of discount was not out of line with what investors a century later experienced and most probably reflected the exposure to illiquid securities in the portfolio.

The benefits of the investment trust structure also manifested themselves in the trading behaviour of FCIT during the two major financial crises of 1890 and 1907. There was little indication of FCIT contributing to any contagion effects. Mauro et al. (2006) suggest that the institutionalisation of investment activity over the 20th century is crucial in helping to explain the greater incidence of emerging markets contagion in the Second Era compared to the First. The implication of this study is that not all investment institutions are the same. The evidence from FCIT suggests that the investment trust or closed end fund model, unlike its close cousin the mutual fund model, is less conducive to contagion effects. This research question, that of the degree to which the FCIT experience was representative of the investment trust industry as a whole, together with a better understanding of the evolution of the closed end fund discount before the 1920s, seem worthy of further study.

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 Table 1: FCIT shareholders samples

	1882	1892	1902	1912 ^a	1912 ^b
Mean (£)	643	709	781	479	587
Median (£)	421	303	378	315	
SD (£)	744	1919	1388	534	
N	191	190	189	184	4000
Female	73	80	89	91	
Both Pref & Def	163	153	111	74	

Sources: ^a data kindly shared by Janette Rutterford; ^b 1912 issue of the *Investors Four Shilling Yearbook*.

Table 2: FCIT portfolios by security type

		No. se	curities		Securi	ty type (% marke	t value)		Portfolio	
Year	Total	Stock	Bonds	Other ¹	Cmn. Stock	Pref. Stock	Bonds	Other ¹	Total value £000	Perpetuals % 3	Maturity Yrs ³
1880	94	6	87	1	2.3	3	94.7	0	2,827	68	22
1881	92	7	84	1	2.2	4.1	93.7	0.1	2,893	72	23.2
1882	96	9	86	1	3.4	2.8	91.6	2.2	2,859	70	23.3
1883	98	11	86	1	4.6	2.8	90.5	2.2	2,836	70	24.8
1884	105	12	92	1	5.7	2.7	89.5	2.1	2,912	69	27.2
1885	119	13	105	1	7.8	2.7	87.6	2	2,971	65	27.1
1886	112	13	98	1	8	2.7	87.4	1.9	3,105	65	26.7
1887	122	15	106	1	8.7	2.5	87	1.8	3,108	64	28.8
1888	133	15	117	1	5.4	6.3	86.6	1.7	3,178	66	29.4
1889	148	17	130	1	3.5	6.4	88.5	1.6	3,195	65	32.7
1890	163	18	144	1	3.8	6.9	87.8	1.4	3,058	59	34.1
1891	201	16	184	1	2.6	5.2	90.6	1.6	2,727	53	36.6
1892	216	17	197	2	2.5	5.6	90.4	1.6	2,699	49	36
1893	235	16	217	2	2.3	3.1	92.9	1.7	2,505	45	37.1
1894	251	18	231	2	2.5	3.1	92.8	1.6	2,647	47	38.7
1895	257	18	237	2	2.9	3.2	91.9	2	2,709	46	39.2
1896	265	24	238	3	2.4	13	82.6	1.9	2,989	44	40.7
1897	268	25	239	4	2.9	10.7	84.6	1.8	2,961	42	40.2
1898	269	26	240	3	2.6	8.6	86.6	2.2	2,946	41	39.9
1899	267	33	232	2	4.5	8.7	85.1	1.7	3,006	40	39.6
1900	267	32	232	3	5	8.7	84.3	1.9	3,094	40	40.3
1901	259	25	231	3	6.1	5.8	86.3	1.9	3,012	39	40
1902	262	24	235	3	5.8	5.8	86.8	1.6	3,126	37	40.9
1903	269	21	245	3	4.6	6.1	87.7	1.5	3,099	33	39
1904	282	23	256	3	4.7	3.4	90.9	1	3,258	33	38.6
1905	275	21	251	3	5.5	3.6	89.7	1.2	3,242	33	38.9
1906	285	21	261	3	5.5	3.3	90.1	1.1	3,287	32	38.6
1907	297	20	274	3	5.1	3.6	90.3	1.1	3,126	30	37.5
1908	295	17	276	2	4.7	3.4	90.9	1	3,182	29	37.5
1909	300	19	279	2	4.8	2.8	91.5	0.9	3,274	27	38
1910	299	18	278	3	4.8	2.9	91.3	1	3,291	26	36.9
1911	303	18	283	2	5	2.8	91.7	0.5	3,293	24	36.1
1912	313	19	293	1	5.2	2.7	91.9	0.1	3,325	25	36.1
1913	312	20	291	2	5.6	2.9	91.4	0.2	3,024	22	36.3
Mean					4.5	4.8	89.3	1.4	3,022	46	34.8

¹Scrip certificates and deferred interest warrants. ²Percentage of perpetual bonds in portfolio. ³Average maturity (years) of bonds, excluding perpetuities.

Source: FCIT Annual Reports

 Table 3: Country allocation of FCIT investments 1880-1913

Country	Emerging	Numl	per of se	curities	Cumulative exposure		ure (£m)1
(ISO code)	Market	Total	Gov't	Private	Total	Gov't	Private
ARGENTINA	1	155	55	100	78.48	29.84	48.64
AUSTRALIA	1	15	9	6	7.25	6.38	0.87
AUSTRIA	0	5	3	2	10.31	7.38	2.93
BULGARIA	0	4	2	2	1.26	0.91	0.35
BRAZIL	1	60	17	43	43.86	11.63	32.23
BARBADOS	0	4	0	4	3.77	0.00	3.77
CANADA	1	21	5	16	9.00	1.09	7.91
CHILE	i 1	27	12	15	11.77	8.42	3.35
CHINA	i	12	11	1	4.33	4.16	0.17
COLOMBIA	1	1	1	0	0.20	0.20	0.00
COSTA RICA	1	10	4	6	2.16	0.20	1.44
CUBA	1	12	1	11	5.04	0.71	5.00
CZECH REP.	0		0	1		0.04	
		1			0.20		0.20
GERMANY	0	4	3	1	0.60	0.41	0.19
EGYPT	1	11	9	2	18.27	18.17	0.10
SPAIN	1	5	5	0	15.06	15.06	0.00
FRANCE	0	4	1	3	6.01	2.26	3.75
BRITAIN	0	43	0	43	8.41	0.00	8.41
GREECE	1	5	3	2	1.74	1.24	0.49
GUATEMALA	1	1	1	0	0.08	0.08	0.00
HUNGARY	1	6	6	0	6.70	6.70	0.00
INDIA	1	10	4	6	13.82	10.08	3.74
ITALY	0	13	5	8	17.59	10.71	6.88
JAPAN	1	12	12	0	4.55	4.55	0.00
SRI LANKA	1	2	0	2	0.53	0.00	0.53
MEXICO	1	45	9	36	21.89	5.01	16.89
BURMA	1	1	0	1	0.24	0.00	0.24
NICARAGUA	1	3	3	0	0.85	0.85	0.00
NETHERLANDS	0	2	0	2	0.39	0.00	0.39
NEW ZEALAND	1	12	6	6	4.14	2.19	1.95
PERU	1	1	1	0	1.18	1.18	0.00
PHILIPPINES	1	6	0	6	1.87	0.00	1.87
PORTUGAL	1	1	1	0	3.14	3.14	0.00
PARAGUAY	1	2	0	2	0.86	0.00	0.86
ROMANIA	1	8	6	2	5.36	5.18	0.18
RUSSIA	1	12	3	9	12.31	7.66	4.64
SERBIA	1	2	2	Ö	0.37	0.37	0.00
SWEDEN	1	4	1	3	0.61	0.07	0.54
THAILAND	1	2	2	0	0.69	0.69	0.00
TRINIDAD&TOB.	O	1	0	1	0.36	0.00	0.36
TURKEY	1	23	16	7	21.28	19.76	1.53
URUGUAY	1	23 11	6	5	4.59	2.37	2.22
USA	1	282		264			93.67
VENEZUELA	 		18 4		103.18	9.52	
	I 4	10	4	6	4.29	0.58	3.71
SOUTH AFRICA	l 4	8	4	4	2.16	1.20	0.96
RHODESIA	1	3	0	3	0.95	0.00	0.95
Total		882	251	631			

¹ Value of all holdings of securities of each country 1880-1912. Sources: FCIT Reports to AGM and Data Appendix

Table 4: Comparison of FCIT Regional Allocation with Cumulative Capital Flows (%)

Panel A tabulates FCIT regional weights at market values for the years given. In Panel B cumulative capital flows data is from Stone (1999). Panel C reports FCIT position compared to the cumulative capital flows benchmark.

%	1880	1885	1890	1895	1900	1905	1910
Panel A: FCIT							
North America	6.3	10.9	12.5	45.2	46.3	43.8	50.2
South America	15.8	23.1	31.8	26.0	31.5	37.5	37.2
Europe	49.4	39.9	26.7	17.0	12.4	8.5	5.7
Africa	8.4	7.7	7.6	1.3	1.1	1.2	0.7
Asia/ Pacific	20.1	18.4	21.4	10.5	8.7	9.0	6.2
British Empire	15.1	22.3	19.2	8.8	9.1	6.9	3.5
Panel B: CUM. FLOWS							
North America	44.2	31.7	32.0	32.6	29.7	30.4	32.5
South America	7.5	13.1	21.6	19.0	16.9	15.3	17.0
Europe	6.1	13.7	10.8	9.6	9.6	8.1	8.1
Africa	6.4	7.4	5.6	7.2	9.8	14.7	13.3
Asia/ Pacific	35.8	34.1	30.0	31.6	34.0	31.4	29.1
British Empire	45.3	44.4	38.0	41.5	44.2	44.6	42.4
Panel C: FCIT - CUM. FLOWS							
North America	-37.9	-20.8	-19.5	12.6	16.6	13.4	17.7
South America	8.3	10.0	10.2	7.0	14.6	22.2	20.3
Europe	43.2	26.2	15.8	7.5	2.9	0.4	-2.4
Africa	2.0	0.3	2.0	-5.9	-8.7	-13.5	-12.6
Asia/ Pacific	-15.7	-15.7	-8.6	-21.1	-25.4	-22.4	-22.9
British Empire	-30.1	-22.1	-18.8	-32.6	-35.1	-37.7	-39.0

Table 5: Comparison of FCIT Sector Allocation with Cumulative Capital Flows (%)

Panel A tabulates FCIT sector weights at market values for the years given. In Panel B Cumulative capital flows data is from Stone (1999) Panel C reports the FCIT position compared to the cumulative capital flows benchmark.

%	1880	1885	1890	1895	1900	1905	1910
Panel A: FCIT							
Gov't	82.4	69.1	57.4	31.7	26.8	28.8	23.8
Railroads	13.6	25.4	37.3	59.0	59.7	51.2	52.9
Utilities	0.2	0.0	0.5	3.0	4.4	7.1	12.1
Financial	0.0	0.0	0.0	0.7	1.9	1.7	2.0
Natural resources	0.0	2.0	1.5	1.9	2.3	2.6	2.6
Mfg & misc.	3.8	3.4	3.3	3.7	5.1	8.6	6.6
Panel B: CUM. FLOWS							
Gov't	32.2	40.1	34.9	35.6	34.8	35.5	34.2
Railroads	38.7	33.4	35.3	33.1	30.4	31.7	32.3
Utilities	3.9	4.1	4.3	4.2	4.1	4.2	5.3
Financial	5.7	8.9	9.8	10.5	9.2	8.3	7.9
Natural resources	10.1	7.0	7.4	8.7	12.9	12.4	12.2
Mfg & misc.	9.4	6.5	8.3	8.0	8.6	7.9	8.1
Panel C: FCIT - CUM. FLOWS							
Gov't	50.2	29	22.5	-3.9	-8	-6.7	-10.4
Railroads	-25.1	-8	2	25.9	29.3	19.5	20.6
Utilities	-3.7	-4.1	-3.8	-1.2	0.3	2.9	6.8
Financial	-5.7	-8.9	-9.8	-9.8	-7.3	-6.6	-5.9
Natural resources	-10.1	-5	-5.9	-6.8	-10.6	-9.8	-9.6
Mfg & misc.	-5.6	-3.1	-5	-4.3	-3.5	0.7	-1.5

Table 6: Optimal Portfolio Allocation (%)

Panel A lists the actual weights for the FCIT portfolios in 1890, 1900 and 1907 for Empire bonds, Empire stocks, US bonds, Other Foreign bonds, and Other which sums the negligible allocations to US stocks and Other Foreign stocks. Panel B lists the corresponding optimal weights based on the annual returns from 1866 until 1890, 1900 and 1907 and from 1880 until 1900 and 1907 respectively. Panel C is the difference between FCIT weights and the optimal portfolio weights. See text for a discussion of the portfolio optimisation methodology.

Year		Empire	Empire	US	Other Foreign	Other
		Bonds	Stocks	Bonds	Bonds	
Panel A:	FCIT					
1890		18.1	1.1	3.5	67.7	9.6
1900		7.0	2.1	33.7	44.3	12.9
1907		5.5	0.6	35.5	47.5	10.9
Panel B:	Optimal Weights					
1866-1890		72.0	1.1	9.8	16.4	0.7
1866-1900		38.2	8.2	35.2	17.3	1.2
1866-1907		31.9	7.7	39.0	20.5	1.0
1880-1900		19.0	8.1	45.6	27.1	0.2
1880-1907		13.8	4.9	50.8	30.4	0.1
Panel C:	FCIT-Optimal Weights					
1890		-53.9	0.0	-6.3	51.3	8.9
1900		-31.2	-6.1	-1.5	27.0	11.7
1907		-26.3	-7.1	-3.5	27.0	9.9
1900		-12.0	-6.0	-11.9	17.2	12.7
1907		-8.3	-4.3	-15.3	17.1	10.8

Table 7: Tests of investment strategy

	(1)	(2)	(3)
Dependent variable	Book Value	Increase in holdings	Decrease in holdings
		<u> </u>	
Constant	8.547***	3.05***	-3.076
	(0.002)	(0.684)	(2.118)
Price	-0.001		
	(0.002)		
Lagged price	-0.001		
	(0.001)		
Default	0.0001	-0.105	0.06
	(0.001)	(0.159)	(0.072)
Change in price	e ` ´	-0.219	0.037
0 1		(0.178)	(0.460)
Security FE	Yes	Yes	Ŷes
N	6309	509	1053
\overline{R}^{2}		0.292	0.624
Method	FGLS panel	Pooled LS	Pooled LS

Note: all values in logs or differences of logs

Table 8: FCIT Investments - annual buy-and-hold returns (%)

	Real Returns ¹				
Year	Total	Capital gains	Income	St Dev(within year)	Total
1880	9.72	5.04	4.68	16.88	9.35
1881	3.53	-1.32	4.85	7.05	3.60
1882	4.08	-1.11	5.18	9.30	4.12
1883	7.32	2.02	5.30	8.93	7.32
1884	5.86	0.71	5.16	8.56	6.17
1885	11.92	6.78	5.14	45.92	12.71
1886	3.59	-1.26	4.85	6.43	3.67
1887	10.42	5.46	4.96	41.06	10.54
1888	4.80	-0.01	4.81	11.00	4.80
1889	1.33	-3.72	5.06	16.37	1.32
1890	-7.88	-12.92	5.04	19.23	-7.88
1891	4.28	-0.61	4.89	20.58	4.28
1892	-0.41	-4.73	4.32	12.85	-0.40
1893	7.40	2.83	4.57	17.95	7.48
1894	6.02	1.61	4.41	22.68	6.31
1895	5.65	1.34	4.31	15.48	5.78
1896	8.15	3.88	4.27	22.06	8.15
1897	13.98	9.79	4.19	8.87	13.65
1898	4.13	0.05	4.07	14.28	3.99
1899	7.45	2.93	4.52	27.70	7.62
1900	7.07	2.40	4.67	9.50	6.69
1901	6.73	2.22	4.51	10.59	6.80
1902	4.39	-0.07	4.45	12.12	4.39
1903	8.38	3.93	4.45	12.12	8.29
1904	8.19	3.86	4.33	14.61	8.10
1905	2.58	-1.72	4.30	9.77	2.47
1906	-0.39	-4.67	4.28	7.46	-0.39
1907	6.51	2.01	4.50	12.21	6.65
1908	6.52	2.09	4.42	9.35	6.45
1909	4.76	0.22	4.54	6.17	4.66
1910	4.07	-0.53	4.60	9.37	4.03
1911	3.17	-1.49	4.66	5.02	3.08
1912	-0.38	-4.96	4.58	8.61	-0.37
Average	5.24 ²	0.60^{2}	4.63 ²	4.10	5.25 ²

¹Nominal returns deflated with CPI from Mitchell (1993). ²Geometric average.



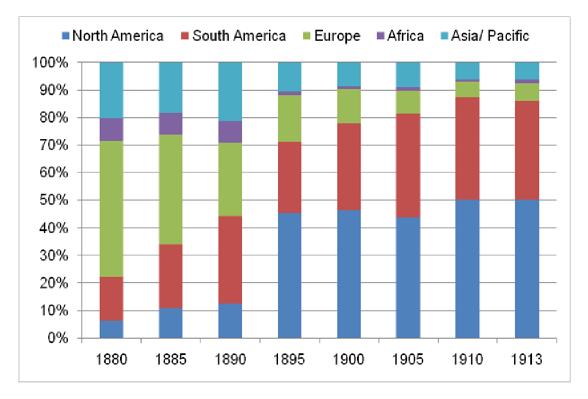
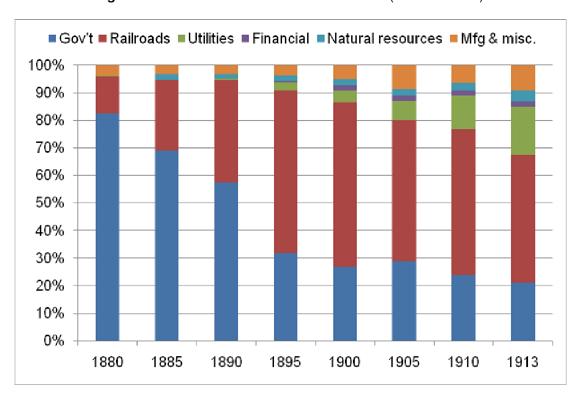


Figure 2: FCIT investments - sector breakdown (market values)



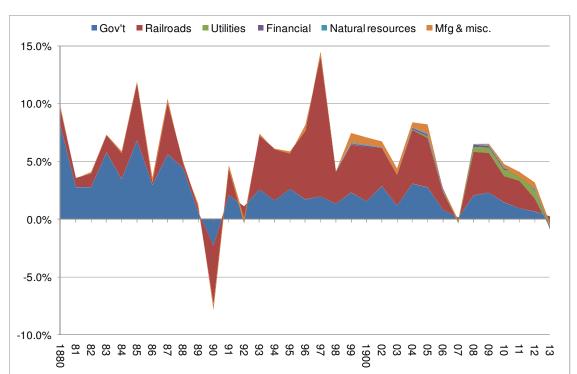


Figure 3: FCIT total return decomposition by sector

Figure 4: FCIT annual returns (%) versus the Benchmark 1880-1912

FCIT annual returns are buy-and-hold returns. The Benchmark returns are taken from Chabot and Kurz (2010) for 1880-1907 and spliced with Edelstein (1982) for 1908-12.

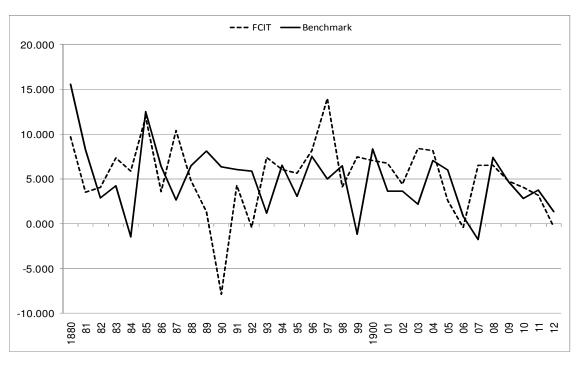


Figure 5: FCIT real buy-and-hold return dispersion over holding periods up to 33 years

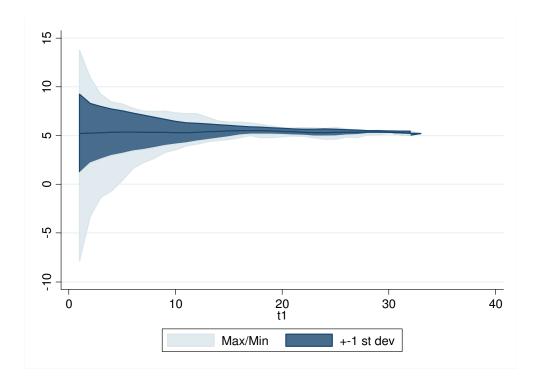


Figure 6: FCIT deferred shares - annual total returns 1880-1912

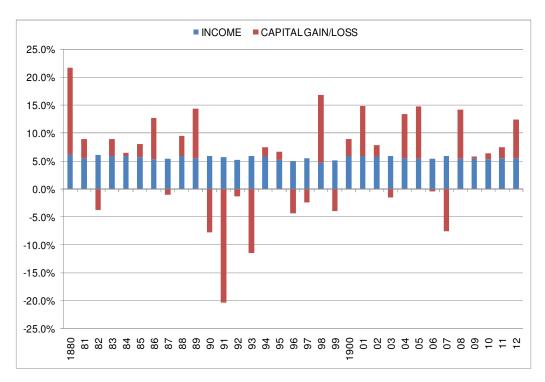


Figure 7: FCIT Deferred share price premium/discount to NAV per share (%)

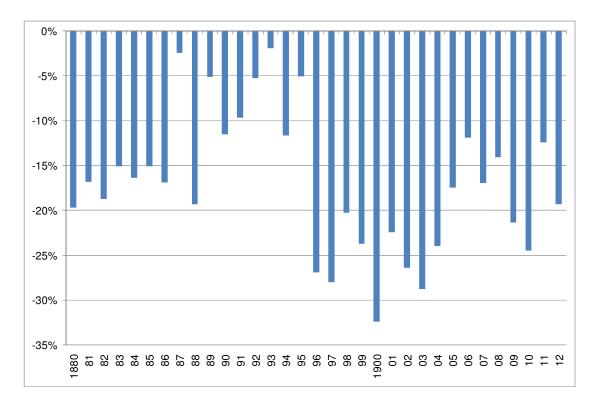
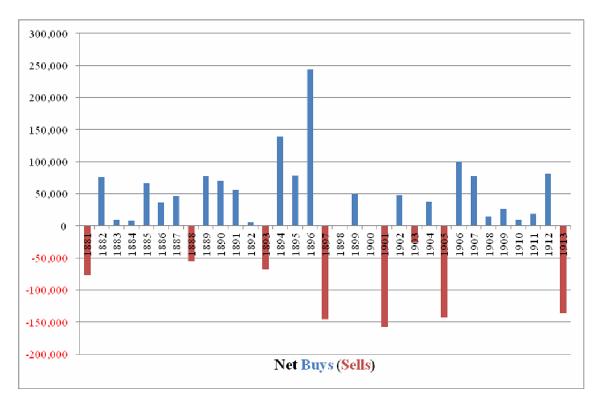
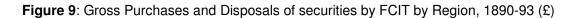


Figure 8: Net Purchases (Disposals) of securities by FCIT (\mathfrak{L})





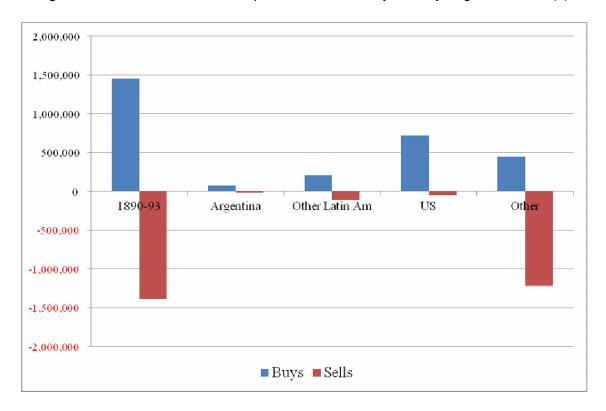


Figure 10: Gross Purchases and Disposals of securities by FCIT by Region, 1907 (£)

