

# Bloody Foreigners! Overseas Equity on the London Stock Exchange, 1870-1913

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## ABSTRACT

This paper presents data on capital gains, dividend, and total returns for domestic and overseas equities listed on the London Stock Exchange during 1870-1913. Indices are presented for Africa, Asia, Europe, Latin America, North America, Australia/New Zealand and for the finance, transportation, raw materials, and utilities sectors in each region. Returns and volatility were typically highest in emerging regions and the raw materials sector. Dividend yields were similar across regions and differences in total returns were due largely to disparities in capital gains. Returns of firms in more industrial markets were relatively highly correlated with each other and with developing regions with which they had substantial colonial or trade connections. Contingent liability was most extensively employed where leverage was high and the physical assets were either meager or inaccessible to creditors.

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## 1. Introduction

This paper presents new annual data on the extent and returns of overseas equity securities traded on the London Stock Exchange during 1870-1913. Many authors have constructed long-run monthly and annual indices of returns on stock markets, both in Britain<sup>1</sup> and elsewhere.<sup>2</sup> Few have computed or employed indices of foreign securities listed on British markets. Exceptions include Edelstein (1976; (1982), who compares the returns of home and foreign investment on British markets, Goetzmann and Ukhov (2006), who employ Edelstein's data to construct a variety of portfolios with home and foreign securities, and Chabot and Kurz (2010), who gather data on home and foreign securities listed on exchanges in Britain and the United States.

The new data include of capital gains, dividend yields, and total return on most London-quoted equities of firms based in six different regions outside of the United Kingdom (Africa, Asia, Australia/New Zealand, Europe, Latin America, and North America) for the period 1870-1913, as well as corresponding measures for domestic UK equities. In addition to overall regional indices, it presents total return data for 25 of the largest subsectors, including finance, transportation, raw materials, and utilities. These new indices have a number of potential uses, many of which are touched upon in this paper.

First, they may help to explain the slowdown in British economic growth—both relative to Britain's historical trend and vis-à-vis its economic competitors--during the late Victorian period. A prime suspect for this slowdown was the low level of investment in Britain, on average about 7 percent of GDP during the period, relative to more than 12 percent in the US and Germany (Eichengreen (1982)). Could this shortage of investment have resulted because the City of London was more adept at channeling domestic savings toward foreign, rather than domestic, destinations, thus demonstrating a failure of British institutions (Hobson (1914), Edelstein (1976; (1982), Davis and Huttenback (1986), Kennedy (1987)))? Or did large scale foreign investment result merely because of the

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<sup>1</sup> Bowley, Schwartz, and Smith (1931), Smith and Horne (1934), Gayer, Jacobson, and Finkelstein (1940), Grossman (2002), and Acheson et al. (2009), Campbell (2012).

<sup>2</sup> Cowles (1939), Frennberg and Hansson (1992), Goetzmann, Ibbotson, and Peng (2001), Dimson, Marsh, and Staunton (2002), Esteves (2011), Le Bris and Hautœur (2010), and Annaert, Buelens, and De Ceuster (2012).

greater risk-adjusted return on foreign projects? Or did Britons send large sums abroad to achieve portfolio diversification (Goetzmann and Ukhov (2006), Chabot and Kurz (2010))? Comparisons of investment returns across regions presented here, combined with additional data on capital flows to those regions, may help to clarify the reasons for the capital outflow.

Second, these measures may prove useful as indicators---or serve as checks on existing measures--of real economic activity around the world, particularly outside of the industrial core countries. As such, they may yield insight into the economic consequences of world-wide or more localized military, political, legal, and technological events, as well as shedding light on the extent of nineteenth century globalization and market integration (O'Rourke and Williamson (1999)) and the consequences of financial globalization, including listing in multiple countries, for firm growth and governance (Stulz (2005), Doidge, Karolyi, and Stulz (2004)). Data from local stock exchanges might be superior for this purpose, since they would presumably include more—and a greater variety of—local securities than London listings, which would be restricted to the largest and most well-established firms. And, in fact, many stock exchanges existed around the world during 1870-1913, both within and outside the industrial core: fourteen exchanges were in existence in 1870 and another 23 were established before 1913. However, because many of these exchanges only existed sporadically, “emerging, submerging, and re-emerging” throughout the period (Goetzmann and Jorion (1999)), they may be less useful than London listings for constructing consistent long-term measures. Nonetheless, comparing London and local listings will provide insight into the usefulness of each, as well as allowing permitting tests on market integration (Neal (1985)).

Third, these data may prove useful in addressing a variety of issues of interest to contemporary finance economists, such as why firms pay dividends and what sort of dividend policy to adopt (Merton and Modigliani (1961), Black (1976)), how to explain the premium of equity over fixed income returns (Mehra and Prescott (1985)), and investor preferences for home over foreign equity (French and Poterba (1991)). They may also help to explain why firms during this period frequently issued contingent liability and yield insight into firm decisions about how much contingent capital to issue,

an issue of interest to both economic historians and contemporary finance scholars working in the wake of the subprime crisis (Jefferys (1938 [1977]; (1946), Kashyap, Rajan, and Stein (2008), Flannery (2009), and Grossman and Imai (2011)).

The remainder of this paper is organized as follows. Section 2 outlines the data and methodology employed in collecting the data and calculating the indices. Section 3 provides summary information about the composition of the data set. Section 4 presents weighted and unweighted regional indices of capital appreciation, dividend yield, and total returns for the equities of firms doing business in the six non-UK regions, as well as for domestic UK equities, and correlations among them. Section 5 further breaks the data down by industry sector within regions, presents return data and correlations among the series, and compares the use of contingent capital across industries and regions. Conclusions follow.

## 2. Data and methodology

The main data source for this paper is the *Investor's Monthly Manual (IMM)*. End of year data on all ordinary equity were gathered from the December issue of the *IMM*.<sup>3</sup> Information was collected on the number of shares outstanding, the amount, par, latest price, and dividends.<sup>4</sup> Shares listed during this period were issued with a non-trivial nominal value, described in the *IMM* as the “amount” of the share. Frequently, shares were originally issued with only a portion of this amount “paid in” by shareholders (denoted by the *IMM* as “par” or “paid”). Owners of equity that was partially paid-up (i.e., where “amount” exceeded “par”) could be called upon by the firm to pay in the

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<sup>3</sup> The *IMM* data, and some of the difficulties in interpreting them, are described in detail in Grossman (2002: 124-126, 143-144). The same methodology is adopted here. No data was collected for issues that listed the nominal amount of the issue rather than the number of shares in the column titled “number of shares or amount of stock” (i.e., £100,000 versus 100,000) or carried the designation “stock” rather than an amount in the column devoted to the nominal amount of the share under the assumption that these constituted “stock” (i.e., bonds), rather than “shares” (i.e., equity). In fact, it is possible issues may have constituted equity, so their omission may be problematic. Shares listed in foreign currencies were not included.

<sup>4</sup> Securities for which any of these items are missing—with the exception of dividends, which were typically zero if left blank—were omitted. A missing latest price suggests that the share was not actively traded in the month. If trading in particular firms, regions, or sectors was typically inactive in December, the sample will be biased due to their absence. Market prices may also be affected by year-end window-dressing, however, this should not systematically affect year-to-year price changes.

uncalled amount of their shares. Because this complicates the calculation of the total return, equities for which the par value changes are excluded from the return indices in the year in which they change.<sup>5</sup> Similarly, stock splits, new issues (whether or not related to a merger), and retirement of issues are omitted—for purposes of calculating return indices, although not for gauging the size of the market—in the year that they occur. The resulting data set contained 39,240 security-year observations, consisting of 2913 distinct securities issued by 2588 companies.

Each company was categorized by the country in which it conducted the majority of its business, rather than by where it had its corporate headquarters, since many firms operating primarily outside of Britain were organized under British law and had corporate headquarters in the UK.<sup>6</sup> For some firms, this task was straightforward: there is little doubt about the location of the main activities of a South African gold mine or an Indian tea plantation. For other firms, the issue was complicated by the fact that their operations spanned more than one country. A firm that owned cattle ranches in Canada and the United States or operated a railroad line between Chile and Peru cannot be so easily classified. The use of broader regional classifications (e.g., North America, Latin America) substantially mitigated this problem.<sup>7</sup>

Two further types of companies were less amenable to geographic categorization. Firms with far-flung networks of operations, such as shipping lines and undersea telegraph cable companies, cannot be so easily categorized. The majority of these firms were within the shipping and telecommunications sectors. Finally, for a much smaller number of companies, it was unclear exactly what constituted their main region of operation. Fortunately, these difficult-to-categorize firms constituted less than 2 percent of all securities collected. They are omitted from the regional calculations below.

The data employed here differ in several important respects from those used in other studies. Michael Edelstein's data, used both by Edelstein (1976; 1982) and Goetzmann and Ukhov (2006), consist of annual observations on 703 UK and foreign equity, debenture, and preference shares from 1870-1913. The sample includes 132 non-

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<sup>5</sup> Par changes occur in less than 4 percent of the observations; more than 60 percent of these occur in domestic UK equities.

<sup>6</sup> See Stone (1999).

UK equities (see Edelstein (2010) for a detailed description of the data). Chabot and Kurz (2010) gather monthly data on British and foreign government bonds, corporate stocks, corporate bonds, and stocks listed on London and US markets from 1866-1907. Their dataset consists of 2242 stocks and 1817 bonds, although the precise breakdown among the various categories of securities and regions of origin of non-UK securities are not presented.

### 3. Summary Data

Figure 1 presents data on the aggregate amount of equity listed on the London market. The total number of issues rose steadily from 490 in 1870 to 1113 in 1901 before declining slightly, to 1049, by the end of 1913. Two other measures of the size of the market, total market capitalization (i.e., number of shares times price) and total paid-up capitalization (i.e., number of shares times par), followed a similar course, rising from £726 million and £931 million, respectively (equivalent to about 63 and 81 percent of GNP, according to figures from Mitchell (1978)), to about £1.3 billion (71 percent of GNP) in 1898. Market and paid-up capitalization had fallen by 1913, both in absolute numbers and as a proportion of aggregate economic activity: market capitalization was about £1.2 billion in 1913 (44 percent of GNP); paid-up capital was £973 million (34 percent of GNP).

Figure 2 presents data on the non-UK component of the London equity market, expressed as a percentage of the sum of UK and non-UK equity. Non-UK equity constituted about 30 percent of the total number of issues during the 1870s, rose to about 40 percent during the 1880s, leveled off during the 1890s, and rose to 50 percent during the decade prior to the outbreak of World War I. As measured by market capitalization and paid-up capitalization, the share of foreign firms was even greater: about 50 percent at the beginning of the period, rising to 75 and 82 percent, respectively, just prior to the Baring crisis of 1890, before beginning a nearly 20-year decline to 68 (of market capitalization) and 52 percent (of paid-up capitalization) by 1908.

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<sup>7</sup> For purposes of this paper, North America includes the United States and Canada; the rest of the western hemisphere is included in the Latin American region.

Figure 3 presents data on the market and paid-up capitalization of UK and non-UK firms. On average, non-UK firms were substantially larger than UK firms throughout the period, although the gap in market capitalization shrank from as much as £2.5 million in 1880 to less than £500,000 by 1913. Although there were relatively few official barriers to listing on the London Stock Exchange, this gap suggests that, at least early in the period, only the very largest non-UK firms were able to issue shares in London and that the barrier facing UK firms that sought listings was lower. The declining gap indicates that the higher standard faced by non-UK firms may have eased over time as non-UK listings became more common.

Figures 4a and 4b illustrate the distribution of non-UK equity on the London market. Figure 4a presents data on the percentage of equity issues; Figure 4b presents data on the distribution of market capitalization. The most dramatic growth occurred in African equities, which rose from about 8 percent of non-UK equity issues and less than one percent of non-UK equity market capitalization in 1870 to over 30 percent of issues and nearly half of market capitalization during the first decade of the twentieth century, before falling to nearly 28 percent of issues and almost one third of market capitalization by 1913. The largest single issuer of African equity was the Suez canal, which first appeared in the *IMM* in 1880 with a market capitalization of £20 million and rose to more than £90 million in 1911, before falling to £73 million by the end of 1913. Even without the canal, the growth African share of market capitalization was impressive, reaching 38 percent in 1904 before falling to 22 percent in 1913. The most important African sector was raw materials, especially southern African mining companies, but also including land/exploration companies, which grew substantially starting around 1885.<sup>8</sup>

Asian securities also accounted for a larger portion of the market in 1913 than they had in 1870. Asian equities constituted about 19 percent of non-UK equity issues in 1870, fell to about 13 percent in 1893, and rose to more than 27 percent by 1913, when they were just slightly less numerous than African issues. Asian equities constituted less than 5 percent of non-UK equity market capitalization throughout the 1870s, rose to between 14 and 16 percent during the early 1880s before falling off into single-digits. They constituted between 16 and 22 percent of market capitalization during the 1890s,

before again falling off into the single digits, reaching 15 percent by the outbreak of World War I. Asian equities were overwhelmingly (more than two thirds) Indian, and concentrated in railroad and raw materials (e.g., coffee, tea, rubber, jute).

By contrast, European and North American securities declined as a share of non-UK equities throughout 1870-1913. Both had accounted for around 20 percent of equity issues during the 1870s and 1880s and, at different times, accounted for nearly 50 percent of market capitalization. By 1913, both sectors accounted for less than 10 percent of equity issues. European equities accounted for less than six percent and North American equities for less than 16 percent of market capitalization. This decline may have resulted in part to the growth of domestic equities markets in these regions, making listing in London less important. The largest capitalization declines were in railroads: several large Belgian and Dutch railroads were delisted following government take-over and reorganization.<sup>9</sup>

Equities of firms from Australia and New Zealand also declined as a portion of issues (from 15-20 percent to about 11 percent) and market capitalization (from 10-15 percent to about 7 percent), although not as dramatically as those of Europe and North America. Latin American equities declined slightly as a portion of issues (22 percent to 16 percent), but remained at 16-17 percent of market capitalization at both the beginning and end of 1870-1913.

Non-UK equity was dominated by the finance, raw materials, and transportation sectors.<sup>10</sup> Finance, primarily banks, constituted between 20 and 40 percent of all equity issues in most regions at the beginning of the sample and declined continuously through its end.<sup>11</sup> These banks, often established to channel funds to developing regions were

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<sup>8</sup> Frankel (1967).

<sup>9</sup> The North American decline is overstated. Following the merger of Canada's Grand Trunk and Great Western Railways in 1882, the resulting common equity had no nominal value (i.e., the "amount" was not stated) and so was dropped from the sample. The combined market capitalization of the two railways was 87 percent of total North American railroad capitalization prior to the merger. The numbers may also be misleading, because many US railroads—like French railroads listed in London—were priced in currencies other than pounds and were, consequently, omitted.

<sup>10</sup> Utilities (gas, light, electric, waterworks) accounted for as much as 6 percent of total market capitalization in a few years in Asia and Latin America, and were also well represented among European and UK listings.

<sup>11</sup> Banks similarly constituted about 20 percent of domestic UK equity issues in 1870; about half of that in 1913. Unlike the regions examined here, however, British banks rose from about 15 percent to 30 percent of domestic equity market capitalization from during 1870-1913.



usually large relative to other sectors and often constituted the majority of market capitalization early in the period. For example, finance issues constituted between 70 and 80 percent of market capitalization of African, Asian, and Australian equities during the 1870s and 1880s. As other sectors grew, finance became a smaller share of the market as a whole, despite the fact that market capitalization of the finance sector increased throughout the period, doubling in Australia, tripling in Asia, increasing five times in Latin America, and 12 times in Africa. Finance was also an important component of UK equity issues. Banks and insurance companies accounted for nearly 40 percent of UK firm issues and 20 percent of UK firm market capitalization in 1870; by 1913, they constituted a smaller proportion of the issues (22 percent) but had grown to nearly half (47 percent) of total market capitalization.

Transportation, primarily railroads, was the most important sector in Latin America and Europe throughout the period, constituting more than 80 percent of market capitalization for most of the period, and about two thirds by the end of the period. Transportation was less important in other regions and, in all, declined in importance during the period. In contrast, UK railroads, which had constituted two thirds of UK firms' market capitalization in 1870, decline to less than 5 percent by the outbreak of World War I.

Companies engaged in the exploitation of raw materials, including mining, tea, coffee, jute, and land/exploration companies, rose in importance in all regions. In Africa, Asia, Australia, and North America, the share of companies engaged in raw materials grew as a fraction of market capitalization by 1-2 percent per year and, by 1913 was responsible for the majority of market capitalization. In Europe and Latin America, where transportation remained the dominant sector throughout the period, raw materials shares grew as a share of market capitalization to 30 percent in Europe and 15 percent in Latin America. Among UK firms, companies extracting raw materials constituted a trivial proportion of the market. Manufacturing firms processing raw materials, by contrast, grew substantially. By the outbreak of World War I, coal, iron, and steel and textiles combined accounted for about a quarter of market capitalization of all UK firms.

In Africa in 1870, the finance, raw materials, and utilities sectors were responsible for about 50, 42, and 8 percent of the issues, although finance (74 percent)

and raw materials (24 percent) accounted for the vast majority of market capitalization. By 1913, finance had declined to about 10 percent of both issues and market capitalization, while raw materials—particularly mines—accounted for 84 percent of issues and 58 percent of market capitalization. Similarly, in Asia, finance, along with transportation and utilities, declined as a share of issues and market capitalization, while raw materials accounted for 83 percent of Asian equity issues and 58 percent of market capitalization by 1913.

#### 4. Returns

The returns to holding equity consist of: (1) capital gains, the increase in the value of shares; plus (2) dividends paid to share owners (dividend yield). Capital gains in year  $t$  are calculated as:

$$(P_t - P_{t-1})/P_{t-1},$$

where  $P_t$  equals the share price at the end of year  $t$ . The dividend yield is calculated as  $D_t/P_{t-1}$ , where  $D_t$  equals the dividends paid to the owner of the share during year  $t$ .

Tables 1 through 8 present annual return data for six overseas regions (Africa, Asia, Europe, Latin America, North America, Australia/New Zealand), UK equities, and the aggregate of all equities. The six left hand columns of each table present unweighted data on capital gains, dividend yield, and total return (along with the standard deviation of each). In the unweighted data, the capital gains, dividend yield, and total return of all shares are averaged in each year, giving equal weights to large and small firms. An unweighted index will not be unduly affected by changes in returns exhibited by large firms, as would return averages weighted by capitalization. On the other hand, such an index gives equal weight to the largest and the smallest firm, which may also not be appropriate. Hence, the right hand six columns on each table presents two more sets of weighted return calculations (capital gains, dividend yield, and total return), one weighted by market capitalization, the other by paid-up capitalization. The series weighted by market capitalization will give more weight to larger firms, but because market capitalization is calculated as the product of price and number of shares outstanding, price movements may cause large fluctuations in the return indices. Paid-up

capital may provide an appropriate compromise: its weights are fixed in the short term, since paid-up capital typically does not change very frequently, and yet the series does give more weight to larger firms. On the other hand, since par changes were not all that frequent, weights assigned by this method may be out of date. Additionally, since the ratio of paid to unpaid capital varied considerably across industries, weighting by paid capitalization may bias the indices toward industries with lower levels of paid-in capital.

Graphs of annual total return indices, both unweighted and weighted by market capitalization, are presented in Figures 5a and 5b. Several key features stand out. Equities of firms operating outside the industrial core, particularly those in Africa, Asia, and Latin America, stand out by their high returns and volatility over the entire period. North American and European equities exhibit sluggish growth during the cyclical downturn of the 1870s. The decline in equities following the Baring crisis of 1890 was especially severe in the less industrialized regions, while the subsequent 1893 financial crisis in the US shows up as a prolongation of the slow growth inaugurated by the Baring crisis. Several of the regional indices also turn down around the world-wide financial crisis of 1907.

Summary statistics in Table 9 present the average and standard deviation of the annual return indices for each region. Returns were highest in economically less developed regions, such as Africa, Asia, and Latin America. The more mature markets of Europe, North America, and the UK exhibited lower rates of return. By most measures, the higher returns in less developed regions were accompanied by greater volatility than returns in the more industrialized countries. This historical pattern of higher returns and volatility in emerging markets is echoed in the modern world (Harvey (1995)).

Australia is an outlier. Although less industrial than the UK, Europe, or North America, the return and volatility characteristics of Australian equity listed in London resembled those of these more developed economies, rather than those of Africa, Asia, or Latin America. This may be explained by the fact that domestic Australian stock exchanges had developed relatively early—in the 1860s—and that many of the riskier enterprises were financed on domestic exchanges. A severe financial crisis in the 1890s

further dimmed the prospects for more risky ventures from reaching the London market.<sup>12</sup>

Another striking feature of Table 9 is the similarity of dividends across regional markets. The unweighted dividend yield ranges between 5.3% and 6.6% (the range among weighted yields are higher) and are much less volatile than capital gains, suggesting that London investors may have demanded a certain minimum level of dividends from foreign and domestic companies alike, with the greater returns (and volatility) of firms based in less industrialized countries coming from capital gains. Dividends clearly represent a higher proportion of the total return in mature markets than in less developed markets.

Table 10 presents correlations of the regional total returns, using both unweighted series, as well as series weighted by market and paid-up capitalization. Although the results are not uniform across the weighted and unweighted indices, several regularities emerge. Correlations are relatively high among the European, North American, and UK indices. Given that these were relatively developed regions, with substantial commercial and financial cultural ties, this trans-Atlantic relationship is not surprising. Interestingly, and also not surprisingly, given their high degree of economic and financial connections, North American and Latin American indices are also highly correlated. By the same reasoning one would expect the correlation between the UK and Australia/New Zealand indices to be high. The results here are mixed: using unweighted indices, the total returns have a correlation coefficient of 0.45; using the weighted indices, the coefficients are 0.20 or 0.25.

We can further assess the performance of regional indices by analyzing them within the framework of the Capital Asset Pricing Model (CAPM).<sup>13</sup> To do this, we run a regression of the following form:

$$R_{i,t} - R_{F,t} = \alpha + \beta(R_{uk,t} - R_{F,t}),$$

where  $R_{i,t}$  is the return on the portfolio of equities from region  $i$  listed in London in year  $t$ ,  $R_{F,t}$  represents the risk-free rate (proxied for by the interest rate on UK consols) in period

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<sup>12</sup> Merrett (1997) further argues that domestic savings paid for much of Australia's capital formation during this period. Note that after 1878, Australia accounted for less than 10 percent of non-UK market capitalization.

<sup>13</sup> Sharpe (1964), Lintner (1965).

$t$ , and  $R_{uk,t}$  is the return on domestic equities listed in London in year  $t$ . The coefficient  $\beta$  is interpreted as systematic risk, or the extent to which the excess returns (over the risk free rate) of the regional indices covary with those of a market benchmark, in this case the sample of UK equities. The results are presented in Table 11. The top panel of Table 11 employs the unweighted indices, the middle panel uses the indices weighted by market capitalization, and the bottom panel uses the indices weighted by paid-up capital.

No matter which index is used, none of the estimated  $\beta$  coefficients are significantly different from one. With the exception of Australia, which has an above average estimate  $\beta$  no matter which index is used, no region shows a clear pattern of high or low estimated  $\beta$ 's across indices. This result is perhaps not surprising, given that the non-UK equities listed in London were typically large, stable, export-oriented enterprises with close connections to British economic conditions.

## 5. Region-sector sub-indices

The regional indices can be further subdivided into components based on the type of business in which they were engaged. Tables 12, 13, 14, and 15 present both unweighted and weighted annual total returns for the finance, raw materials, transportation, and utilities sectors of each region.<sup>14</sup> Table 16 presents correlations among the regions for each sector, as well as sector-region data on the average and standard deviation of returns. Several notable results stand out.

Returns and volatility were, on average, highest in the raw materials sector. Given the speculative nature of many types of land/exploration and mining operations, this is not surprising.<sup>15</sup> Australia, the UK, and, for two of the three series employed, Latin America were exceptional in this regard. The relatively low return in Australia's raw materials sector may be due to the fact that the majority of high-risk--primarily

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<sup>14</sup> Due to space limitations, dividends and capital gains are not presented. No Asian transport securities were listed in 1879 or 1880, hence no return data are presented for this region-sector for 1878-79, 1879-80, and 1880-81. There were not enough listings for utilities in Africa, North America, or Australia/New Zealand to generate meaningful return series.

<sup>15</sup> A more detailed decomposition of the raw materials sector between the various types of natural resources being might shed additional light on inter-regional differences.

mining-- shares were listed on domestic exchanges, suggesting that the raw materials enterprises that were listed in London carried lower risk--and return. UK raw materials equities were primarily also in mining, however, the natural resources being extracted were much less valuable (i.e., fewer precious metals and stones) and probably from sources that had been long known (and therefore carried less risk) compared with those from overseas regions.

On the other end of the risk-return spectrum were utilities, primarily consisting of gas, light, and waterworks. There were not consistently enough African, North American, or Australian utilities listed to construct meaningful return series for these regions, however Asian and Latin American utility shares had reliably lower returns and volatility than those of companies in the finance, transportation, and raw materials sectors. The UK was an outlier in utilities, with generally higher returns (along with transportation) than finance and raw materials. A more detailed analysis of the composition of UK sectors would yield benefits; however, the results may reflect the fact that the rising populations and industrialization of Britain's urban areas generated substantial demand for transportation and utilities. The relatively lower return on UK financial shares is a bit of a puzzle, given Britain's leading role in world finance at the time. One explanation might be that the leading (and most profitable) institutions involved in international finance were privately owned merchant banks, rather than the joint stock commercial banks that were publicly traded.

Table 16 also presents correlations among the regions for each of the sectors. Of the four sectors, finance is the most highly correlated among regions. Particularly strong correlations exist between securities of European financial firms and those of African and Asian financial firms, perhaps reflecting colonial connections. Shares of British financial firms were most highly correlated with those of Africa, North America, and Europe. Utilities, the output of which is perhaps the least tradable of any of the four sectors, was generally the least correlated among regions.

Table 17a presents CAPM regression estimates for regional indices for each of the four main sectors: finance, raw materials, transportation, and utilities. The results presented in Table 17a employ unweighted indices; results based on weighted indices are qualitatively similar. Estimated  $\beta$ 's are lowest for the finance sector (significantly less

than one using the unweighted indices), slightly higher in transportation and utilities, and highest in raw materials. As the earliest, and hence most established, of foreign firms listed in London, the relatively lower  $\beta$ 's in the finance sector accord with intuition, as does the relatively high  $\beta$ 's on raw materials, given the uncertainties associated with extractive industries and the volatility of commodities prices.

Taking this investigation one step further, Table 17b presents CAPM regressions on raw materials firms by region. Again, results using unweighted data alone are presented; tests using weighted indices yield similar results. Asia and Australia stand out due to their low estimated  $\beta$ 's. This may be explained by the fact that higher-risk Australian shares were listed on Australian markets, meaning that London-listed companies would have been less subject to market risk. Asian raw materials shares consisted primarily of tea, rubber, and jute. The relatively steady demand for these Asian products, compared with the precious metals, diamonds, and land that characterized the raw materials firms in Africa and North America—characterized by high estimated  $\beta$ 's-- may have rendered their shares less subject to market risk than raw materials concerns based on other regions.

An interesting—and unusual, by modern standards—characteristic of equity traded in London during the late nineteenth and early twentieth century was that it often carried contingent liability. For example, a share with a nominal value of £20 might have had £16 paid-in, meaning that prospective shareholders would have paid £16 if they purchased it upon issue. At the time of issue, the share would have traded for about £16, but that figure would have varied with the fortunes of the company over time. Owners of these shares would have had a £4 contingent (i.e., uncalled) liability, meaning that the company could call upon holders of these shares to pay in £4 whenever asked--and for whatever reason (Jefferys (1938 [1977])).

Grossman and Imai (2011) find that English banks that had higher levels of contingent equity undertook less risk than their counterparts with less uncalled capital. Because firms were free to issue as much uncalled liability as they saw fit, analyzing the consequences of uncalled liability is made more difficult because the decision to hold uncalled capital and to take risk may be simultaneously determined. Hence, an analysis of whether the decision to hold capital was affected by firm location and/or sector might

help to resolve this question. Grossman and Imai (2011) note that in the UK during 1870-1913, banks, insurance, and land, mortgage, and financial companies held large amounts of uncalled capital relative to the market as a whole, without distinguishing between domestic and foreign companies. They suggest that this high proportion may have been a market-imposed requirement to engender confidence in sectors where leverage was high and the physical assets were either meager or inaccessible to creditors. Data on the ratio of uncalled to paid-in capital presented in Figure 6 supports this: shareholders in finance and raw materials were subject to the largest amounts of uncalled capital; those of transport and utilities were subject to far less.

Figure 7 presents data on the ratio of uncalled capital by region. Firms in the UK, Australia, and Africa issued considerable amount of uncalled capital, at times equal to the amount of paid-in capital. Firms in North America and Asia issued less, while those in Europe and Latin America (not included in Figure 6) issued almost none. It may be that uncalled liability was a particularly British institution which had more currency in areas where British, rather than continental (European) laws and standards applied (LaPorta et al. (1997)). Regressions of contingent liability on a variety of firm qualities (not included for reasons of space) confirm the sector- and region-specific influences found in Figures 6 and 7; they also suggests that older firms were more likely to issue greater amounts of contingent capital, while large firms were likely to issue less. Matching these equity market data with other firm characteristics may help to disentangle the simultaneity between contingent capital and firm behavior.

## 6. Conclusions and Extensions

This paper presents new annual indices of domestic and foreign equity traded on British securities markets. The series presented include weighted and unweighted regional indices for Africa, Asia, Europe, Latin America, North America, Australia, and UK, including capital gains, dividends and total return data. The data reveal substantial differences in the mean and volatility of returns. As in the modern world, equities representing more developed economies generally had lower returns and higher volatility than those in less developed economies. Australia was exceptional, perhaps because much of its capital formation—especially high-risk mining ventures--was financed



locally, rather than in the UK markets. These data do not, on their own, answer the question of Victorian Britain's failure, but does lend support to the conclusions of Goetzmann and Ukhov (2006) and Chabot and Kurz (2010), who argue that Britain's substantial capital outflow may be the result of investors' search for diversification. Analysis of these indices—and those for local stock markets outside the UK—with data on Britain capital exports may shed further light on Victorian failure.

An interesting feature of the data is that dividend yields were similar across regions, suggesting that investors in the London market required a certain minimal yield in order to hold equities, reaping higher returns (when they did reap higher returns) via capital gains. Correlations of return data suggest that developed markets were more connected to each other (and to developing regions with colonial or trade connections), but that developing regions were not necessarily highly correlated with each other.

The data show that the raw materials sector had the highest returns, although the UK, Australia, and Latin America were exceptions. On the other end of the spectrum, utilities were the lowest returning equities—except in the UK. Correlations were highest between regions among financial firms, perhaps not surprising given their role in intermediation—frequently across borders. Utilities, with the essentially local output, were the least correlated. These sector region indices, combined with balance sheet and other operating data may help to make more detailed statements about the profitability of enterprises around the world (e.g., Mitchell, Chambers, and Crafts (2011)).

Finally, the data allow a more disaggregated view of the use of contingent liability, both around the world and across industries. As previous research has shown, contingent liability was more extensively employed when leverage was high and the physical assets were either meager or inaccessible to creditors. Combining these data with other firm-specific characteristics may allow a more in-depth analysis of both the firm's decision to hold contingent capital and the consequences of that decision.

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Table 1: Africa

Year	Unweighted Averages						Weighted Averages (MK: weighted by market capitalization; PK: weighted by paid-up capitalization)					
	Capital gain	SD of Capital gain	Dividend yield	SD of dividend yield	Total return	SD of Total return	Capital gain (MK)	Dividend yield (MK)	Total return (MK)	Capital gain (PK)	Dividend yield (PK)	Total return (PK)
1871	0.7502	1.1820	0.1144	0.1357	0.8646	1.3091	0.9262	0.1629	1.0891	0.6858	0.1247	0.8104
1872	0.0779	0.2380	0.0930	0.0543	0.1709	0.2880	0.2076	0.1256	0.3332	0.0855	0.0909	0.1764
1873	0.0224	0.1463	0.0913	0.0406	0.1137	0.1269	-0.0608	0.1016	0.0408	-0.0188	0.0860	0.0671
1874	0.1120	0.1248	0.0864	0.0398	0.1983	0.1529	0.0960	0.0933	0.1894	0.0763	0.0747	0.1510
1875	0.0247	0.1941	0.0744	0.0302	0.0990	0.1969	0.0039	0.0706	0.0745	-0.0319	0.0725	0.0406
1876	-0.2053	0.2887	0.0510	0.0410	-0.1543	0.3073	-0.2046	0.0660	-0.1386	-0.2999	0.0505	-0.2494
1877	0.1168	0.3513	0.0859	0.0477	0.2026	0.3880	0.0008	0.0690	0.0698	-0.0526	0.0494	-0.0033
1878	0.0135	0.2654	0.0747	0.0364	0.0882	0.2852	0.1464	0.0932	0.2393	0.2036	0.0903	0.2930
1879	0.1328	0.3165	0.0796	0.0230	0.2124	0.3275	0.1861	0.0802	0.2663	0.2121	0.0805	0.2926
1880	0.2460	0.2652	0.0764	0.0372	0.3223	0.2700	0.0784	0.0190	0.0973	0.1030	0.0254	0.1284
1881	0.1388	0.4914	0.0659	0.0199	0.2047	0.4888	1.4767	0.0552	1.5319	1.0503	0.0562	1.1065
1882	0.0109	0.3095	0.0664	0.0431	0.0772	0.3461	-0.2628	0.0302	-0.2326	-0.2037	0.0310	-0.1727
1883	-0.1690	0.2907	0.0540	0.0390	-0.1149	0.3068	-0.1832	0.0396	-0.1436	-0.2054	0.0406	-0.1648
1884	-0.1515	0.1589	0.0536	0.0480	-0.0979	0.1706	-0.0501	0.0475	-0.0026	-0.0838	0.0436	-0.0402
1885	-0.1513	0.3047	0.0388	0.0334	-0.1125	0.3098	0.1753	0.0487	0.2240	0.1101	0.0437	0.1538
1886	0.8079	2.3354	0.0507	0.0414	0.8586	2.3532	0.0000	0.0401	0.0400	0.0750	0.0395	0.1145
1887	0.2114	0.5242	0.0437	0.0399	0.2551	0.5188	0.0511	0.0373	0.0885	0.0455	0.0307	0.0762
1888	0.0715	0.2574	0.0541	0.0373	0.1255	0.2777	0.0463	0.0291	0.0754	0.0307	0.0306	0.0613
1889	0.1054	0.2229	0.0475	0.0310	0.1529	0.2220	0.2323	0.0387	0.2710	0.1940	0.0406	0.2347
1890	-0.1616	0.2308	0.0539	0.0327	-0.1078	0.2546	-0.0504	0.0438	-0.0067	-0.0670	0.0436	-0.0234
1891	-0.2238	0.2588	0.0513	0.0322	-0.1725	0.2691	0.0601	0.0456	0.1057	-0.0156	0.0460	0.0304
1892	0.0917	0.4945	0.0418	0.0368	0.1335	0.4872	0.0311	0.0361	0.0672	0.0377	0.0385	0.0762
1893	-0.0968	0.3073	0.0639	0.0501	-0.0328	0.3308	0.0000	0.0418	0.0418	-0.0234	0.0381	0.0148
1894	0.4312	0.6591	0.0591	0.0583	0.4904	0.6526	0.2960	0.0471	0.3431	0.3170	0.0469	0.3638
1895	0.3473	0.4824	0.0617	0.0741	0.4090	0.5061	0.2383	0.0369	0.2753	0.1748	0.0296	0.2044
1896	0.4419	5.1295	0.0475	0.0923	0.4799	5.1262	0.0202	0.0376	0.0562	0.1022	0.0252	0.1245
1897	0.0816	0.3857	0.0391	0.0464	0.1211	0.3961	0.0751	0.0339	0.1090	0.0311	0.0299	0.0609
1898	0.0228	0.4229	0.0406	0.0547	0.0634	0.4294	0.0785	0.0392	0.1178	0.0315	0.0325	0.0640
1899	0.0519	0.5877	0.0528	0.0586	0.1050	0.5833	-0.0300	0.0309	0.0009	0.0238	0.0303	0.0541
1900	0.1563	0.4252	0.0140	0.0337	0.1703	0.4264	0.1607	0.0177	0.1784	0.1352	0.0199	0.1551
1901	0.1827	0.1954	0.0166	0.0334	0.1994	0.1923	0.1751	0.0212	0.1963	0.1711	0.0217	0.1928
1902	0.0208	0.2308	0.0187	0.0285	0.0397	0.2352	0.0304	0.0189	0.0493	-0.0688	0.0177	-0.0512
1903	-0.1829	0.2021	0.0248	0.0312	-0.1582	0.2191	-0.1087	0.0223	-0.0864	-0.1485	0.0201	-0.1284
1904	0.1093	0.2237	0.0336	0.0357	0.1429	0.2203	0.1501	0.0290	0.1791	0.1336	0.0282	0.1616
1905	-0.2870	0.2190	0.0345	0.0400	-0.2523	0.2419	-0.2018	0.0303	-0.1714	-0.2553	0.0263	-0.2290
1906	-0.1943	0.2351	0.0417	0.0526	-0.1525	0.2618	-0.0606	0.0387	-0.0219	-0.1262	0.0290	-0.0972
1907	-0.2431	0.2494	0.0533	0.0664	-0.1898	0.2741	-0.0907	0.0483	-0.0424	-0.2060	0.0362	-0.1698
1908	0.4243	0.8870	0.0656	0.0955	0.4903	0.8851	0.2477	0.0595	0.3070	0.2601	0.0487	0.3082
1909	0.2154	0.4550	0.0627	0.0745	0.2781	0.4566	0.1903	0.0482	0.2385	0.2129	0.0455	0.2583
1910	-0.0638	0.4531	0.0486	0.0525	-0.0152	0.4552	-0.0054	0.0434	0.0380	-0.0415	0.0404	-0.0011
1911	-0.2670	0.2377	0.0594	0.1151	-0.2076	0.2680	-0.1327	0.0450	-0.0877	-0.2403	0.0418	-0.1985
1912	-0.0821	0.2910	0.0587	0.0894	-0.0230	0.2879	-0.0184	0.0387	0.0203	-0.0728	0.0436	-0.0291
1913	-0.2099	0.2360	0.0689	0.0791	-0.1413	0.2568	-0.1541	0.0516	-0.1034	-0.2089	0.0543	-0.1553

Table 2: Asia

Year	Unweighted Averages						Weighted Averages (MK: weighted by market capitalization; PK: weighted by paid-up capitalization)					
	Capital gain	SD of Capital gain	Dividend yield	SD of dividend yield	Total return	SD of Total return	Capital gain (MK)	Dividend yield (MK)	Total return (MK)	Capital gain (PK)	Dividend yield (PK)	Total return (PK)
1871	0.1953	0.3483	0.0592	0.0498	0.2545	0.3765	0.1172	0.0591	0.1763	0.1021	0.0535	0.1557
1872	0.1696	0.8918	0.0514	0.0445	0.2210	0.8824	0.0624	0.0362	0.0986	0.1078	0.0307	0.1385
1873	0.0072	0.3880	0.0744	0.1013	0.0816	0.4831	-0.0552	0.0443	-0.0109	-0.0347	0.0271	-0.0076
1874	0.0390	0.2320	0.0575	0.0381	0.0989	0.2467	-0.0016	0.0431	0.0415	-0.1253	0.0298	-0.0955
1875	0.0976	0.5337	0.0608	0.0600	0.1525	0.5586	-0.0414	0.0352	-0.0076	-0.0374	0.0257	-0.0124
1876	-0.0495	0.3478	0.0480	0.0433	-0.0030	0.3475	0.0357	0.0340	0.0693	-0.0013	0.0239	0.0225
1877	0.1164	0.4640	0.0565	0.0325	0.1698	0.4625	0.0702	0.0550	0.1238	0.0856	0.0457	0.1305
1878	0.2227	1.4008	0.0992	0.2350	0.3219	1.6261	0.3881	0.0563	0.4444	0.4476	0.0643	0.5119
1879	0.0191	0.2632	0.0435	0.0380	0.0627	0.2810	0.1570	0.0352	0.1922	0.1151	0.0295	0.1446
1880	-0.0773	0.2152	0.0431	0.0330	-0.0342	0.2413	0.0599	0.0537	0.1136	0.0345	0.0494	0.0839
1881	0.0946	0.2788	0.0395	0.0368	0.1367	0.2818	0.4985	0.0448	0.5353	0.2668	0.0427	0.2939
1882	-0.1138	0.1968	0.0454	0.0313	-0.0684	0.2171	-0.0268	0.0137	-0.0131	-0.0236	0.0107	-0.0129
1883	-0.2230	0.3269	0.0292	0.0321	-0.1946	0.3476	-0.0061	0.0386	0.0324	-0.0106	0.0356	0.0249
1884	0.5468	2.1537	0.0387	0.0354	0.5856	2.1483	0.0252	0.0341	0.0593	0.0256	0.0325	0.0581
1885	0.4025	1.6834	0.0453	0.0365	0.4475	1.6752	0.1912	0.0293	0.2199	0.1056	0.0262	0.1306
1886	0.1126	0.2421	0.0493	0.0404	0.1618	0.2384	0.0745	0.0487	0.1232	0.0934	0.0469	0.1403
1887	0.0080	0.2259	0.0572	0.0752	0.0667	0.2459	-0.0339	0.0303	-0.0035	-0.0162	0.0236	0.0074
1888	-0.0237	0.2340	0.0510	0.0359	0.0273	0.2552	0.0159	0.0511	0.0670	-0.0068	0.0482	0.0414
1889	0.0195	0.3830	0.0436	0.0336	0.0621	0.3939	0.7221	0.0849	0.8066	0.6792	0.0810	0.7593
1890	-0.0496	0.3289	0.0424	0.0334	-0.0073	0.3381	0.0005	0.0165	0.0171	-0.0351	0.0368	0.0017
1891	-0.1249	0.2914	0.0846	0.2100	-0.0403	0.4273	-0.0048	0.0138	0.0091	-0.0087	0.0137	0.0049
1892	-0.1360	0.2673	0.0672	0.1480	-0.0688	0.3571	-0.1224	0.0440	-0.0784	-0.1350	0.0415	-0.0935
1893	-0.0327	0.3724	0.0449	0.0358	0.0122	0.3675	0.0052	0.0300	0.0352	-0.0159	0.0292	0.0134
1894	0.1803	0.5518	0.0476	0.0356	0.2280	0.5444	0.0301	0.0350	0.0651	0.0263	0.0340	0.0602
1895	0.1881	0.4510	0.0656	0.0402	0.2536	0.4509	0.1034	0.0346	0.1380	0.0837	0.0297	0.1134
1896	0.2217	0.3654	0.0645	0.0482	0.2861	0.3927	0.0675	0.0390	0.1066	0.0529	0.0332	0.0861
1897	-0.0327	0.2225	0.0488	0.0281	0.0145	0.2350	0.0930	0.0361	0.1288	0.1030	0.0375	0.1403
1898	-0.1428	0.2201	0.0474	0.0300	-0.0954	0.2342	0.0238	0.0363	0.0602	-0.0022	0.0343	0.0321
1899	0.0563	0.3418	0.0532	0.0399	0.1089	0.3506	0.0195	0.0486	0.0678	-0.0258	0.0257	-0.0006
1900	-0.0968	0.1900	0.0566	0.0393	-0.0406	0.2139	0.0248	0.0525	0.0773	0.0169	0.0278	0.0446
1901	-0.0899	0.2044	0.0460	0.0370	-0.0439	0.2243	0.0611	0.0512	0.1123	0.0826	0.0376	0.1202
1902	-0.0348	0.1668	0.0417	0.0343	0.0069	0.1817	0.0637	0.0585	0.1222	0.0294	0.0493	0.0787
1903	0.1916	0.3956	0.0507	0.0346	0.2430	0.4039	0.0531	0.0564	0.1095	0.0547	0.0476	0.1023
1904	-0.0229	0.3278	0.0502	0.0314	0.0266	0.3329	0.0700	0.0521	0.1206	0.0565	0.0473	0.1026
1905	0.1530	0.3334	0.0492	0.0371	0.2022	0.3369	0.1045	0.0595	0.1640	0.1239	0.0447	0.1687
1906	0.0700	0.2444	0.0540	0.0327	0.1239	0.2558	0.0647	0.0546	0.1191	0.0764	0.0487	0.1249
1907	-0.0178	0.2642	0.0555	0.0346	0.0380	0.2716	-0.0454	0.0554	0.0100	-0.0588	0.0489	-0.0099
1908	-0.0504	0.2341	0.0554	0.0407	0.0050	0.2604	0.0463	0.0601	0.1064	-0.0226	0.0520	0.0294
1909	0.1856	0.5382	0.0598	0.0391	0.2454	0.5495	0.1826	0.0535	0.2360	0.0948	0.0487	0.1435
1910	0.1881	0.3641	0.0620	0.0400	0.2501	0.3835	0.0971	0.0449	0.1420	0.0711	0.0421	0.1132
1911	-0.0690	0.1934	0.0503	0.0374	-0.0182	0.2044	-0.0405	0.0489	0.0083	-0.0682	0.0448	-0.0234
1912	0.0582	0.2726	0.0650	0.0430	0.1214	0.2754	0.0212	0.0569	0.0777	0.0134	0.0542	0.0673
1913	-0.1433	0.3300	0.0656	0.0434	-0.0783	0.3430	-0.0397	0.0597	0.0193	-0.0324	0.0580	0.0252

Table 3: Europe

Year	Unweighted Averages						Weighted Averages (MK: weighted by market capitalization; PK: weighted by paid-up capitalization)					
	Capital gain	SD of Capital gain	Dividend yield	SD of dividend yield	Total return	SD of Total return	Capital gain (MK)	Dividend yield (MK)	Total return (MK)	Capital gain (PK)	Dividend yield (PK)	Total return (PK)
1871	0.2320	0.2386	0.0763	0.0458	0.3083	0.2474	0.2081	0.0615	0.2697	0.2218	0.0590	0.2808
1872	0.0502	0.3043	0.0591	0.0437	0.1061	0.3252	0.0768	0.0523	0.1274	0.0867	0.0519	0.1371
1873	-0.0262	0.2313	0.0520	0.0500	0.0264	0.2653	0.0220	0.0543	0.0762	0.0237	0.0511	0.0748
1874	-0.1495	0.2008	0.0505	0.0341	-0.1035	0.2193	-0.0014	0.0510	0.0494	-0.0181	0.0477	0.0294
1875	-0.1239	0.2415	0.0587	0.0413	-0.0613	0.2648	-0.0166	0.0520	0.0354	-0.0555	0.0472	-0.0083
1876	0.0589	0.4116	0.0698	0.0757	0.1290	0.4295	-0.0055	0.0563	0.0507	0.0229	0.0523	0.0752
1877	-0.0540	0.2531	0.0510	0.0440	-0.0011	0.2642	-0.0214	0.0524	0.0310	-0.0379	0.0490	0.0111
1878	-0.0847	0.2165	0.0495	0.0499	-0.0368	0.2476	-0.0027	0.0550	0.0523	-0.0035	0.0508	0.0473
1879	0.2838	0.4813	0.0489	0.0431	0.3327	0.4651	0.2079	0.0549	0.2627	0.2413	0.0516	0.2929
1880	0.1514	0.3303	0.0443	0.0338	0.1957	0.3344	0.0669	0.0507	0.1177	0.0776	0.0476	0.1252
1881	0.0731	0.3052	0.0455	0.0340	0.1186	0.3175	0.0088	0.0481	0.0569	-0.0231	0.0460	0.0229
1882	-0.0969	0.1928	0.0436	0.0339	-0.0533	0.2037	-0.0743	0.0500	-0.0243	-0.0701	0.0486	-0.0214
1883	-0.1234	0.2091	0.0436	0.0341	-0.0797	0.2227	-0.0298	0.0199	-0.0100	-0.0228	0.0136	-0.0092
1884	-0.0433	0.3354	0.0496	0.0447	0.0064	0.3566	0.0095	0.0349	0.0444	0.0110	0.0305	0.0416
1885	0.0440	0.3272	0.0442	0.0356	0.0888	0.3250	-0.0958	0.0339	-0.0619	-0.1040	0.0296	-0.0743
1886	0.0674	0.1990	0.0509	0.0374	0.1183	0.2087	-0.0972	0.0329	-0.0642	-0.1391	0.0273	-0.1118
1887	0.0423	0.2652	0.0882	0.2075	0.1000	0.2762	-0.0568	0.0281	-0.0288	-0.1180	0.0189	-0.0998
1888	0.0463	0.2725	0.0621	0.0556	0.1084	0.3075	0.1780	0.0286	0.2066	0.1959	0.0201	0.2160
1889	0.0566	0.3705	0.0492	0.0398	0.1058	0.3808	0.2146	0.0356	0.2503	0.2420	0.0314	0.2733
1890	-0.0223	0.2318	0.0538	0.0373	0.0315	0.2378	0.0352	0.0347	0.0699	0.0305	0.0313	0.0618
1891	-0.0998	0.3589	0.0566	0.0423	-0.0432	0.3687	-0.2329	0.0272	-0.2057	-0.2894	0.0190	-0.2704
1892	-0.0265	0.3558	0.0728	0.0976	0.0463	0.3494	0.0319	0.0302	0.0622	0.0354	0.0244	0.0598
1893	0.0670	0.4098	0.0513	0.0324	0.1197	0.4034	0.1193	0.0259	0.1452	0.1389	0.0200	0.1589
1894	0.1422	0.3992	0.0580	0.0317	0.2002	0.3878	-0.0030	0.0214	0.0184	0.0008	0.0190	0.0198
1895	0.1993	0.3214	0.0614	0.0354	0.2607	0.3246	-0.0309	0.0229	-0.0079	-0.0533	0.0198	-0.0335
1896	0.0678	0.2352	0.0628	0.0422	0.1306	0.2543	0.0285	0.0304	0.0589	-0.0147	0.0253	0.0106
1897	0.0658	0.1714	0.0724	0.0568	0.1382	0.2000	-0.0754	0.0238	-0.0515	-0.1059	0.0212	-0.0847
1898	0.0019	0.1669	0.0617	0.0325	0.0636	0.1757	-0.0952	0.0272	-0.0680	-0.1573	0.0182	-0.1391
1899	0.0343	0.2506	0.0616	0.0320	0.0957	0.2488	0.1382	0.0608	0.1984	0.1217	0.0582	0.1797
1900	-0.0297	0.1589	0.0659	0.0353	0.0362	0.1740	-0.0784	0.0258	-0.0526	-0.1761	0.0031	-0.1731
1901	-0.1204	0.2330	0.0529	0.0404	-0.0675	0.2515	-0.2327	0.0339	-0.1987	-0.2638	0.0228	-0.2410
1902	-0.0118	0.1666	0.0592	0.0407	0.0474	0.1871	-0.0719	0.0240	-0.0480	-0.1186	0.0025	-0.1161
1903	0.0245	0.1449	0.0670	0.0325	0.0915	0.1463	0.0491	0.0251	0.0742	0.0025	0.0023	0.0048
1904	0.0861	0.2086	0.0731	0.0349	0.1592	0.2229	0.1044	0.0236	0.1280	0.0702	0.0021	0.0723
1905	0.1384	0.1549	0.0680	0.0252	0.2064	0.1512	0.2328	0.0217	0.2545	0.3186	0.0030	0.3216
1906	0.0257	0.2031	0.0599	0.0252	0.0856	0.1994	0.4096	0.0210	0.4306	0.4762	0.0030	0.4792
1907	-0.0726	0.1462	0.0638	0.0254	-0.0088	0.1573	-0.2010	0.0193	-0.1816	-0.1957	0.0026	-0.1931
1908	-0.0034	0.2485	0.0729	0.0638	0.0695	0.2987	-0.1327	0.0234	-0.1092	-0.2797	0.0025	-0.2772
1909	0.0263	0.1192	0.0599	0.0312	0.0862	0.1249	0.1463	0.0177	0.1640	0.1987	0.0022	0.2009
1910	-0.0695	0.2314	0.0570	0.0317	-0.0125	0.2532	-0.0621	0.0167	-0.0454	-0.0495	0.0022	-0.0473
1911	0.0230	0.1250	0.0554	0.0279	0.0784	0.1175	-0.0422	0.0175	-0.0247	-0.0970	0.0021	-0.0948
1912	0.0065	0.1226	0.0620	0.0270	0.0685	0.1372	0.0224	0.0218	0.0443	0.0270	0.0026	0.0296
1913	-0.0706	0.1624	0.0592	0.0332	-0.0114	0.1580	-0.0183	0.0254	0.0072	-0.0062	0.0033	-0.0029

Table 4: Latin America

Year	Unweighted Averages						Weighted Averages (MK: weighted by market capitalization; PK: weighted by paid-up capitalization)					
	Capital gain	SD of Capital gain	Dividend yield	SD of dividend yield	Total return	SD of Total return	Capital gain (MK)	Dividend yield (MK)	Total return (MK)	Capital gain (PK)	Dividend yield (PK)	Total return (PK)
1871	0.1668	0.2387	0.0452	0.0423	0.2120	0.2458	0.1345	0.0525	0.1870	0.3167	0.0350	0.3517
1872	0.0021	0.2863	0.0382	0.0430	0.0403	0.3065	0.0381	0.0244	0.0626	0.0398	0.0156	0.0554
1873	-0.0621	0.1874	0.0427	0.0371	-0.0194	0.1934	-0.0244	0.0167	-0.0077	0.0336	0.0097	0.0433
1874	-0.1762	0.2620	0.0407	0.0385	-0.1325	0.2859	-0.0378	0.0408	0.0030	-0.2658	0.0265	-0.2393
1875	0.0288	0.6840	0.0457	0.0364	0.0746	0.6796	0.0119	0.0714	0.0833	-0.0540	0.0454	-0.0086
1876	-0.1210	0.2612	0.0411	0.0317	-0.0798	0.2614	-0.1592	0.0657	-0.0936	-0.3575	0.0382	-0.3194
1877	0.0436	0.3391	0.0379	0.0378	0.0826	0.3425	0.0116	0.0323	0.0439	0.3165	0.0176	0.3341
1878	-0.1064	0.1928	0.0437	0.0351	-0.0642	0.2045	-0.0278	0.0235	-0.0045	-0.0677	0.0102	-0.0576
1879	0.4827	0.9330	0.0422	0.0365	0.5249	0.9209	1.0397	0.0405	1.0802	1.5444	0.0236	1.5680
1880	0.2344	0.3188	0.0470	0.0445	0.2814	0.3136	0.5352	0.0356	0.5707	0.5833	0.0260	0.6093
1881	0.0158	0.2141	0.0443	0.0381	0.0569	0.2304	0.1292	0.0360	0.1641	0.1050	0.0275	0.1323
1882	-0.0424	0.2238	0.0451	0.0322	0.0027	0.2365	0.0069	0.0332	0.0401	-0.0357	0.0252	-0.0105
1883	0.1221	0.7694	0.0486	0.0361	0.1707	0.7632	0.0745	0.0240	0.0985	0.0990	0.0187	0.1177
1884	-0.0954	0.2722	0.0502	0.0307	-0.0452	0.2852	0.0166	0.0154	0.0320	0.0549	0.0220	0.0769
1885	0.0262	0.3560	0.0447	0.0334	0.0712	0.3526	0.0201	0.0422	0.0622	-0.0251	0.0358	0.0107
1886	0.0282	0.2101	0.0606	0.0441	0.0887	0.2101	0.0238	0.0443	0.0681	0.0496	0.0441	0.0937
1887	0.1814	0.5797	0.0493	0.0362	0.2307	0.5734	0.0401	0.0453	0.0854	0.0218	0.0387	0.0605
1888	0.1339	0.3239	0.0523	0.0368	0.1862	0.3406	0.0874	0.0323	0.1197	0.1169	0.0321	0.1491
1889	-0.0186	0.4136	0.0492	0.0319	0.0306	0.4117	-0.0240	0.0250	0.0009	-0.0138	0.0231	0.0093
1890	-0.1345	0.2984	0.0441	0.0354	-0.0904	0.3112	0.0362	0.0437	0.0799	-0.0168	0.0318	0.0150
1891	-0.1425	0.3676	0.0445	0.0433	-0.0980	0.3764	-0.1038	0.0409	-0.0629	-0.1318	0.0257	-0.1061
1892	-0.0841	0.4138	0.0506	0.0578	-0.0323	0.4434	-0.0762	0.0500	-0.0262	-0.1329	0.0443	-0.0886
1893	-0.0580	0.6872	0.0475	0.0482	-0.0105	0.6866	-0.1205	0.0537	-0.0668	-0.1323	0.0451	-0.0872
1894	0.1394	0.5252	0.0600	0.0601	0.1994	0.5325	0.2243	0.0620	0.2863	0.1274	0.0408	0.1682
1895	-0.0269	0.4249	0.0711	0.1021	0.0451	0.4407	0.1802	0.0668	0.2470	0.1387	0.0445	0.1832
1896	0.0064	0.3051	0.0500	0.0452	0.0568	0.3251	0.1110	0.0513	0.1622	0.1412	0.0342	0.1753
1897	-0.0733	0.3454	0.0456	0.0514	-0.0272	0.3513	0.0247	0.0448	0.0670	0.0493	0.0313	0.0793
1898	0.0162	0.3779	0.0607	0.0843	0.0769	0.4023	-0.0414	0.0471	0.0058	-0.0664	0.0552	-0.0111
1899	-0.0042	0.2156	0.0625	0.0576	0.0582	0.2335	-0.0247	0.0523	0.0276	0.0010	0.0472	0.0482
1900	0.1331	0.3449	0.0682	0.0456	0.1993	0.3616	0.1267	0.0672	0.1938	0.1595	0.0707	0.2301
1901	0.0623	0.2721	0.0632	0.0396	0.1244	0.2851	0.1058	0.0603	0.1661	0.1263	0.0587	0.1849
1902	0.0539	0.2941	0.0697	0.0646	0.1188	0.3028	0.1450	0.0651	0.2100	0.0774	0.0627	0.1397
1903	0.0536	0.2789	0.0641	0.0442	0.1177	0.2861	0.0155	0.0589	0.0744	-0.0081	0.0539	0.0458
1904	0.3267	0.5159	0.0596	0.0386	0.3862	0.5117	0.2246	0.0538	0.2780	0.2681	0.0467	0.3146
1905	0.1705	0.3174	0.0570	0.0333	0.2285	0.3291	0.1833	0.0520	0.2353	0.1326	0.0413	0.1739
1906	0.1718	0.8312	0.0577	0.0433	0.2283	0.8344	0.0116	0.0502	0.0618	-0.0224	0.0404	0.0179
1907	-0.1650	0.2098	0.0550	0.0324	-0.1100	0.2302	-0.1074	0.0410	-0.0664	-0.1803	0.0349	-0.1454
1908	0.0665	0.3008	0.0804	0.1595	0.1290	0.3243	0.0682	0.0533	0.1201	0.0698	0.0462	0.1146
1909	0.0291	0.2139	0.0464	0.0331	0.0756	0.2210	0.0676	0.0447	0.1116	0.0545	0.0386	0.0922
1910	0.1421	0.6042	0.0710	0.1366	0.1981	0.6269	0.0647	0.0499	0.1130	0.0465	0.0471	0.0919
1911	0.1070	0.2561	0.0590	0.0315	0.1668	0.2646	0.0709	0.0551	0.1260	0.0903	0.0526	0.1429
1912	0.0773	0.2745	0.0571	0.0387	0.1331	0.2898	0.0509	0.0500	0.1007	0.0768	0.0451	0.1216
1913	-0.1641	0.1838	0.0526	0.0304	-0.1115	0.1930	-0.0612	0.0546	-0.0067	-0.0749	0.0503	-0.0245



Table 5: North America

Year	Unweighted Averages						Weighted Averages (MK: weighted by market capitalization; PK: weighted by paid-up capitalization)					
	Capital gain	SD of Capital gain	Dividend yield	SD of dividend yield	Total return	SD of Total return	Capital gain (MK)	Dividend yield (MK)	Total return (MK)	Capital gain (PK)	Dividend yield (PK)	Total return (PK)
1871	0.1321	0.2769	0.0775	0.0328	0.2096	0.2544	0.4319	0.0686	0.5005	0.4141	0.0677	0.4817
1872	-0.1011	0.3685	0.0575	0.0472	-0.0436	0.4058	-0.0128	0.0509	0.0382	-0.0115	0.0503	0.0388
1873	0.0237	0.4709	0.0640	0.0503	0.0877	0.4837	-0.1072	0.0460	-0.0612	-0.1296	0.0456	-0.0840
1874	-0.1539	0.2712	0.0610	0.0487	-0.0929	0.2913	-0.1253	0.0386	-0.0867	-0.1724	0.0283	-0.1441
1875	-0.0282	0.3050	0.0394	0.0394	0.0127	0.3053	-0.0781	0.0339	-0.0441	-0.1152	0.0185	-0.0967
1876	-0.0842	0.3348	0.0444	0.0472	-0.0398	0.3576	0.0155	0.0428	0.0583	0.0361	0.0285	0.0646
1877	-0.0582	0.4311	0.0352	0.0334	-0.0230	0.4375	0.0530	0.0409	0.0939	0.0640	0.0283	0.0923
1878	-0.1203	0.2820	0.0316	0.0379	-0.0876	0.2955	-0.0871	0.0443	-0.0428	-0.1910	0.0290	-0.1620
1879	0.4006	1.0304	0.0450	0.0395	0.4456	1.0174	0.4386	0.0358	0.4744	0.5128	0.0227	0.5355
1880	0.3454	0.6595	0.0440	0.0415	0.3893	0.6761	0.2372	0.0380	0.2752	0.3107	0.0323	0.3430
1881	-0.0115	0.2041	0.0422	0.0265	0.0307	0.2072	-0.0481	0.0374	-0.0107	-0.0808	0.0314	-0.0494
1882	-0.0629	0.1725	0.0580	0.0441	-0.0061	0.1746	0.1380	0.0324	0.1704	0.1480	0.0257	0.1737
1883	-0.1170	0.2249	0.0486	0.0366	-0.0684	0.2329	-0.0893	0.0272	-0.0621	-0.1728	0.0234	-0.1495
1884	-0.1414	0.2732	0.0541	0.0400	-0.0880	0.2729	-0.0947	0.0369	-0.0578	-0.1265	0.0325	-0.0941
1885	-0.0603	0.2403	0.0508	0.0502	-0.0087	0.2649	0.0532	0.0335	0.0867	0.0845	0.0318	0.1164
1886	-0.0015	0.3155	0.0491	0.0386	0.0455	0.3353	0.1932	0.0381	0.2308	0.1314	0.0305	0.1615
1887	-0.1144	0.2631	0.0468	0.0356	-0.0675	0.2737	0.0025	0.0301	0.0327	-0.0005	0.0260	0.0254
1888	0.0739	0.4239	0.0561	0.0576	0.1313	0.4293	-0.0071	0.0324	0.0254	-0.0887	0.0198	-0.0689
1889	-0.0130	0.2842	0.0520	0.0424	0.0390	0.3025	0.1381	0.0333	0.1713	0.2160	0.0238	0.2398
1890	-0.1324	0.2232	0.0462	0.0402	-0.0862	0.2349	-0.0257	0.0241	-0.0017	-0.0327	0.0153	-0.0174
1891	-0.1385	0.2883	0.0646	0.0536	-0.0739	0.3041	-0.0739	0.0481	-0.0257	-0.1552	0.0334	-0.1217
1892	-0.1087	0.7284	0.0548	0.0608	-0.0532	0.7698	-0.0283	0.0215	-0.0068	-0.0924	0.0168	-0.0756
1893	0.1724	1.8638	0.0597	0.0548	0.2321	1.8569	-0.0398	0.0436	0.0037	-0.0194	0.0358	0.0164
1894	-0.0277	0.2803	0.0607	0.0661	0.0339	0.2963	-0.0538	0.0439	-0.0099	-0.0286	0.0346	0.0060
1895	0.6501	5.8462	0.1219	0.5907	0.7720	6.4355	0.0111	0.0532	0.0643	0.0917	0.0594	0.1511
1896	-0.0820	0.3091	0.0670	0.0530	-0.0150	0.3378	-0.0160	0.0550	0.0390	-0.0284	0.0555	0.0271
1897	-0.0063	0.3106	0.0662	0.0524	0.0599	0.3332	0.0416	0.0524	0.0940	-0.0117	0.0523	0.0406
1898	-0.0343	0.2905	0.0712	0.0487	0.0369	0.3050	0.0030	0.0486	0.0515	-0.0620	0.0514	-0.0106
1899	-0.0419	0.3110	0.0719	0.0726	0.0299	0.3372	-0.0002	0.0424	0.0422	-0.0695	0.0497	-0.0198
1900	0.1050	0.2980	0.0682	0.0512	0.1732	0.2967	0.0934	0.0259	0.1194	0.0646	0.0288	0.0933
1901	-0.0343	0.2939	0.0597	0.0562	0.0264	0.3306	-0.0097	0.0491	0.0394	-0.0751	0.0406	-0.0345
1902	0.0622	0.3968	0.0804	0.1864	0.1426	0.5565	0.1027	0.0402	0.1430	0.0025	0.0268	0.0293
1903	0.0551	0.6295	0.0616	0.0517	0.1169	0.6238	0.0608	0.0613	0.1207	0.1344	0.0777	0.2116
1904	0.0148	0.2844	0.0668	0.0655	0.0768	0.3119	-0.0187	0.0486	0.0290	-0.0490	0.0654	0.0157
1905	0.2545	0.7799	0.0736	0.1025	0.3281	0.8624	0.4011	0.0637	0.4647	0.3566	0.0743	0.4309
1906	0.0767	0.3443	0.0547	0.0536	0.1314	0.3698	0.1240	0.0532	0.1773	0.0641	0.0626	0.1267
1907	-0.1144	0.2347	0.0551	0.0523	-0.0593	0.2456	-0.1545	0.0516	-0.1029	-0.1883	0.0553	-0.1330
1908	-0.0117	0.2481	0.0729	0.0612	0.0612	0.2786	0.0089	0.0620	0.0709	-0.0178	0.0798	0.0620
1909	0.1904	0.6530	0.0747	0.0769	0.2651	0.7095	0.1322	0.0497	0.1820	0.0461	0.0619	0.1080
1910	0.0398	0.2676	0.0727	0.0620	0.1124	0.2991	0.0145	0.0505	0.0649	-0.0708	0.0527	-0.0182
1911	-0.0216	0.2225	0.0697	0.0449	0.0477	0.2454	-0.0520	0.0528	0.0001	-0.1527	0.0573	-0.0963
1912	-0.0347	0.1879	0.0604	0.0416	0.0257	0.2018	0.0289	0.0548	0.0836	-0.0229	0.0482	0.0254
1913	0.0129	0.4744	0.0675	0.0772	0.0798	0.4651	-0.0010	0.0241	0.0225	-0.1060	0.0229	-0.0838

Table 6: Australia/New Zealand

Year	Unweighted Averages						Weighted Averages (MK: weighted by market capitalization; PK: weighted by paid-up capitalization)					
	Capital gain	SD of Capital gain	Dividend yield	SD of dividend yield	Total return	SD of Total return	Capital gain (MK)	Dividend yield (MK)	Total return (MK)	Capital gain (PK)	Dividend yield (PK)	Total return (PK)
1871	0.1164	0.2627	0.0634	0.0351	0.1798	0.2559	-0.1346	0.0589	-0.0757	-0.1611	0.0568	-0.1043
1872	0.0324	0.2220	0.0536	0.0340	0.0900	0.2402	0.1668	0.0434	0.2089	0.1745	0.0394	0.2131
1873	0.0755	0.3096	0.0613	0.0314	0.1368	0.3115	0.1247	0.0616	0.1863	0.1209	0.0606	0.1815
1874	0.0832	0.2609	0.0560	0.0342	0.1392	0.2605	0.0694	0.0584	0.1279	0.0570	0.0552	0.1122
1875	0.1669	0.4441	0.0621	0.0394	0.2290	0.4505	0.0732	0.0653	0.1385	0.0720	0.0644	0.1364
1876	0.1971	0.9577	0.0567	0.0333	0.2538	0.9527	0.2084	0.0666	0.2750	0.2143	0.0657	0.2801
1877	0.0286	0.2271	0.0583	0.0401	0.0861	0.2524	0.0422	0.0651	0.1045	0.0307	0.0646	0.0930
1878	-0.1441	0.1601	0.0515	0.0361	-0.0927	0.1764	-0.0510	0.0592	0.0083	-0.0501	0.0585	0.0084
1879	0.1093	0.2095	0.0619	0.0283	0.1711	0.2084	0.0577	0.0668	0.1245	0.0616	0.0655	0.1271
1880	0.1536	0.2293	0.0657	0.0256	0.2193	0.2258	0.0946	0.0536	0.1482	0.0880	0.0560	0.1440
1881	0.0088	0.1903	0.0546	0.0201	0.0634	0.1969	0.0285	0.0501	0.0786	0.0207	0.0513	0.0720
1882	0.0100	0.1339	0.0546	0.0197	0.0646	0.1482	0.0385	0.0510	0.0895	0.0286	0.0475	0.0761
1883	-0.0380	0.2441	0.0494	0.0271	0.0123	0.2642	0.0614	0.0564	0.1138	0.0291	0.0523	0.0795
1884	-0.0362	0.2629	0.0517	0.0255	0.0155	0.2630	0.0035	0.0523	0.0557	-0.0256	0.0473	0.0217
1885	-0.0494	0.2593	0.0560	0.0256	0.0066	0.2639	0.0146	0.0579	0.0725	-0.0001	0.0569	0.0568
1886	0.0636	0.3225	0.0613	0.0417	0.1246	0.3508	0.0060	0.0561	0.0620	0.0059	0.0540	0.0595
1887	-0.1281	0.1810	0.0524	0.0253	-0.0757	0.1881	-0.0498	0.0513	0.0015	-0.0710	0.0478	-0.0232
1888	0.0619	0.4757	0.0686	0.0521	0.1306	0.5209	0.0214	0.0544	0.0720	0.0184	0.0524	0.0693
1889	0.0467	0.3037	0.0635	0.0389	0.1101	0.3047	0.0885	0.0516	0.1401	0.0860	0.0521	0.1380
1890	-0.1520	0.2127	0.0530	0.0330	-0.0990	0.2225	-0.0465	0.0485	0.0019	-0.1022	0.0428	-0.0594
1891	-0.1340	0.2440	0.0590	0.0427	-0.0750	0.2636	-0.0825	0.0521	-0.0303	-0.1103	0.0484	-0.0619
1892	-0.1716	0.2286	0.0643	0.0378	-0.1072	0.2297	-0.0986	0.0493	-0.0531	-0.1502	0.0569	-0.0945
1893	-0.2193	0.4582	0.0597	0.0576	-0.1596	0.4684	-0.2497	0.0559	-0.1937	-0.2192	0.0521	-0.1671
1894	-0.0760	0.2852	0.0619	0.0788	-0.0141	0.2959	-0.0913	0.0629	-0.0285	-0.0516	0.0382	-0.0134
1895	0.1297	0.5531	0.0951	0.1313	0.2271	0.6289	0.0880	0.0607	0.1485	0.1297	0.0526	0.1812
1896	-0.0674	0.3109	0.0846	0.1871	0.0173	0.3862	0.0355	0.0577	0.0932	-0.0311	0.0799	0.0488
1897	-0.0154	0.4356	0.0648	0.0828	0.0494	0.4779	0.0704	0.0335	0.1039	0.0460	0.0488	0.0947
1898	-0.1421	0.3445	0.0580	0.0658	-0.0841	0.3699	0.0251	0.0530	0.0780	-0.1202	0.0523	-0.0678
1899	0.2604	0.7590	0.0923	0.0825	0.3527	0.7875	0.2872	0.0764	0.3636	0.1904	0.0811	0.2715
1900	-0.0466	0.3485	0.0647	0.0701	0.0181	0.3883	-0.0210	0.0610	0.0400	-0.0252	0.0624	0.0373
1901	-0.0636	0.3847	0.0549	0.0581	-0.0081	0.3966	-0.0440	0.0470	0.0028	-0.0557	0.0494	-0.0069
1902	-0.1462	0.2869	0.0603	0.0772	-0.0860	0.3001	-0.0849	0.0527	-0.0322	-0.1282	0.0533	-0.0749
1903	-0.0042	0.3975	0.0660	0.0685	0.0617	0.4276	0.0873	0.0783	0.1656	-0.0104	0.0581	0.0478
1904	-0.0143	0.4044	0.0900	0.1707	0.0773	0.4233	0.0306	0.1038	0.1344	-0.0757	0.1294	0.0538
1905	0.0749	0.4286	0.0819	0.0752	0.1568	0.4481	0.4340	0.1033	0.5373	0.3526	0.0929	0.4454
1906	0.0507	0.3136	0.0767	0.0613	0.1290	0.3036	0.1306	0.0778	0.2084	0.0743	0.0734	0.1477
1907	-0.1471	0.3340	0.0805	0.0580	-0.0650	0.3351	-0.1019	0.0753	-0.0266	-0.1294	0.0768	-0.0525
1908	0.1065	0.4130	0.0796	0.0673	0.1860	0.4242	0.0904	0.0710	0.1613	0.1260	0.0721	0.1981
1909	0.1369	0.3691	0.0801	0.0619	0.2169	0.3692	0.1249	0.0683	0.1933	0.1240	0.0709	0.1948
1910	-0.0747	0.2282	0.0707	0.0454	-0.0040	0.2360	-0.0600	0.0634	0.0035	-0.0551	0.0628	0.0077
1911	-0.0133	0.4296	0.0745	0.0502	0.0612	0.4458	-0.0053	0.0623	0.0570	-0.0660	0.0577	-0.0083
1912	-0.0309	0.3185	0.0784	0.0724	0.0475	0.3484	0.0116	0.0772	0.0888	-0.0291	0.0634	0.0343
1913	-0.0058	0.2399	0.0984	0.0762	0.0926	0.2515	0.0002	0.0737	0.0739	0.0017	0.0798	0.0816

Table 7: UK

Year	Unweighted Averages						Weighted Averages (MK: weighted by market capitalization; PK: weighted by paid-up capitalization)					
	Capital gain	SD of Capital gain	Dividend yield	SD of dividend yield	Total return	SD of Total return	Capital gain (MK)	Dividend yield (MK)	Total return (MK)	Capital gain (PK)	Dividend yield (PK)	Total return (PK)
1871	0.1389	0.2443	0.0639	0.0780	0.2028	0.2609	0.1897	0.0642	0.2539	0.2392	0.0342	0.2735
1872	0.0569	0.4477	0.0600	0.0408	0.1150	0.4499	0.0755	0.0552	0.1299	0.0518	0.0445	0.0956
1873	0.0057	0.2153	0.0599	0.0421	0.0660	0.2395	0.0253	0.0499	0.0743	0.0133	0.0374	0.0498
1874	-0.0025	0.2021	0.0587	0.0348	0.0563	0.2114	0.0034	0.0461	0.0488	-0.0341	0.0344	-0.0002
1875	0.0377	0.2251	0.0541	0.0339	0.0918	0.2335	0.0868	0.0397	0.1260	0.1359	0.0307	0.1662
1876	0.0153	0.1889	0.0534	0.0455	0.0690	0.2006	0.0492	0.0434	0.0920	0.0343	0.0357	0.0696
1877	0.0159	0.5307	0.0483	0.0374	0.0645	0.5474	0.0880	0.0439	0.1309	0.0802	0.0370	0.1164
1878	-0.0911	0.2292	0.0463	0.0301	-0.0451	0.2386	-0.0946	0.0400	-0.0550	-0.0809	0.0344	-0.0466
1879	0.0910	0.5067	0.0440	0.0261	0.1362	0.5026	0.0430	0.0397	0.0823	0.0288	0.0293	0.0579
1880	0.0351	0.1982	0.0449	0.0267	0.0799	0.2068	0.0481	0.0384	0.0859	0.0267	0.0327	0.0591
1881	-0.0206	0.1841	0.0455	0.0247	0.0250	0.1928	-0.0044	0.0400	0.0355	-0.0402	0.0339	-0.0064
1882	-0.0346	0.2614	0.0491	0.0414	0.0126	0.2702	0.0095	0.0392	0.0480	-0.0203	0.0279	0.0069
1883	-0.0801	0.2027	0.0506	0.0418	-0.0304	0.2184	-0.0342	0.0416	0.0073	-0.1047	0.0264	-0.0785
1884	-0.0135	0.2819	0.0499	0.0353	0.0364	0.3039	-0.0300	0.0431	0.0121	-0.1189	0.0277	-0.0920
1885	-0.0021	0.3347	0.0477	0.0354	0.0452	0.3459	0.0047	0.0446	0.0482	-0.0132	0.0281	0.0144
1886	0.0040	0.2323	0.0464	0.0354	0.0505	0.2411	0.0039	0.0449	0.0488	-0.0532	0.0276	-0.0257
1887	-0.0115	0.2684	0.0460	0.0327	0.0347	0.2884	0.0113	0.0451	0.0563	-0.0297	0.0259	-0.0038
1888	0.0867	0.4065	0.0511	0.0307	0.1377	0.4102	0.0847	0.0441	0.1286	0.1211	0.0303	0.1513
1889	0.1449	0.3627	0.0556	0.0397	0.2006	0.3731	0.1249	0.0464	0.1712	0.1756	0.0405	0.2156
1890	-0.0244	0.1582	0.0570	0.0326	0.0317	0.1676	-0.0101	0.0410	0.0306	-0.0451	0.0363	-0.0092
1891	-0.0373	0.1977	0.0572	0.0332	0.0200	0.2093	-0.0045	0.0468	0.0422	-0.0596	0.0424	-0.0173
1892	-0.0512	0.2216	0.0510	0.0387	-0.0014	0.2344	-0.0328	0.0435	0.0106	-0.0802	0.0337	-0.0467
1893	-0.0325	0.2715	0.0506	0.0423	0.0180	0.2839	-0.0265	0.0459	0.0192	-0.0548	0.0367	-0.0185
1894	0.0689	0.4963	0.0516	0.0531	0.1204	0.5103	0.0707	0.0461	0.1165	0.0683	0.0349	0.1030
1895	0.0842	0.3065	0.0505	0.0607	0.1324	0.3259	0.0499	0.0425	0.0912	0.0065	0.0320	0.0362
1896	0.1432	0.4094	0.0495	0.0320	0.1929	0.4264	0.1312	0.0408	0.1719	0.0957	0.0290	0.1246
1897	0.0632	0.2985	0.0485	0.0326	0.1111	0.3107	0.0976	0.0409	0.1382	0.0669	0.0312	0.0979
1898	0.0290	0.2977	0.0476	0.0235	0.0766	0.3019	0.0565	0.0373	0.0937	0.0691	0.0297	0.0987
1899	0.0616	0.5273	0.0545	0.0444	0.1162	0.5557	0.0098	0.0398	0.0494	0.0146	0.0296	0.0440
1900	-0.0319	0.1571	0.0565	0.0377	0.0242	0.1722	0.0087	0.0441	0.0523	-0.0237	0.0336	0.0097
1901	-0.0598	0.1743	0.0574	0.0407	-0.0025	0.1817	-0.0445	0.0414	-0.0036	-0.0709	0.0411	-0.0308
1902	-0.0108	0.2449	0.0553	0.0292	0.0448	0.2535	0.0122	0.0472	0.0594	0.0030	0.0420	0.0449
1903	-0.0397	0.1686	0.0544	0.0281	0.0147	0.1798	-0.0291	0.0465	0.0169	-0.0443	0.0441	-0.0006
1904	0.0011	0.2453	0.0526	0.0298	0.0539	0.2532	0.0243	0.0496	0.0737	0.0057	0.0457	0.0512
1905	0.0631	0.2735	0.0542	0.0285	0.1170	0.2836	0.0732	0.0472	0.1202	0.1106	0.0451	0.1554
1906	-0.0053	0.3145	0.0560	0.0267	0.0508	0.3256	0.0105	0.0484	0.0589	-0.0233	0.0462	0.0227
1907	-0.0618	0.2202	0.0732	0.3007	0.0112	0.3778	-0.0348	0.0519	0.0165	-0.1144	0.0575	-0.0572
1908	-0.0574	0.2145	0.0674	0.1786	0.0102	0.2894	0.0511	0.0508	0.1019	0.0442	0.0519	0.0962
1909	-0.0110	0.2232	0.0586	0.1002	0.0477	0.2499	0.0159	0.0464	0.0623	0.0238	0.0447	0.0685
1910	0.0115	0.5508	0.0566	0.0522	0.0682	0.5875	0.0328	0.0489	0.0816	0.0466	0.0468	0.0934
1911	0.0684	0.6584	0.0566	0.0328	0.1251	0.6606	0.0315	0.0511	0.0805	0.0667	0.0506	0.1146
1912	0.0703	0.3329	0.0606	0.0364	0.1309	0.3461	0.0321	0.0501	0.0821	0.0693	0.0486	0.1177
1913	-0.0020	0.3317	0.0649	0.0477	0.0629	0.3635	-0.0095	0.0498	0.0402	-0.0239	0.0508	0.0267

Table 8: All Equities

Year	Unweighted Averages						Weighted Averages (MK: weighted by market capitalization; PK: weighted by paid-up capitalization)					
	Capital gain	SD of Capital gain	Dividend yield	SD of dividend yield	Total return	SD of Total return	Capital gain (MK)	Dividend yield (MK)	Total return (MK)	Capital gain (PK)	Dividend yield (PK)	Total return (PK)
1871	0.1639	0.3175	0.0649	0.0721	0.2287	0.3406	0.2139	0.0634	0.2773	0.2499	0.0444	0.2942
1872	0.0508	0.4466	0.0584	0.0417	0.1079	0.4512	0.0595	0.0507	0.1094	0.0524	0.0437	0.0955
1873	0.0040	0.2484	0.0599	0.0474	0.0642	0.2749	0.0014	0.0479	0.0489	-0.0066	0.0385	0.0315
1874	-0.0209	0.2205	0.0572	0.0361	0.0364	0.2327	-0.0163	0.0464	0.0297	-0.0904	0.0350	-0.0556
1875	0.0310	0.3167	0.0539	0.0369	0.0850	0.3240	0.0333	0.0459	0.0789	0.0133	0.0344	0.0475
1876	0.0045	0.3114	0.0532	0.0465	0.0577	0.3197	0.0266	0.0494	0.0757	-0.0235	0.0381	0.0145
1877	0.0154	0.4842	0.0488	0.0379	0.0643	0.4990	0.0508	0.0462	0.0963	0.0900	0.0353	0.1248
1878	-0.0769	0.3812	0.0494	0.0609	-0.0278	0.4292	-0.0557	0.0453	-0.0106	-0.0845	0.0342	-0.0504
1879	0.1414	0.5606	0.0461	0.0300	0.1885	0.5556	0.2702	0.0427	0.3127	0.4353	0.0304	0.4656
1880	0.0774	0.2757	0.0465	0.0302	0.1239	0.2836	0.1600	0.0402	0.2000	0.2233	0.0343	0.2575
1881	-0.0020	0.2129	0.0460	0.0268	0.0440	0.2211	0.1121	0.0420	0.1537	-0.0129	0.0353	0.0218
1882	-0.0390	0.2442	0.0497	0.0391	0.0093	0.2543	0.0204	0.0363	0.0565	0.0285	0.0288	0.0571
1883	-0.0838	0.2810	0.0485	0.0393	-0.0359	0.2927	-0.0271	0.0320	0.0047	-0.0509	0.0218	-0.0291
1884	-0.0037	0.5797	0.0498	0.0356	0.0461	0.5865	-0.0056	0.0358	0.0299	-0.0313	0.0300	-0.0016
1885	0.0104	0.4826	0.0478	0.0358	0.0582	0.4873	-0.0027	0.0404	0.0373	-0.0349	0.0311	-0.0041
1886	0.0354	0.4186	0.0489	0.0370	0.0841	0.4265	-0.0107	0.0414	0.0307	-0.0537	0.0313	-0.0224
1887	-0.0051	0.3016	0.0497	0.0602	0.0431	0.3148	-0.0041	0.0392	0.0350	-0.0556	0.0256	-0.0303
1888	0.0767	0.3869	0.0533	0.0370	0.1301	0.3970	0.1023	0.0363	0.1384	0.1366	0.0271	0.1637
1889	0.1011	0.3574	0.0541	0.0385	0.1552	0.3666	0.1193	0.0371	0.1564	0.1635	0.0329	0.1963
1890	-0.0559	0.2081	0.0538	0.0337	-0.0028	0.2185	0.0085	0.0371	0.0455	-0.0069	0.0327	0.0258
1891	-0.0756	0.2511	0.0582	0.0612	-0.0174	0.2716	-0.0716	0.0380	-0.0337	-0.1563	0.0267	-0.1296
1892	-0.0671	0.3373	0.0538	0.0575	-0.0138	0.3570	-0.0389	0.0412	0.0021	-0.0649	0.0343	-0.0307
1893	-0.0256	0.6580	0.0516	0.0444	0.0260	0.6601	-0.0144	0.0412	0.0268	-0.0186	0.0339	0.0152
1894	0.0801	0.4833	0.0540	0.0547	0.1341	0.4931	0.0984	0.0443	0.1426	0.0561	0.0319	0.0880
1895	0.1407	1.6969	0.0618	0.1800	0.2012	1.8654	0.0986	0.0438	0.1420	0.0443	0.0329	0.0767
1896	0.1306	1.6038	0.0541	0.0643	0.1840	1.6070	0.0820	0.0419	0.1236	0.0646	0.0317	0.0960
1897	0.0386	0.3149	0.0507	0.0430	0.0890	0.3294	0.0557	0.0384	0.0934	0.0145	0.0305	0.0445
1898	0.0013	0.3158	0.0509	0.0417	0.0522	0.3245	0.0184	0.0392	0.0576	-0.0461	0.0362	-0.0099
1899	0.0601	0.5031	0.0590	0.0525	0.1191	0.5256	0.0224	0.0455	0.0677	0.0393	0.0447	0.0839
1900	0.0027	0.2535	0.0544	0.0438	0.0566	0.2641	0.0532	0.0403	0.0933	-0.0083	0.0327	0.0243
1901	-0.0278	0.2289	0.0527	0.0437	0.0248	0.2359	0.0286	0.0397	0.0681	-0.0482	0.0391	-0.0094
1902	-0.0088	0.2552	0.0533	0.0585	0.0444	0.2787	0.0260	0.0405	0.0665	-0.0285	0.0325	0.0039
1903	-0.0258	0.2727	0.0525	0.0365	0.0267	0.2841	-0.0276	0.0426	0.0147	-0.0200	0.0333	0.0131
1904	0.0345	0.2945	0.0538	0.0536	0.0881	0.3009	0.0899	0.0444	0.1340	0.0866	0.0341	0.1206
1905	0.0434	0.3484	0.0542	0.0420	0.0976	0.3690	0.0706	0.0452	0.1157	0.1621	0.0316	0.1936
1906	-0.0068	0.3634	0.0551	0.0370	0.0483	0.3743	0.0634	0.0447	0.1081	0.1364	0.0313	0.1676
1907	-0.0953	0.2409	0.0669	0.2315	-0.0284	0.3410	-0.0797	0.0474	-0.0325	-0.1585	0.0350	-0.1236
1908	0.0296	0.4232	0.0682	0.1477	0.0966	0.4523	0.0792	0.0524	0.1313	-0.0324	0.0372	0.0045
1909	0.0563	0.3418	0.0602	0.0846	0.1165	0.3597	0.0978	0.0455	0.1432	0.1147	0.0319	0.1465
1910	0.0213	0.4997	0.0586	0.0617	0.0788	0.5274	0.0206	0.0450	0.0653	0.0008	0.0328	0.0333
1911	-0.0002	0.5264	0.0578	0.0535	0.0577	0.5317	-0.0140	0.0479	0.0331	-0.0373	0.0352	-0.0028
1912	0.0353	0.3094	0.0616	0.0507	0.0966	0.3199	0.0256	0.0463	0.0718	0.0292	0.0338	0.0628
1913	-0.0665	0.3171	0.0661	0.0550	-0.0005	0.3389	-0.0461	0.0492	0.0028	-0.0531	0.0367	-0.0167

Table 9: Capital gains, dividend yields, and total returns (average of annual figures), by region

	Capital gain (unweighted)	Dividend yield (unweighted)	Total return (unweighted)	Capital gain (MK)	Dividend yield (MK)	Total return (MK)	Capital gain (PK)	Dividend yield (PK)	Total return (PK)	dividend share (unweighted)	dividend share (MK weighted)	dividend share (PK weighted)
<b>Africa</b>												
Average	0.0635	0.0561	0.1195	0.0876	0.0501	0.1376	0.0496	0.0450	0.0945	0.470	0.364	0.476
Standard deviation	0.2484	0.0210	0.2545	0.2891	0.0290	0.3009	0.2395	0.0225	0.2487			
<b>Asia</b>												
Average	0.0468	0.0540	0.1005	0.0728	0.0448	0.1173	0.0532	0.0394	0.0921	0.537	0.382	0.428
Standard deviation	0.1517	0.0124	0.1533	0.1477	0.0139	0.1536	0.1376	0.0134	0.1449			
<b>Europe</b>												
Average	0.0183	0.0587	0.0763	0.0147	0.0343	0.0489	0.0034	0.0253	0.0286	0.770	0.701	0.885
Standard deviation	0.0961	0.0100	0.0986	0.1280	0.0140	0.1310	0.1580	0.0195	0.1621			
<b>Latin America</b>												
Average	0.0360	0.0527	0.0878	0.0714	0.0458	0.1171	0.0757	0.0373	0.1129	0.600	0.391	0.331
Standard deviation	0.1351	0.0101	0.1371	0.1908	0.0138	0.1915	0.2780	0.0138	0.2765			
<b>North America</b>												
Average	0.0175	0.0600	0.0774	0.0372	0.0433	0.0804	0.0094	0.0408	0.0502	0.775	0.538	0.813
Standard deviation	0.1588	0.0152	0.1670	0.1359	0.0113	0.1388	0.1600	0.0178	0.1638			
<b>Australia/New Zealand</b>												
Average	-0.0002	0.0663	0.0664	0.0324	0.0615	0.0936	0.0090	0.0606	0.0693	0.998	0.657	0.874
Standard deviation	0.1103	0.0129	0.1150	0.1146	0.0136	0.1209	0.1124	0.0159	0.1169			
<b>UK</b>												
Average	0.0143	0.0539	0.0680	0.0279	0.0453	0.0728	0.0131	0.0373	0.0500	0.792	0.622	0.746
Standard deviation	0.0586	0.0063	0.0585	0.0536	0.0051	0.0553	0.0773	0.0081	0.0779			
<b>All equities</b>												
Average	0.0163	0.0546	0.0707	0.0394	0.0433	0.0824	0.0237	0.0336	0.0571	0.773	0.525	0.589
Standard deviation	0.0625	0.0056	0.0630	0.0711	0.0054	0.0725	0.1096	0.0045	0.1100			

Table 10: Correlations of total returns across regions, 1871-1913

Unweighted								
	Africa	Asia	Europe	Latin America	North America	Australia/ New Zealand	UK	All
Africa	1							
Asia	0.16	1						
Europe	0.42	0.21	1					
Latin America	0.24	-0.02	0.55	1				
North America	0.23	0.06	0.66	0.46	1			
Australia/New Zealand	0.27	0.12	0.34	0.22	0.41	1		
UK	0.33	0.22	0.61	0.27	0.35	0.45	1	
All	0.61	0.34	0.77	0.49	0.59	0.58	0.85	1
Weighted by market capitalization								
	Africa	Asia	Europe	Latin America	North America	Australia/ New Zealand	UK	All
Africa	1							
Asia	0.52	1						
Europe	0.13	0.30	1					
Latin America	0.19	0.11	0.28	1				
North America	0.16	0.24	0.49	0.59	1			
Australia/New Zealand	-0.20	0.12	0.40	0.11	0.29	1		
UK	0.27	0.16	0.35	0.19	0.47	0.20	1	
All	0.51	0.36	0.55	0.74	0.69	0.21	0.66	1
Weighted by paid-up capitalization								
	Africa	Asia	Europe	Latin America	North America	Australia/ New Zealand	UK	All
Africa	1							
Asia	0.38	1						
Europe	0.09	0.30	1					
Latin America	0.27	0.12	0.27	1				
North America	0.19	0.29	0.48	0.63	1			
Australia/New Zealand	-0.13	0.15	0.37	0.09	0.30	1		
UK	0.21	0.27	0.35	0.20	0.45	0.26	1	
All	0.28	0.30	0.72	0.77	0.80	0.34	0.58	1

Table 11: Regional Betas

## Panel A: Unweighted indices

	All	Africa	Asia	Australia	Europe	Latin America	North America
UK return – Consol rate	1.024*** (0.0370)	1.141*** (0.0995)	0.914*** (0.0742)	1.121*** (0.137)	0.896*** (0.0706)	1.072*** (0.0390)	1.002*** (0.0793)
Constant	0.0873 (0.108)	0.454 (0.287)	-0.217 (0.208)	0.355 (0.407)	-0.303 (0.209)	0.212* (0.112)	0.0235 (0.231)
Observations	258	43	43	43	43	43	43
R-squared	0.755	0.611	0.703	0.796	0.852	0.945	0.803
Adj. R-squared	0.754	0.602	0.696	0.791	0.848	0.944	0.798

## Panel B: Indices weighted by market capitalization

	All	Africa	Asia	Australia	Europe	Latin America	North America
UK return – Consol rate	0.965*** (0.0359)	0.910*** (0.122)	0.960*** (0.0938)	1.000*** (0.0700)	0.987*** (0.0766)	0.948*** (0.0687)	0.984*** (0.0865)
Constant	-0.0749 (0.101)	-0.194 (0.327)	-0.0714 (0.265)	0.00739 (0.201)	-0.0172 (0.230)	-0.173 (0.205)	-0.00135 (0.235)
Observations	258	43	43	43	43	43	43
R-squared	0.608	0.347	0.676	0.781	0.778	0.764	0.595
Adj. R-squared	0.607	0.331	0.668	0.776	0.773	0.758	0.585

## Panel C: Indices weighted by paid-up capitalization

	All	Africa	Asia	Australia	Europe	Latin America	North America
UK return – Consol rate	0.965*** (0.0359)	0.910*** (0.122)	0.960*** (0.0938)	1.000*** (0.0700)	0.987*** (0.0766)	0.948*** (0.0687)	0.984*** (0.0865)
Constant	-0.0749 (0.101)	-0.194 (0.327)	-0.0714 (0.265)	0.00739 (0.201)	-0.0172 (0.230)	-0.173 (0.205)	-0.00135 (0.235)
Observations	258	43	43	43	43	43	43
R-squared	0.608	0.347	0.676	0.781	0.778	0.764	0.595
Adj. R-squared	0.607	0.331	0.668	0.776	0.773	0.758	0.585

Robust standard errors in parentheses, \*\*\* p&lt;0.01, \*\* p&lt;0.05, \* p&lt;0.1

Table 12: Regional returns, financial sector

Year	Africa			Asia			Europe			Latin America			North America			Australia/New Zealand			UK		
	unwtd	weighted (MK)	weighted (PK)	unwtd	weighted (MK)	weighted (PK)	unwtd	weighted (MK)	weighted (PK)	unwtd	weighted (MK)	weighted (PK)	unwtd	weighted (MK)	weighted (PK)	unwtd	weighted (MK)	weighted (PK)	unwtd	weighted (MK)	weighted (PK)
1871	1.5177	1.3136	1.0326	0.2390	0.2222	0.1934	0.3510	0.6973	0.5787	0.2290	0.1235	0.1352	0.0749	0.0966	0.1024	0.1305	0.1094	0.1161	0.2230	0.1965	0.2080
1872	0.1467	0.2609	0.2065	0.0747	0.1429	0.1082	0.1256	0.1612	0.1446	0.1964	0.1519	0.1344	0.2303	0.1328	0.1424	0.1530	0.1310	0.1303	0.0798	0.0868	0.0897
1873	0.0714	-0.0059	0.0185	-0.0365	-0.0412	-0.0301	0.0003	-0.0809	-0.0705	0.0449	0.0469	0.0428	0.2649	0.1392	0.1350	0.0729	0.0768	0.0720	0.0511	0.0526	0.0436
1874	0.2187	0.2030	0.2000	0.0895	0.1392	0.1001	0.0219	0.0587	0.0460	0.0423	0.0460	0.0360	0.1311	0.1216	0.1117	0.2175	0.2345	0.2268	0.1429	0.1484	0.1362
1875	0.0854	0.0398	0.0572	-0.0319	-0.1882	-0.1891	0.0195	-0.0384	-0.0363	-0.0793	-0.0014	-0.0850	0.0582	0.0505	0.0500	0.1139	0.1095	0.1092	0.0970	0.0542	0.0413
1876	-0.3002	-0.2463	-0.3254	0.0580	0.0458	-0.1028	-0.0960	-0.0895	-0.1906	-0.0961	-0.0073	-0.0213	0.1286	0.0364	0.0476	0.0549	0.0844	0.0768	0.0991	0.1031	0.0805
1877	0.0128	0.0213	-0.0494	0.1079	0.0827	0.0142	0.2197	0.3179	0.3481	0.1472	0.1677	0.0454	0.0274	0.0261	0.0237	0.1958	0.1741	0.1584	0.1228	0.1009	0.0777
1878	0.1584	0.3289	0.3905	0.3827	0.6751	0.7004	0.2204	0.5654	0.4482	0.0151	-0.0148	0.0264	-0.0264	-0.0347	-0.0377	-0.1081	-0.0975	-0.0980	0.0222	-0.0357	-0.0130
1879	0.2147	0.2504	0.2479	0.1690	0.2010	0.1976	0.1324	0.2867	0.2268	0.2358	0.1664	0.2247	0.0294	0.0360	0.0289	0.0670	0.1062	0.0906	0.0788	0.1061	0.1054
1880	0.2981	0.3738	0.3544	0.1720	0.1576	0.1484	0.0556	0.0102	0.0143	0.1766	0.2181	0.1408	0.0905	0.0853	0.0818	0.1517	0.1212	0.1202	0.1334	0.1036	0.0945
1881	0.0626	0.0508	0.0431	0.3251	0.8194	0.6448	0.3303	0.3646	0.2876	0.1730	0.2132	0.0668	0.1301	0.1242	0.1242	0.0990	0.0764	0.0795	0.0610	0.0633	0.0640
1882	-0.0362	-0.0363	-0.0712	-0.0265	-0.0646	-0.0614	-0.0884	-0.0326	-0.0257	-0.0333	0.0455	-0.0816	0.0781	0.0504	0.0513	0.1087	0.1101	0.1108	0.0298	0.0431	0.0391
1883	-0.0984	-0.1118	-0.1166	-0.0155	-0.0713	-0.0624	-0.0252	-0.0769	-0.0660	0.0619	0.1046	0.0585	0.0505	0.0698	0.0667	0.1434	0.1252	0.1306	0.0106	0.0293	0.0142
1884	-0.1711	-0.1391	-0.1565	0.0142	-0.0278	-0.0163	-0.0148	-0.0278	-0.0351	-0.0577	-0.0758	-0.0536	0.0272	0.0082	0.0013	-0.0022	0.0190	0.0052	0.0357	0.0311	0.0226
1885	0.0514	0.1365	0.1040	0.0514	0.0501	-0.0239	-0.0412	0.0115	-0.0203	0.1477	0.0819	0.2255	0.0942	0.0999	0.0970	0.1187	0.1110	0.1196	0.1061	0.0547	0.0502
1886	0.1248	0.1135	0.0624	0.1070	0.0845	0.0977	0.0863	0.1172	0.1097	0.2611	0.1745	0.1431	0.1982	0.1601	0.1444	0.0546	0.0432	0.0404	0.1135	0.0773	0.0730
1887	0.1768	0.0885	0.0759	-0.0056	-0.0083	-0.0095	0.0554	0.0719	0.0572	0.1697	0.2237	0.2469	0.1121	0.0952	0.0994	0.0007	0.0139	-0.0015	0.0652	0.0731	0.0724
1888	0.1967	0.1418	0.1364	0.1325	0.1301	0.1332	0.1457	0.1125	0.1221	0.2489	0.2427	0.2226	0.2039	0.1796	0.1876	0.1160	0.0649	0.0616	0.1116	0.1035	0.1017
1889	0.2349	0.2424	0.2117	0.1845	0.1304	0.1285	0.1244	0.1447	0.1456	0.1351	0.1292	0.1122	0.2405	0.2038	0.1958	0.1403	0.1350	0.1222	0.1177	0.1225	0.1130
1890	-0.0604	-0.0545	-0.0482	0.1231	0.2005	0.1781	-0.0514	-0.0217	-0.0303	0.0538	0.0386	0.0268	0.0194	0.0067	0.0038	0.0200	0.0406	0.0273	0.0579	0.0450	0.0451
1891	-0.1183	0.0152	-0.0199	-0.1288	-0.1458	-0.1467	0.0286	0.0323	0.0241	-0.1701	-0.1102	-0.1161	-0.0058	0.0080	0.0098	-0.0564	-0.0344	-0.0549	0.0505	0.0394	0.0382
1892	0.4754	0.2009	0.1823	-0.2147	0.0000	-0.0664	-0.0041	0.0355	0.0043	0.0352	0.1393	0.0771	0.0507	0.0238	0.0285	-0.0961	-0.0736	-0.0986	0.0287	0.0120	0.0176
1893	-0.0700	0.0295	0.0175	-0.0687	0.0341	-0.0194	-0.0012	0.0245	-0.0155	-0.0544	-0.0266	-0.0457	-0.0015	0.0193	0.0105	-0.1722	-0.2610	-0.2421	-0.0026	-0.0059	-0.0126
1894	0.1178	0.1185	0.1050	0.1181	0.2048	0.1641	0.0894	0.0781	0.1013	0.2150	0.2635	0.2273	0.0278	0.0163	0.0186	-0.1459	-0.0810	-0.0957	0.1233	0.0984	0.0972
1895	0.1966	0.1394	0.1880	0.1349	0.0168	-0.0161	0.0990	0.0940	0.0829	0.1245	0.1571	0.1360	-0.0531	-0.0903	-0.0970	0.1343	0.0324	0.0407	0.0865	0.0617	0.0598
1896	0.0759	0.0277	0.0568	0.1594	0.0888	0.0994	0.0856	0.0786	0.0964	0.2076	0.1814	0.1821	-0.0924	-0.0372	-0.0707	0.2171	0.0584	0.0518	0.0916	0.0986	0.0990
1897	0.1493	0.1202	0.1644	0.0634	0.0980	0.0914	0.0853	0.0874	0.0814	0.0067	0.0722	0.0162	0.2136	0.1744	0.1839	0.1665	0.0968	0.1100	0.0858	0.0903	0.0856
1898	0.1251	0.0933	0.1206	0.1579	0.1743	0.1389	0.1118	0.1111	0.1136	0.1249	0.1139	0.0978	0.0489	0.0397	0.0289	0.0095	-0.0005	-0.0038	0.0432	0.0506	0.0575
1899	0.0079	-0.0235	-0.0322	0.1258	0.1072	0.1005	0.0446	0.0218	0.0276	0.0671	0.0354	0.0589	-0.0494	0.0088	-0.0092	0.2267	0.1935	0.2034	0.0408	0.0409	0.0438
1900	0.1114	0.2017	0.1002	0.0910	0.0553	0.0475	0.0238	0.0036	0.0058	0.1877	0.1487	0.1819	-0.0393	0.0943	0.0582	0.2470	0.2040	0.2122	0.0106	0.0500	0.0413
1901	0.0992	0.1302	0.0924	0.0968	0.0671	0.0479	-0.0271	-0.1517	-0.2176	0.0657	0.0473	0.0603	-0.0714	0.0723	0.0418	0.0846	0.0607	0.0438	0.0229	0.0209	0.0207
1902	0.2124	0.1406	0.1392	0.1830	0.2408	0.2503	0.0496	0.0393	0.0267	0.0752	0.0637	0.0768	0.1441	0.1157	0.1191	-0.0464	-0.0373	-0.0589	0.0578	0.0533	0.0552
1903	0.0663	0.0339	0.0638	0.0903	0.0617	0.0608	0.1001	0.0882	0.0955	0.0403	0.0196	0.0342	-0.0025	0.0146	-0.0089	0.2105	0.1569	0.1744	0.0337	0.0189	0.0155
1904	0.1787	0.2278	0.2023	0.1235	0.0739	0.0664	0.0064	0.0182	0.0122	0.2946	0.2282	0.2763	0.1012	0.0680	0.0829	0.3208	0.0406	-0.0295	0.0604	0.0504	0.0481
1905	-0.0382	-0.0066	-0.0243	0.1795	0.1459	0.1297	0.2122	0.2012	0.1958	0.2127	0.2072	0.2062	0.0501	0.0685	0.0757	0.1310	0.9964	0.8341	0.1342	0.0957	0.0829
1906	0.0059	0.0621	0.0358	0.1924	0.2146	0.2089	0.1308	0.1363	0.1267	0.1766	0.1999	0.1847	0.0439	0.0576	0.0608	0.2710	0.1916	0.2410	0.0310	0.0181	0.0226
1907	-0.1966	-0.1640	-0.2036	0.0588	0.0582	0.0633	0.0003	-0.0028	-0.0016	-0.0778	-0.0706	-0.0570	-0.0322	-0.0291	-0.0305	0.0439	0.0340	0.0275	0.0223	0.0158	0.0130
1908	0.1733	0.1093	0.1506	0.0626	0.0712	0.0724	0.2767	0.0814	0.0593	0.1348	0.1600	0.1387	0.1262	0.1293	0.1295	0.0908	0.1115	0.1010	0.0614	0.0723	0.0693
1909	0.2002	0.1439	0.2035	0.1310	0.1148	0.1176	0.0991	0.0986	0.0991	0.1839	0.1675	0.1771	0.0816	0.0816	0.0816	0.1794	0.1318	0.1467	0.0446	0.0348	0.0326
1910	0.0838	0.0130	0.0240	0.0057	0.0111	-0.0009	0.0804	0.0930	0.0873	0.1703	0.1571	0.1544	0.0526	0.0526	0.0526	0.0753	0.0342	0.0378	0.0332	0.0166	0.0077
1911	-0.0197	-0.0681	-0.0611	0.0265	-0.0028	0.0154	0.0874	0.0595	0.0522	0.1340	0.0655	0.0985	0.0196	0.0196	0.0196	0.0306	0.0113	0.0120	0.0445	0.0318	0.0184
1912	0.0346	0.0306	0.0319	0.1032	0.0232	0.0225	-0.0453	-0.0217	-0.0339	0.0575	0.0877	0.0873	0.1208	0.1208	0.1208	0.0504	0.0655	0.0267	0.0441	0.0488	0.0413
1913	-0.0027	0.0021	-0.0030	-0.0117	0.0492	0.0365	0.0346	0.0287	0.0279	-0.0355	-0.0431	-0.0402	-0.0127	-0.0127	-0.0127	0.1182	0.0665	0.1130	0.0426	0.0623	0.0439



Table 13: Regional returns, raw materials

Year	Africa			Asia			Europe			Latin America			North America			Australia/New Zealand			UK		
	unwtd	weighted (MK)	weighted (PK)	unwtd	weighted (MK)	weighted (PK)	unwtd	weighted (MK)	weighted (PK)	unwtd	weighted (MK)	weighted (PK)	unwtd	weighted (MK)	weighted (PK)	unwtd	weighted (MK)	weighted (PK)	unwtd	weighted (MK)	weighted (PK)
1871	0.2504	0.2295	0.1932	0.3692	0.3050	0.1706	0.2644	0.2167	0.2512	0.1019	0.0838	0.1163	0.2233	0.1754	0.2315	0.2506	0.1379	0.1585	0.0664	0.0646	0.1203
1872	0.2565	0.5703	0.1190	0.4430	0.3380	0.6465	-0.0265	0.0294	-0.0152	-0.1202	0.0466	0.0262	-0.1860	0.1739	0.1248	0.0290	0.1604	0.0723	0.1871	0.0952	0.2371
1873	0.1665	0.1928	0.2348	0.1985	-0.0035	-0.0236	0.1655	-0.0658	-0.0072	-0.1206	-0.1345	-0.0602	0.0489	0.0479	-0.1483	0.1849	0.4927	0.3583	-0.1722	-0.0591	-0.1320
1874	0.1780	0.1398	0.0243	0.1321	0.1071	0.0406	-0.1051	-0.1223	-0.0726	-0.4259	-0.1779	-0.1613	-0.1449	0.1885	-0.0336	0.1102	0.1234	0.0790	-0.1005	-0.0943	-0.0279
1875	0.1099	0.2035	-0.0059	0.1079	0.0747	0.0181	0.1356	-0.0253	0.0104	0.5503	0.6638	0.2428	-0.0274	0.1394	0.0501	0.3234	0.3184	0.3100	0.1583	0.2802	0.1237
1876	-0.0084	0.0907	-0.0442	-0.0385	0.0288	-0.0137	0.4017	0.1673	0.1613	0.0399	-0.0096	0.0093	-0.0814	-0.0100	-0.1229	0.3572	0.2159	0.2097	0.0747	0.2884	0.1241
1877	0.3545	0.1706	0.1351	0.2399	0.1790	0.3579	-0.0232	-0.0406	-0.2653	-0.0188	0.0534	-0.0313	-0.0528	0.0171	-0.1244	0.0256	0.0886	0.0326	-0.1424	-0.0294	-0.1425
1878	0.0413	0.0080	0.0140	0.4570	0.0309	0.7081	-0.0823	0.0606	0.0172	-0.2361	-0.1841	-0.1144	-0.0834	0.0603	-0.0535	-0.1095	-0.0349	-0.0612	-0.2041	-0.0735	-0.1429
1879	0.2350	0.3132	0.4461	0.0184	0.1458	-0.0336	0.7193	1.2086	1.6324	1.2208	1.4953	0.5830	0.5060	0.3489	0.6208	0.2312	0.1682	0.2234	0.3248	0.2371	0.1756
1880	0.3466	0.4317	0.4653	-0.1374	-0.1286	-0.1525	0.2339	0.6417	0.6919	0.3561	0.4836	0.1054	0.5850	0.2964	0.3671	0.2631	0.2274	0.2173	0.1554	0.1349	0.0646
1881	0.1150	0.0920	0.0138	0.1082	0.2311	0.1588	0.1195	0.5314	0.4420	-0.2056	-0.0652	-0.2261	0.0131	0.1968	0.1593	0.0415	0.0918	0.0587	-0.0213	0.0503	-0.0516
1882	0.0751	0.0936	0.0204	-0.1802	-0.0375	-0.0715	-0.1339	-0.1314	-0.1148	-0.0362	0.0098	-0.0074	-0.0521	-0.0243	-0.0394	0.0507	0.0540	0.0270	0.1285	0.0855	0.0227
1883	-0.1648	-0.0497	-0.2649	-0.3571	-0.0950	-0.3478	-0.1049	-0.0657	-0.0915	0.2665	0.8733	1.2652	-0.1182	-0.0077	-0.0574	0.0089	0.1027	0.0301	-0.1582	0.0221	-0.0813
1884	-0.1265	-0.0672	-0.0758	1.0223	1.3462	0.6148	-0.0651	-0.2057	-0.2494	-0.4438	-0.1901	-0.2543	-0.0903	0.0173	-0.0604	-0.0027	0.1229	0.0264	-0.0320	-0.0283	-0.0764
1885	-0.1945	-0.1644	-0.0345	0.7907	2.3225	1.1549	0.3278	0.0429	0.0813	0.1419	0.0332	-0.0441	-0.0300	-0.0106	-0.0600	-0.0358	-0.0017	-0.0228	-0.0322	0.0673	-0.0331
1886	1.2286	0.4851	0.4995	0.1901	0.0314	0.1418	0.1619	-0.0446	-0.0374	-0.0162	0.1300	-0.0109	0.0111	0.4106	0.0670	0.1862	0.1125	0.1285	-0.0700	-0.0138	-0.0634
1887	0.3449	0.3048	0.1704	0.1256	-0.0080	0.0638	0.4581	0.6910	0.6452	0.5860	0.7621	0.6422	-0.0679	0.0032	-0.0327	-0.1229	-0.0274	-0.0532	-0.0488	-0.0333	-0.1350
1888	0.0956	0.0076	-0.0175	-0.0462	-0.0368	-0.1088	0.0297	0.2162	0.1590	-0.0069	0.0663	-0.0246	0.0834	0.0299	0.0405	0.1279	0.0729	0.0685	0.1212	0.3592	0.2535
1889	0.1200	0.5251	0.3683	0.0272	0.1702	0.0276	-0.0798	-0.2593	-0.2577	-0.0239	0.0985	0.0827	-0.0197	0.0465	-0.0093	0.0573	0.1333	0.1119	0.0322	0.0658	0.0417
1890	-0.1356	-0.1773	-0.1223	-0.0500	0.0625	-0.0723	0.1559	0.3950	0.3131	-0.1258	-0.0878	-0.1181	-0.0817	-0.0241	-0.0488	-0.1229	-0.0777	-0.1547	-0.0510	0.1064	0.0428
1891	-0.2127	-0.0601	-0.0985	0.0263	0.0727	-0.0003	-0.0989	-0.0738	-0.1265	0.0129	0.0687	-0.1166	-0.0460	0.0115	-0.0972	-0.0961	-0.0258	-0.0998	-0.0280	0.1049	-0.1112
1892	0.0436	0.1941	0.1314	-0.0295	0.0430	0.0019	-0.1257	-0.1018	-0.0808	-0.1425	0.0656	-0.1988	0.0033	0.0377	-0.1471	-0.1061	-0.0189	-0.1161	-0.1108	0.0660	-0.0145
1893	-0.0288	-0.0078	-0.0172	0.0631	-0.0051	0.0018	-0.0348	0.0265	-0.0278	0.1970	0.3269	0.6250	0.4547	0.2523	0.6389	-0.2550	-0.2162	-0.2842	0.0944	-0.0450	-0.0337
1894	0.6350	0.5774	0.5057	0.3380	0.2134	0.3393	0.1626	0.0292	0.0667	0.2285	0.1627	0.0111	0.0929	0.0519	0.0634	0.0126	0.0222	0.0490	0.0860	-0.0197	-0.1282
1895	0.4755	0.3818	0.2412	0.3396	0.2716	0.1990	0.3511	0.0922	0.1656	-0.1230	-0.1311	-0.1236	1.3177	0.3424	0.8362	0.2903	0.1953	0.2657	0.4091	0.2500	0.1898
1896	0.5201	0.0448	0.1324	0.3664	0.7397	0.5538	0.2944	0.6060	0.5289	-0.0068	0.1021	-0.0822	-0.0774	0.0071	-0.0803	-0.0358	0.0901	0.0024	0.0590	-0.0266	-0.1147
1897	0.1216	0.1518	0.0634	0.0242	0.0375	0.0138	0.1861	0.0799	0.1474	-0.1521	0.0643	-0.1010	0.1257	0.2645	0.1611	0.0219	0.0996	0.0748	0.0816	-0.0180	-0.1004
1898	0.0592	0.1214	0.0525	-0.1578	-0.0061	-0.0801	0.1514	0.2740	0.2136	-0.0391	0.0821	-0.0542	0.1056	0.0961	0.0965	-0.1224	0.0936	-0.1144	-0.0232	0.0243	-0.1002
1899	0.1212	0.0031	0.0675	0.1119	0.1464	0.1254	0.0729	0.3864	0.2934	0.0801	0.0968	0.0748	0.0935	0.0345	-0.0241	0.3996	0.4024	0.3082	0.7614	0.1767	0.4329
1900	0.1726	0.2069	0.1675	-0.0641	0.1024	-0.0396	0.2261	0.3509	0.2312	0.3132	0.3704	0.5325	0.1854	0.3492	0.2049	-0.0167	0.0009	-0.0204	0.0119	0.0263	-0.0625
1901	0.2103	0.2236	0.2123	-0.1123	-0.0120	-0.1214	-0.2247	-0.2244	-0.2160	0.1740	0.1923	0.1556	0.1017	0.0281	-0.0016	-0.0185	-0.0236	-0.0442	-0.0727	-0.0236	-0.0904
1902	0.0161	0.0385	-0.0873	-0.0116	0.1221	-0.0112	-0.0337	0.0629	0.0051	0.0297	0.0464	0.0335	0.1765	0.2796	0.0291	-0.1248	-0.0414	-0.1167	0.0078	0.0439	-0.1017
1903	-0.2023	-0.1568	-0.1949	0.2932	0.1558	0.1630	0.2227	0.2545	0.2220	0.1051	0.1699	0.1463	-0.0133	0.0358	-0.0856	0.0553	0.1781	-0.0174	0.0693	0.0436	0.0274
1904	0.1437	0.1890	0.1650	-0.0041	0.0741	-0.0176	0.3723	0.3244	0.3202	0.4836	0.4800	0.4403	0.1142	0.0437	0.0817	0.0559	0.1754	0.1164	0.0089	0.1261	0.0233
1905	-0.3003	-0.2755	-0.3012	0.2164	0.1516	0.1582	0.1714	0.1337	0.1521	0.3111	0.4163	0.2321	0.2277	0.6090	0.3558	0.1712	0.3470	0.2555	0.2018	0.2461	0.2627
1906	-0.1732	-0.0702	-0.1308	0.1385	0.0446	0.0633	0.2735	0.4227	0.4116	0.5323	0.2903	0.2898	0.1210	0.2915	0.1750	0.0827	0.2178	0.0878	0.1872	-0.0196	0.0710
1907	-0.1870	-0.0773	-0.1827	0.0374	0.0054	-0.0401	-0.1290	-0.1975	-0.1848	-0.1291	-0.0034	-0.1050	-0.0631	-0.1323	-0.1709	-0.1398	-0.0829	-0.1330	0.0313	0.1054	0.0296
1908	0.5907	0.4627	0.3845	-0.0027	0.1639	-0.0125	0.0088	0.1589	0.0992	0.0775	0.2389	0.1144	0.1668	0.0889	0.2190	0.2288	0.1924	0.2572	0.0385	0.0437	-0.0250
1909	0.3095	0.2878	0.2870	0.2948	0.4319	0.3097	-0.0226	0.0898	0.0635	0.0004	0.0733	0.0528	0.1903	0.2540	0.2175	0.2260	0.2348	0.2283	0.0215	0.0764	0.0920
1910	-0.0420	0.0027	-0.0224	0.3122	0.1854	0.1578	-0.2154	-0.0902	-0.0890	0.2611	0.2906	0.2890	0.1596	0.1096	0.1088	-0.0332	-0.0395	-0.0300	0.0244	0.1080	0.1648
1911	-0.2400	-0.1934	-0.2415	-0.0276	0.0289	-0.0114	0.2002	0.0973	0.0889	0.1784	0.1707	0.1072	0.0375	0.0202	-0.0430	0.0393	0.0576	-0.0544	0.0650	0.0359	-0.0216
1912	-0.0340	0.0267	-0.0414	0.1089	0.0881	0.0860	0.0380	0.0667	0.0664	0.1625	0.1528	0.1036	0.0120	0.1038	-0.0193	0.0647	0.1237	0.0548	0.2198	0.2226	0.0892
1913	-0.1641	-0.0950	-0.1812	-0.1179	-0.0378	-0.0550	-0.0576	0.0210	-0.1299	-0.1775	-0.0835	-0.1407	0.0361	0.0396	-0.0542	0.0739	0.0690	0.0565	0.0338	-0.0257	-0.0189

Table 14: Regional returns, transportation

Year	Africa			Asia			Europe			Latin America			North America			Australia/New Zealand			UK		
	unwtd	weighted (MK)	weighted (PK)	unwtd	weighted (MK)	weighted (PK)	unwtd	weighted (MK)	weighted (PK)	unwtd	weighted (MK)	weighted (PK)	unwtd	weighted (MK)	weighted (PK)	unwtd	weighted (MK)	weighted (PK)	unwtd	weighted (MK)	weighted (PK)
1871				0.3186	0.1434	0.1422	0.2592	0.2520	0.2719	0.3090	0.1917	0.3683	0.4653	0.5163	0.4953	0.0116	-0.1772	-0.1790	0.2315	0.2799	0.283929
1872				0.1247	0.0248	0.0208	0.2279	0.1354	0.1438	0.1652	0.0534	0.0529	0.0412	0.0324	0.0342	0.1452	0.2463	0.2467	0.0859	0.0711	0.048244
1873				0.0569	0.0167	0.0066	-0.0155	0.0846	0.0812	-0.0149	-0.0116	0.0453	-0.0389	-0.0689	-0.0852	0.0800	0.1981	0.1981	0.0862	0.0581	0.042383
1874				-0.1623	-0.2000	-0.3042	-0.1307	0.0545	0.0317	-0.1148	-0.0023	-0.2577	-0.1934	-0.1018	-0.1511	-0.0243	0.0854	0.0848	0.0210	0.0158	-0.0192
1875				-0.1691	0.0899	0.0761	-0.1378	0.0286	-0.0123	-0.0340	0.0851	-0.0108	0.0931	-0.0566	-0.1044	0.0394	0.1297	0.1290	0.1340	0.1918	0.230926
1876				0.1375	0.1158	0.1312	0.1326	0.0424	0.0766	-0.1671	-0.1114	-0.3467	0.0800	0.0611	0.0710	0.2745	0.3363	0.3357	0.0574	0.0971	0.082088
1877				0.1875	0.1875	0.1875	-0.0264	0.0291	0.0180	0.1354	0.0357	0.3572	0.1527	0.0972	0.0991	0.1312	0.0790	0.0795	0.0582	0.1967	0.179595
1878				0.2778	0.2778	0.2778	-0.0166	0.0493	0.0501	-0.0174	0.0092	-0.0565	-0.0887	-0.0455	-0.1657	0.1101	0.0505	0.0510	-0.0131	-0.0689	-0.04592
1879							0.2755	0.2218	0.2469	0.4447	1.1677	1.6657	0.5453	0.4809	0.5372	0.2955	0.2955	0.2955	0.0200	0.0230	0.004802
1880							0.1361	0.0853	0.1020	0.3199	0.6065	0.6476	0.3157	0.2764	0.3450	0.1509	0.1509	0.1509	0.0638	0.0747	0.055089
1881	1.7350	1.7350	1.7350				0.0313	0.0086	0.0026	0.1181	0.1721	0.1535	0.0006	-0.0178	-0.0541	0.0877	0.0481	0.0459	0.0012	-0.0164	-0.04658
1882	-0.2892	-0.2892	-0.2892	-0.0385	-0.0025	-0.0039	-0.0533	-0.0119	-0.0167	0.0023	0.0412	-0.0078	0.0391	0.1775	0.1797	-0.0090	-0.0052	-0.0087	0.0131	0.0649	0.00096
1883	-0.1571	-0.1571	-0.1571	0.0832	0.0511	0.0563	-0.0994	-0.0073	-0.0069	0.1527	0.0556	0.0397	-0.0346	-0.0916	-0.1691	-0.2901	-0.2166	-0.2881	-0.0524	-0.0364	-0.11831
1884	0.0169	0.0169	0.0169	-0.0530	0.0455	0.0460	0.0483	0.0518	0.0470	0.1076	0.0369	0.0942	-0.2001	-0.0930	-0.1023	0.1030	0.0465	0.0523	0.0501	-0.0361	-0.16167
1885	0.2567	0.2567	0.2567	-0.0866	0.0503	0.0471	0.0025	-0.0660	-0.0779	-0.0229	0.0612	0.0041	0.0975	0.1215	0.1463	0.0275	0.0371	0.0161	0.0048	0.0015	-0.00484
1886	-0.0183	-0.0182	-0.0179	0.2608	0.1642	0.1667	0.0615	-0.0670	-0.1152	0.1255	0.0627	0.0962	0.1079	0.1719	0.1762	0.0659	0.0480	0.0366	-0.0021	-0.0601	-0.08717
1887	-0.2501	0.0331	0.0189	-0.0040	-0.0001	-0.0001	0.0212	-0.0702	-0.1124	0.1268	0.0652	0.0338	-0.0757	0.0363	0.0326	0.0461	0.0710	-0.0316	0.0243	0.0109	-0.03737
1888	0.4108	0.1025	0.1169	0.0860	0.0373	0.0323	0.1111	0.2071	0.2167	0.2720	0.1170	0.1534	0.0008	-0.0483	-0.1677	0.2774	0.1812	0.1232	0.2189	0.2021	0.215467
1889	0.2192	0.1060	0.1095	0.4797	1.3534	1.3130	0.2685	0.2687	0.2842	0.0702	-0.0023	0.0067	0.2221	0.2540	0.3706	0.4305	0.2806	0.4341	0.1750	0.1968	0.229722
1890	0.0160	0.0816	0.0795	0.0004	-0.0154	-0.0583	0.0262	0.0569	0.0589	-0.0903	0.0873	0.0222	-0.1898	0.0152	-0.0053	-0.1222	-0.0939	-0.0979	0.0397	0.0056	-0.02927
1891	0.0337	0.1777	0.1729	0.0089	0.0275	0.0258	-0.1441	-0.2189	-0.2768	-0.1729	-0.0640	-0.1049	0.0379	-0.0617	-0.1532	-0.0054	-0.0017	-0.0002	-0.0064	0.0147	-0.06621
1892	-0.0067	0.0000	-0.0003	-0.1271	-0.1130	-0.1133	0.0167	0.0699	0.0617	0.0854	-0.0316	-0.0873	-0.0421	-0.0069	-0.0450	-0.1654	-0.0218	-0.0334	0.0196	-0.0029	-0.09862
1893	-0.0360	0.0703	0.0667	-0.0688	0.0388	0.0183	0.1130	0.1515	0.1609	-0.1077	-0.0743	-0.1022	-0.0637	-0.0424	-0.1056	0.0108	0.0711	0.0591	0.0161	0.0179	-0.08414
1894	-0.0793	0.1741	0.1649	0.0133	0.0359	0.0365	0.4072	0.0162	0.0177	0.2017	0.2927	0.1731	-0.0164	-0.0269	0.0088	-0.0348	-0.0209	-0.0259	0.0591	0.1481	0.099038
1895	0.2839	0.0686	0.0762	0.0561	0.1419	0.1201	0.3647	-0.0173	-0.0387	0.1162	0.2596	0.1971	0.0470	0.0108	0.0076	0.1181	0.1059	0.1014	0.0503	0.0362	-0.06244
1896	0.0501	0.0835	0.0823	0.1838	0.0479	0.0548	0.0886	0.0087	0.0005	0.0446	0.1628	0.1862	0.0433	0.0255	0.0236	0.2846	0.3022	0.3132	0.3364	0.1259	0.084509
1897	-0.0414	0.0081	0.0063	0.0681	0.1432	0.1552	0.1299	-0.0697	-0.0902	0.0268	0.0651	0.0820	0.0097	0.0545	0.0416	0.1773	0.2187	0.2076	0.1485	0.3151	0.129735
1898	0.1141	0.1141	0.1141	0.0709	0.0577	0.0324	0.0579	-0.1212	-0.1451	0.1234	0.0020	-0.0108	0.0336	0.0395	0.0395	0.0975	0.1083	0.1072	0.0455	0.1467	0.127266
1899	-0.0014	-0.0014	-0.0014	0.1795	-0.0787	-0.1017	0.1156	0.1697	0.1803	0.0541	0.0264	0.0488	-0.0109	0.0575	0.0573	0.1639	0.1763	0.1665	0.0638	-0.0244	-0.01616
1900	0.0712	0.0712	0.0712	-0.0467	0.0710	0.0815	-0.0948	-0.1697	-0.1816	0.1029	0.1823	0.2166	0.0133	0.0385	0.0385	0.1660	0.1295	0.1136	0.0063	0.0525	-0.0161
1901	0.0871	0.0859	0.0829	0.2247	0.2515	0.2583	-0.1150	-0.2024	-0.2436	0.0864	0.1660	0.1861	0.0487	0.0563	0.0552	0.0080	0.0435	0.0289	0.0246	-0.0089	-0.07198
1902	0.1019	0.0578	0.0604	0.0015	0.0669	0.0717	0.0754	-0.0853	-0.1200	0.1501	0.1322	0.1301	0.0863	0.0337	0.0169	0.1447	0.1590	0.1654	0.0182	0.0465	0.064598
1903	0.1898	0.0785	0.0785	-0.0008	0.0785	0.0801	0.0355	0.0137	0.0018	0.1423	0.0701	0.0397	0.1973	0.1930	0.2768	-0.0173	0.0405	-0.0067	-0.0118	-0.0224	-0.03426
1904	0.1070	0.1364	0.1211	0.2447	0.2078	0.1993	0.1975	0.0641	0.0701	0.3787	0.2745	0.3150	0.0009	0.0010	0.0005	-0.0212	0.0518	-0.0179	0.0348	0.0340	0.015011
1905	0.0536	0.0001	-0.0043	0.1666	0.1920	0.1941	0.2009	0.2920	0.3251	0.1666	0.2243	0.1692	0.3276	0.3588	0.4395	0.0232	0.1303	0.0344	0.2075	0.1991	0.265201
1906	-0.1174	0.0537	0.0235	0.0577	0.1442	0.1461	0.1494	0.4496	0.4869	-0.0092	0.0278	-0.0066	0.0379	0.0431	0.0541	0.2257	0.1955	0.2017	0.0975	0.0383	-0.03629
1907	-0.1337	0.0589	0.0266	-0.0002	-0.0150	-0.0140	-0.0905	-0.1885	-0.1975	-0.1281	-0.0773	-0.1565	-0.0961	-0.0943	-0.1484	0.3907	0.2202	0.3327	-0.0143	-0.1208	-0.15493
1908	0.0059	0.0117	0.0110	-0.0388	0.0625	0.0491	0.0152	-0.2518	-0.2856	0.1450	0.0958	0.1112	0.0493	0.0499	0.0447	0.3158	0.1412	0.1804	-0.0425	0.3394	0.238275
1909	0.1934	0.1371	0.1437	0.0096	0.0161	0.0218	0.1452	0.1968	0.2040	0.1065	0.1057	0.0888	0.0254	0.0266	0.0190	0.1859	0.0977	0.1168	0.0690	0.0617	0.066064
1910	0.4166	0.1350	0.1673	0.0477	0.1304	0.1381	0.0902	-0.0384	-0.0471	0.1315	0.0831	0.0721	-0.0543	-0.0413	-0.0879	0.2188	0.2389	0.2318	0.3235	0.2102	0.171168
1911	0.0778	0.1083	0.1048	0.1232	-0.0360	-0.0468	0.0017	-0.0889	-0.1004	0.1829	0.1271	0.1511	-0.1085	-0.0704	-0.1622	0.3829	0.3433	0.3419	0.2509	0.3929	0.271053
1912	0.1962	0.0057	0.0277	0.0767	0.0357	0.0316	0.0464	0.0276	0.0283	0.1379	0.1189	0.1601	0.0358	0.0345	0.0377	-0.1257	-0.0410	-0.0775	0.2609	0.2416	0.247021
1913	-0.0405	-0.1526	-0.1398	0.1830	0.1219	0.1236	0.0153	-0.0001	0.0002	-0.0227	0.0177	-0.0056	-0.1090	-0.0741	-0.1497	0.3196	0.2721	0.3134	0.2230	0.0855	0.031909

Table 15: Regional returns, utilities

Row Label	Asia			Europe			Latin America			UK		
	unwtd	weighted (MK)	weighted (PK)	unwtd	weighted (MK)	weighted (PK)	unwtd	weighted (MK)	weighted (PK)	unwtd	weighted (MK)	weighted (PK)
1871	-0.0034	-0.0001	0.0015	0.2338	0.1765	0.1769	0.2217	0.2154	0.2047	0.0794	0.0728	0.0736
1872	0.0007	-0.0001	-0.0030	0.0518	0.0032	-0.0052	0.1398	0.1261	0.0892	0.0404	0.0211	0.0217
1873	0.0181	0.0263	0.0275	0.1010	0.0258	0.0247	0.0748	0.0577	0.0826	0.0126	0.0248	0.0199
1874	0.1771	0.1594	0.1571	-0.0097	0.0753	0.0637	0.0791	0.0825	0.0776	0.1235	0.1559	0.1569
1875	0.2557	0.2307	0.2280	0.0003	0.3094	0.2012	-0.0706	-0.0024	-0.0174	0.1477	0.1421	0.1452
1876	0.0019	0.0104	0.0100	0.0407	0.2047	0.0986	0.0790	0.1013	0.0853	0.0690	0.0713	0.0593
1877	0.0441	0.0187	0.0116	-0.0613	0.0755	0.0121	0.0092	0.0467	0.0495	0.0211	0.0289	0.0289
1878	-0.1536	-0.1334	-0.1319	-0.0855	-0.0606	-0.0974	-0.1092	-0.1491	-0.1569	-0.1002	-0.0691	-0.0803
1879	0.2125	0.2323	0.2273	0.2915	0.2651	0.2957	0.3319	0.2867	0.2710	0.0989	0.1585	0.1499
1880	0.0696	0.0403	0.0376	-0.0389	0.1410	-0.0011	0.1839	0.1132	0.1337	0.1046	0.1082	0.0977
1881	0.0290	0.0276	0.0243	0.1085	0.0677	0.0882	0.0835	0.0568	0.0504	0.0684	0.0422	0.0488
1882	0.1411	0.0977	0.1108	0.0397	0.0465	0.0414	0.0785	0.0380	0.0380	0.0373	0.0220	0.0286
1883	0.1743	0.1559	0.1617	-0.0529	-0.0161	-0.1434	0.1629	0.1308	0.1292	-0.0066	0.0591	0.0116
1884	0.1181	0.1167	0.1102	-0.0727	0.0141	-0.1110	0.0953	0.0706	0.0599	0.1053	0.0592	0.0762
1885	0.1805	0.1640	0.1579	0.2969	0.1360	0.1230	0.1160	0.1121	0.1029	0.1778	0.1323	0.2235
1886	0.1184	0.1248	0.1210	0.1240	0.0669	0.0653	0.0392	0.0745	0.0714	0.0379	0.0500	0.0418
1887	0.0358	0.0420	0.0463	-0.1809	-0.1175	-0.2728	0.0527	0.1197	0.1092	0.1828	0.1309	0.1384
1888	0.0367	0.0230	0.0213	0.2737	0.2369	0.4927	0.1993	0.1514	0.1672	0.1060	0.1146	0.1557
1889	-0.0324	-0.0166	-0.0177	0.0182	0.0802	0.0318	-0.0657	-0.0420	-0.0548	0.1825	0.1545	0.1812
1890	0.1276	0.1245	0.1166	-0.0207	-0.0191	-0.1292	0.0309	0.0451	0.0364	0.0050	0.0106	0.0066
1891	-0.0328	-0.0154	-0.0190	0.1285	0.0801	0.0262	-0.1015	-0.0931	-0.1285	0.1315	0.0472	0.0887
1892	-0.0074	-0.0109	-0.0117	0.3001	0.2668	0.2207	-0.0583	-0.0364	-0.0697	-0.0211	-0.0253	-0.0532
1893	-0.0352	-0.0532	-0.0508	0.4711	0.1970	0.6434	-0.1144	-0.1221	-0.1916	-0.0009	0.0408	0.0240
1894	0.1053	0.1359	0.1414	0.1514	0.1330	0.1733	0.1930	0.1863	0.1660	0.2122	0.1995	0.2069
1895	0.1530	0.1353	0.1368	0.1800	0.0945	0.0954	0.0806	0.1140	0.0414	0.0579	0.0399	0.0237
1896	0.1384	0.1617	0.1515	0.0935	0.1366	0.0886	0.1462	0.1401	-0.0030	0.1754	0.1675	0.1489
1897	0.0131	-0.0078	-0.0096	0.0607	0.0477	0.0443	0.2549	0.2785	0.4243	0.3312	0.2848	0.2930
1898	-0.0214	-0.0300	-0.0254	-0.0641	-0.0486	-0.0605	-0.0409	-0.0354	-0.0942	-0.0163	-0.0237	-0.0226
1899	0.0432	0.0337	0.0316	0.0335	0.0472	0.0312	-0.0451	-0.0297	-0.0383	-0.0060	-0.0469	-0.0688
1900	0.0472	0.0504	0.0502	-0.0085	0.0070	-0.0005	0.1971	0.2531	0.3225	-0.0337	-0.0172	-0.0499
1901	0.1281	0.1002	0.0994	0.0272	0.0323	0.0237	0.1426	0.1902	0.1966	-0.0433	0.0239	-0.0287
1902	0.0457	0.0122	0.0058	0.0591	0.0733	0.0732	0.1307	0.1459	0.1379	0.0524	0.0827	0.0862
1903	0.0426	0.0416	0.0346	0.0807	0.0811	0.0814	0.1379	0.1496	0.1498	0.0972	0.0798	0.0736
1904	0.1442	0.1939	0.1927	0.0893	0.0592	0.0460	0.2240	0.1648	0.1603	0.0926	0.1460	0.1315
1905	0.1739	0.1661	0.1635	0.1266	0.1387	0.0866	0.1952	0.1654	0.1629	-0.0311	-0.0071	-0.0260
1906	0.0053	-0.0187	-0.0183	0.0532	0.0450	-0.0154	0.0475	0.0014	-0.0057	-0.0305	-0.0773	-0.0598
1907	-0.0022	-0.0732	-0.0779	0.1574	0.2307	0.3130	-0.0234	0.0107	-0.0079	-0.1495	-0.0792	-0.1414
1908	-0.0023	-0.0089	-0.0097	-0.0722	0.0085	-0.3207	0.2160	0.1298	0.1355	-0.0096	0.0741	-0.0149
1909	0.0683	0.0802	0.0737	0.0455	0.0541	0.0246	0.2070	0.2220	0.1825	0.0118	-0.0070	-0.0635
1910	0.0617	0.1086	0.0752	-0.1051	0.0535	-0.3103	0.0925	0.0969	0.0811	-0.0035	0.0111	0.0208
1911	-0.0724	-0.1402	-0.1892	0.0694	0.0640	0.0642	0.0675	0.0557	0.0589	0.6803	0.3446	0.6421
1912	0.2939	0.7799	0.5176	0.0255	0.0536	0.0357	0.0370	0.0464	0.0391	0.0917	0.1633	0.1055
1913	0.0209	0.0017	-0.0208	-0.0646	-0.0158	-0.0762	-0.0940	-0.0205	-0.0493	-0.0153	0.0299	-0.0128

Table 16: Region-sector correlations and summary statistics

Finance (unweighted)								Finance (MK)								Finance (PK)							
	Africa	Asia	Europe	Latin America	North America	Australia/New Zealand	UK		Africa	Asia	Europe	Latin America	North America	Australia/New Zealand	UK		Africa	Asia	Europe	Latin America	North America	Australia/New Zealand	UK
Africa	1							Africa	1							Africa	1						
Asia	0.26	1						Asia	0.28	1						Asia	0.38	1					
Europe	0.51	0.60	1					Europe	0.68	0.65	1					Europe	0.65	0.62	1				
Latin America	0.42	0.49	0.50	1				Latin America	0.29	0.26	0.26	1				Latin America	0.36	0.22	0.26	1			
North America	0.15	0.01	0.10	0.20	1			North America	0.24	0.08	0.02	0.35	1			North America	0.23	0.07	0.05	0.27	1		
Australia/New Zealand	0.08	0.24	0.11	0.37	0.06	1		Australia/New Zealand	-0.02	0.00	0.09	0.25	0.19	1		Australia/New Zealand	-0.04	0.00	0.14	0.21	0.18	1	
UK	0.56	0.33	0.42	0.40	0.35	0.20	1	UK	0.51	0.04	0.32	0.39	0.41	0.33	1	UK	0.56	0.11	0.44	0.35	0.41	0.28	1
average standard deviation	0.1110	0.0882	0.0730	0.0988	0.0671	0.0916	0.0686	average standard deviation	0.1083	0.1046	0.0893	0.1044	0.0647	0.0886	0.0613	average standard deviation	0.0931	0.0856	0.0733	0.0928	0.0610	0.0804	0.0575
	0.2610	0.1086	0.1017	0.1110	0.0871	0.1091	0.0452		0.2302	0.1746	0.1607	0.0931	0.0637	0.1703	0.0430		0.2030	0.1646	0.1461	0.0988	0.0669	0.1538	0.0421
Raw Materials (unweighted)								Raw materials (MK)								Raw materials (PK)							
	Africa	Asia	Europe	Latin America	North America	Australia/New Zealand	UK		Africa	Asia	Europe	Latin America	North America	Australia/New Zealand	UK		Africa	Asia	Europe	Latin America	North America	Australia/New Zealand	UK
Africa	1							Africa	1							Africa	1						
Asia	0.07	1						Asia	-0.16	1						Asia	0.04	1					
Europe	0.19	0.08	1					Europe	0.06	-0.07	1					Europe	0.29	-0.09	1				
Latin America	0.03	-0.25	0.58	1				Latin America	0.15	-0.19	0.56	1				Latin America	-0.04	-0.36	0.28	1			
North America	0.22	-0.04	0.35	0.26	1			North America	0.20	-0.12	0.27	0.26	1			North America	0.33	-0.08	0.45	0.27	1		
Australia/New Zealand	0.30	0.00	0.35	0.18	0.31	1		Australia/New Zealand	0.17	-0.04	0.15	0.08	0.26	1		Australia/New Zealand	0.38	-0.03	0.24	-0.02	0.25	1	
UK	0.02	0.00	0.31	0.31	0.46	0.54	1	UK	-0.04	-0.07	0.21	0.26	0.14	0.31	1	UK	-0.07	-0.05	0.23	0.05	0.34	0.48	1
average standard deviation	0.1191	0.1294	0.1010	0.0916	0.0920	0.0611	0.0557	average standard deviation	0.1250	0.1879	0.1402	0.1766	0.1231	0.1054	0.0709	average standard deviation	0.0709	0.1173	0.1283	0.1001	0.0776	0.0592	0.0181
	0.2873	0.2515	0.2001	0.2937	0.2512	0.1502	0.1668		0.2159	0.4116	0.2882	0.3154	0.1490	0.1357	0.1081		0.2079	0.2717	0.3278	0.2882	0.2170	0.1433	0.1308
Transport (unweighted)								Transport (MK)								Transport (PK)							
	Africa	Asia	Europe	Latin America	North America	Australia/New Zealand	UK		Africa	Asia	Europe	Latin America	North America	Australia/New Zealand	UK		Africa	Asia	Europe	Latin America	North America	Australia/New Zealand	UK
Africa	1							Africa	1							Africa	1						
Asia	0.20	1						Asia	0.13	1						Asia	0.13	1					
Europe	0.09	0.40	1					Europe	-0.02	0.25	1					Europe	-0.02	0.24	1				
Latin America	0.20	0.36	0.50	1				Latin America	0.21	0.02	0.20	1				Latin America	0.18	0.15	0.22	1			
North America	0.10	0.47	0.43	0.54	1			North America	-0.12	0.39	0.39	0.57	1			North America	-0.10	0.46	0.40	0.58	1		
Australia/New Zealand	0.09	0.29	0.20	0.02	0.12	1		Australia/New Zealand	-0.02	0.20	0.08	0.12	-0.04	1		Australia/New Zealand	0.00	0.31	0.07	0.06	0.00	1	
UK	0.08	0.32	0.27	0.16	0.11	0.33	1	UK	-0.11	0.17	0.04	0.05	0.19	0.26	1	UK	-0.04	0.27	0.19	0.13	0.29	0.22	1
average standard deviation	0.1050	0.0705	0.0685	0.0891	0.0426	0.1092	0.0790	average standard deviation	0.1015	0.0986	0.0317	0.1141	0.0540	0.1105	0.0835	average standard deviation	0.1008	0.0917	0.0256	0.1143	0.0417	0.1053	0.0463
	0.3340	0.1362	0.1307	0.1368	0.1534	0.1551	0.0989		0.3105	0.2269	0.1454	0.2053	0.1430	0.1267	0.1175		0.3106	0.2272	0.1633	0.2939	0.1799	0.1484	0.1244

Table 16: Region-sector correlations and summary statistics , con't

	Utilities (unweighted)					Utilities (MK)					Utilities (PK)			
	<i>Asia</i>	<i>Europe</i>	<i>Latin America</i>	<i>UK</i>		<i>Asia</i>	<i>Europe</i>	<i>Latin America</i>	<i>UK</i>		<i>Asia</i>	<i>Europe</i>	<i>Latin America</i>	<i>UK</i>
Asia	1				Asia	1				Asia	1			
Europe	0.03	1			Europe	0.09	1			Europe	-0.01	1		
Latin America	0.34	0.09	1		Latin America	0.24	0.07	1		Latin America	0.24	-0.08	1	
UK	0.00	0.05	0.18	1	UK	0.24	0.16	0.37	1	UK	0.00	0.12	0.24	1
average	0.0666	0.0673	0.0843	0.0713	average	0.0718	0.0826	0.0849	0.0684	average	0.0619	0.0522	0.0744	0.0672
standard deviation	0.0908	0.1288	0.1106	0.1307	standard deviation	0.1414	0.0927	0.1012	0.0897	standard deviation	0.1151	0.1767	0.1210	0.1283

Table 17a: Sector Betas (unweighted indices)

	Finance	Raw materials	Transportation	Utilities
UK return – Consol rate	0.939*** (0.0292)	1.070*** (0.0585)	0.966*** (0.0342)	0.981*** (0.0412)
Constant	-0.158* (0.0824)	0.230 (0.171)	-0.0857 (0.0950)	-0.0695 (0.120)
Observations	258	258	245	184
R-squared	0.747	0.565	0.662	0.689
Adj. R-squared	0.746	0.563	0.660	0.687

Robust standard errors in parentheses, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table 17b: Raw materials betas by region (unweighted indices)

	Africa	Asia	Australia	Europe	Latin America	North America
UK return – Consol rate	1.191*** (0.111)	0.891*** (0.117)	0.884*** (0.0926)	1.132*** (0.0627)	1.015*** (0.156)	1.307*** (0.236)
Constant	0.599* (0.326)	-0.255 (0.326)	-0.342 (0.272)	0.409** (0.176)	0.0628 (0.448)	0.904 (0.702)
Observations	43	43	43	43	43	43
R-squared	0.553	0.440	0.753	0.709	0.428	0.684
Adj. R-squared	0.542	0.427	0.747	0.702	0.414	0.676

Robust standard errors in parentheses, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Figure 1

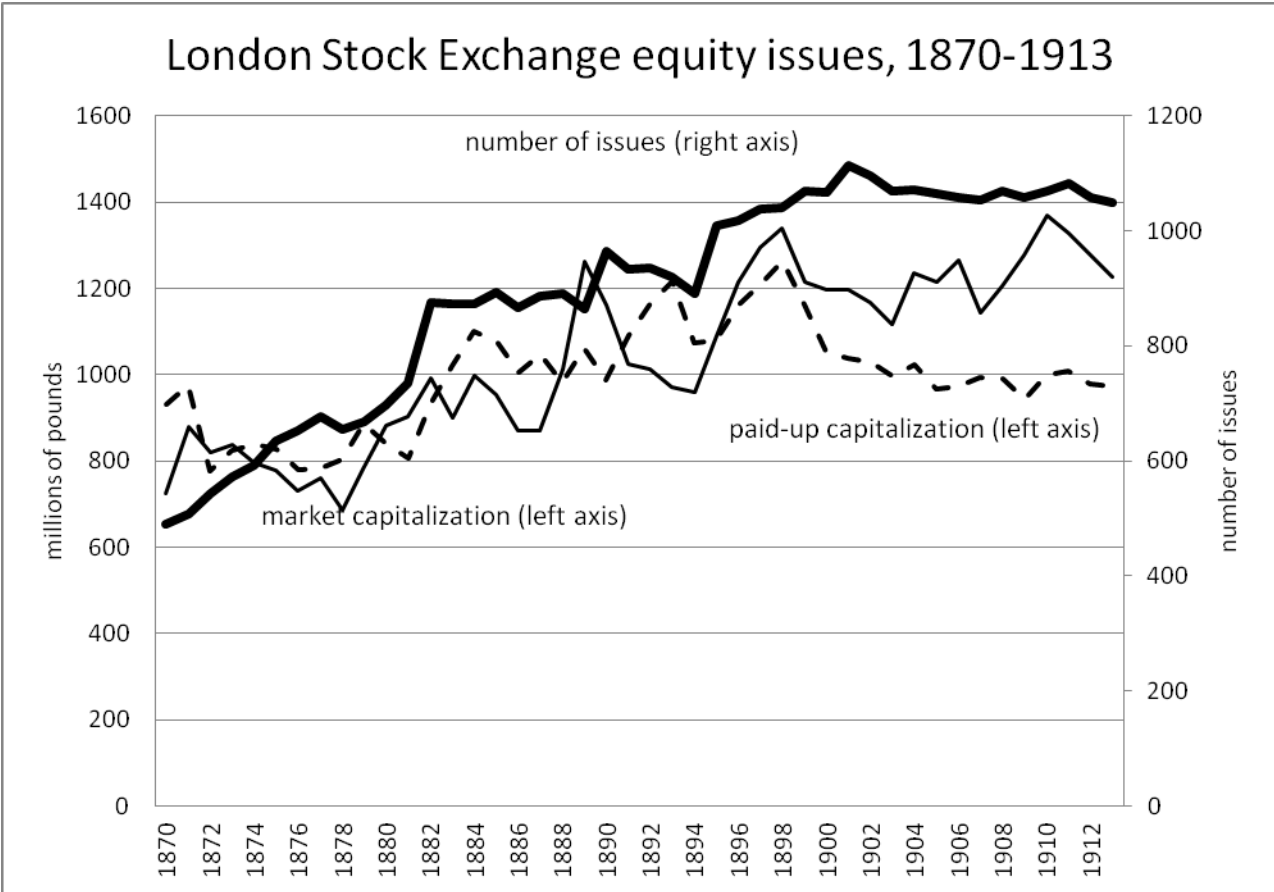


Figure 2

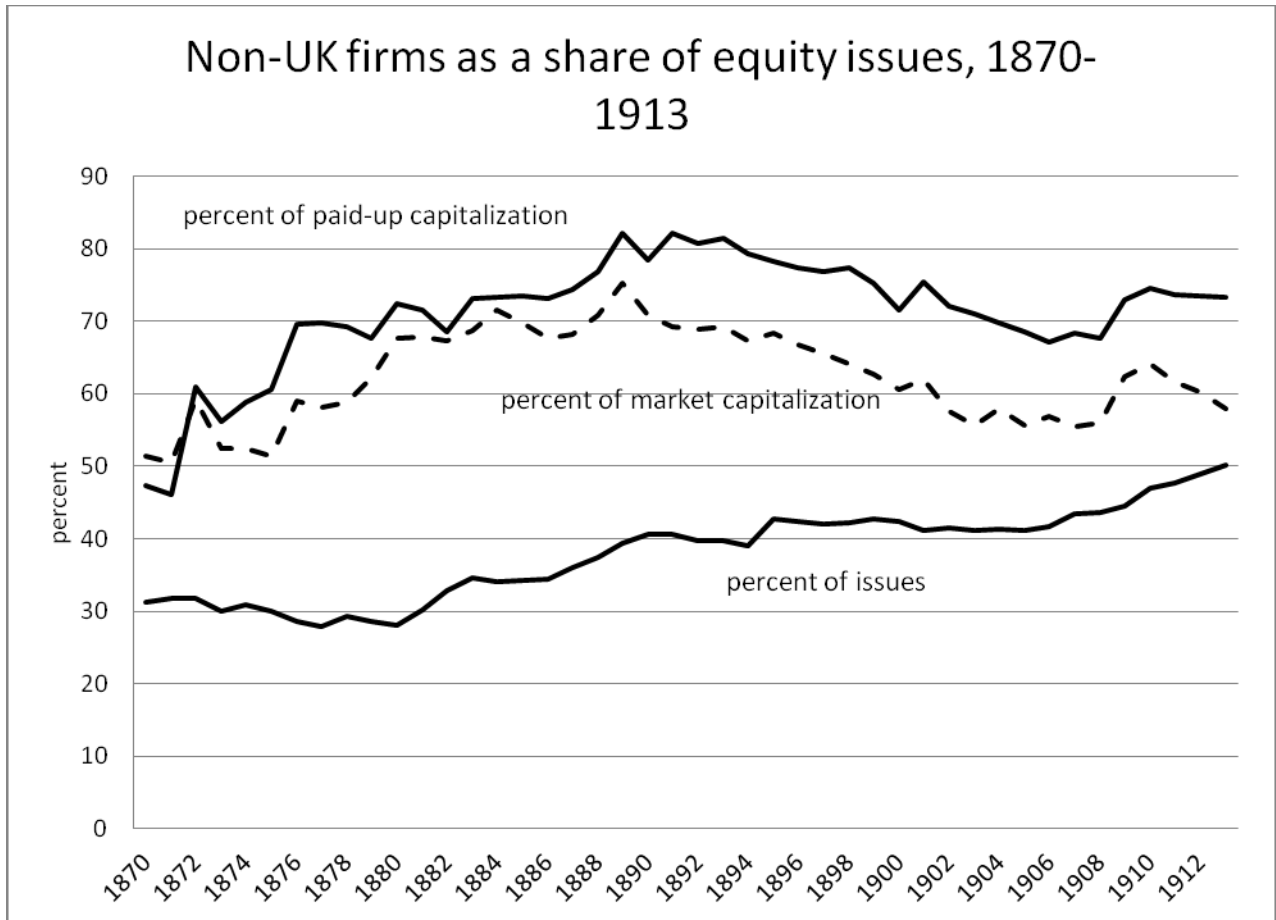




Figure 3

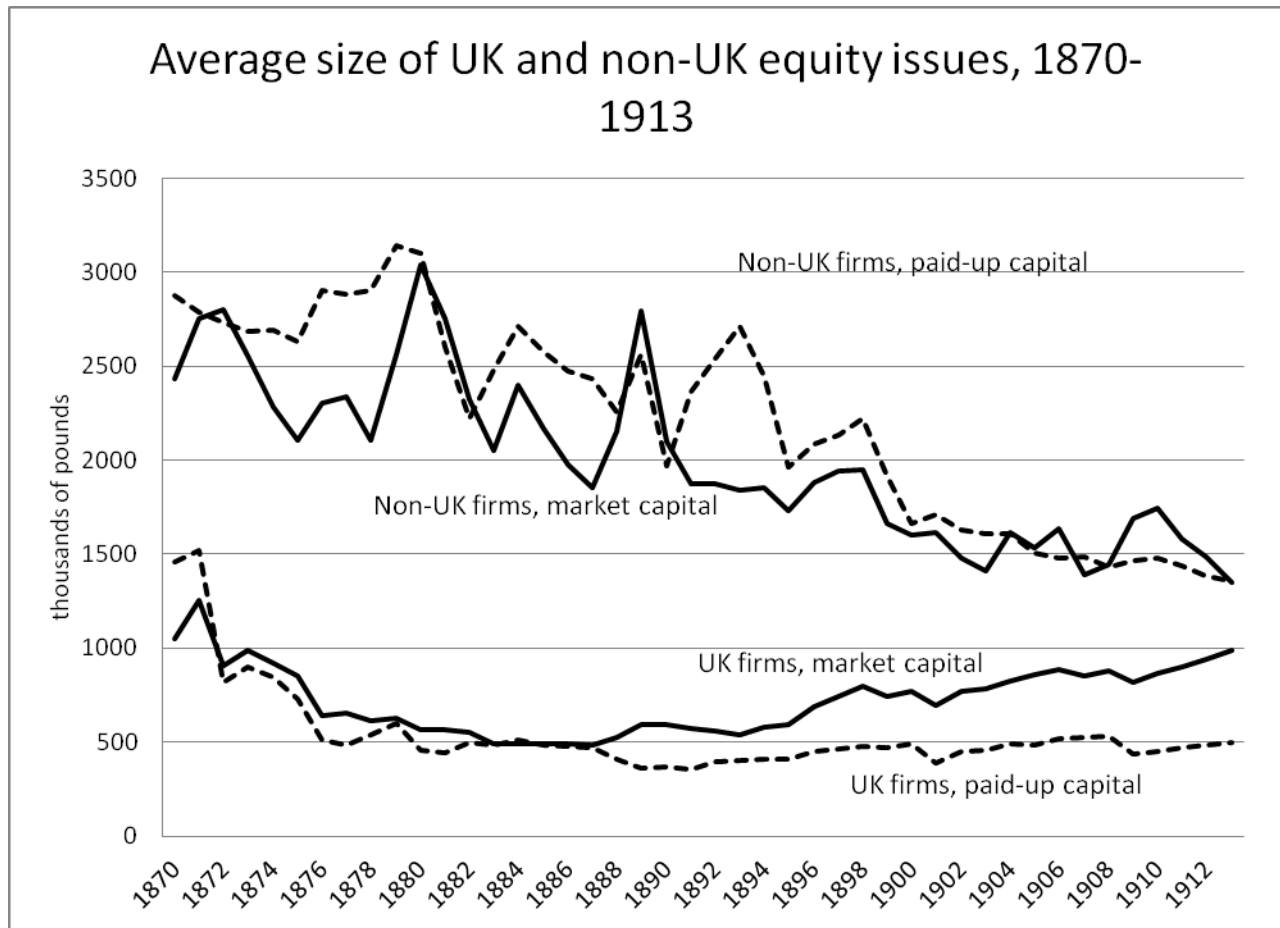


Figure 4a

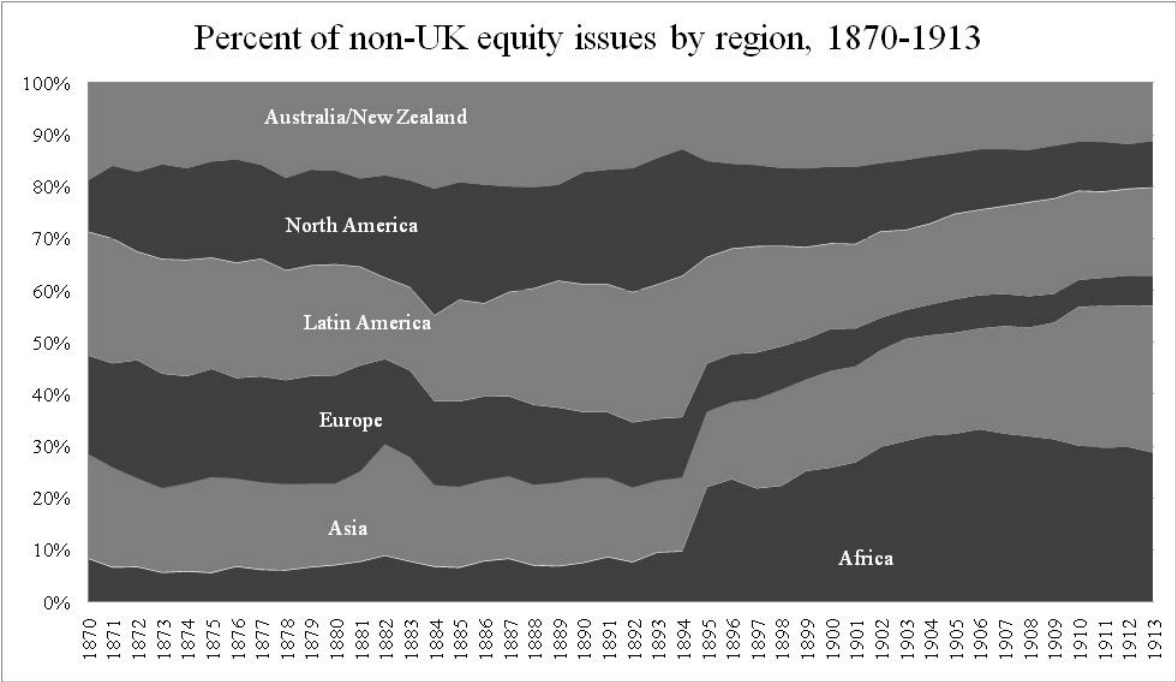


Figure 4b

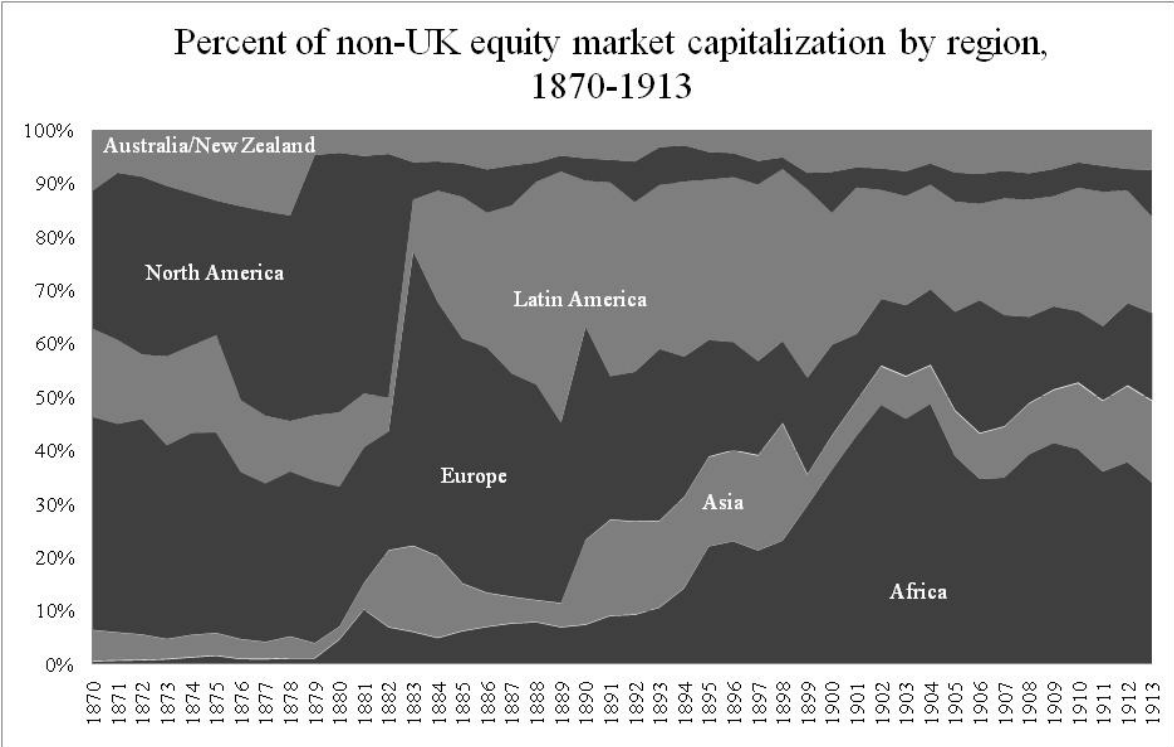


Figure 5a

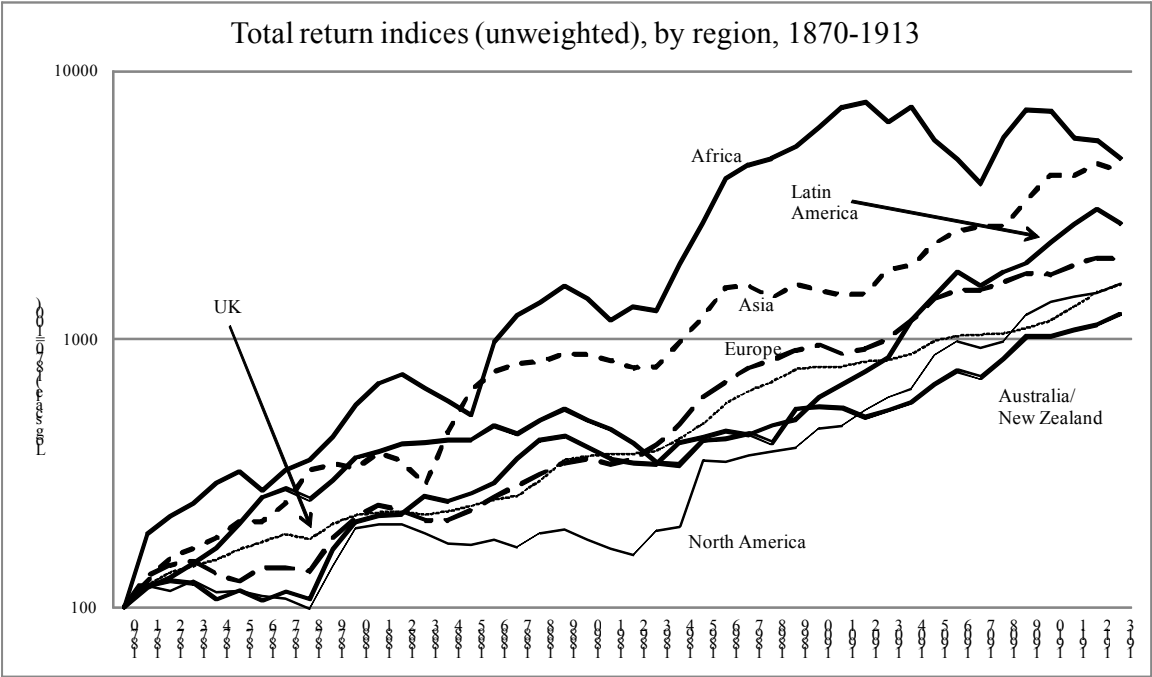


Figure 5b

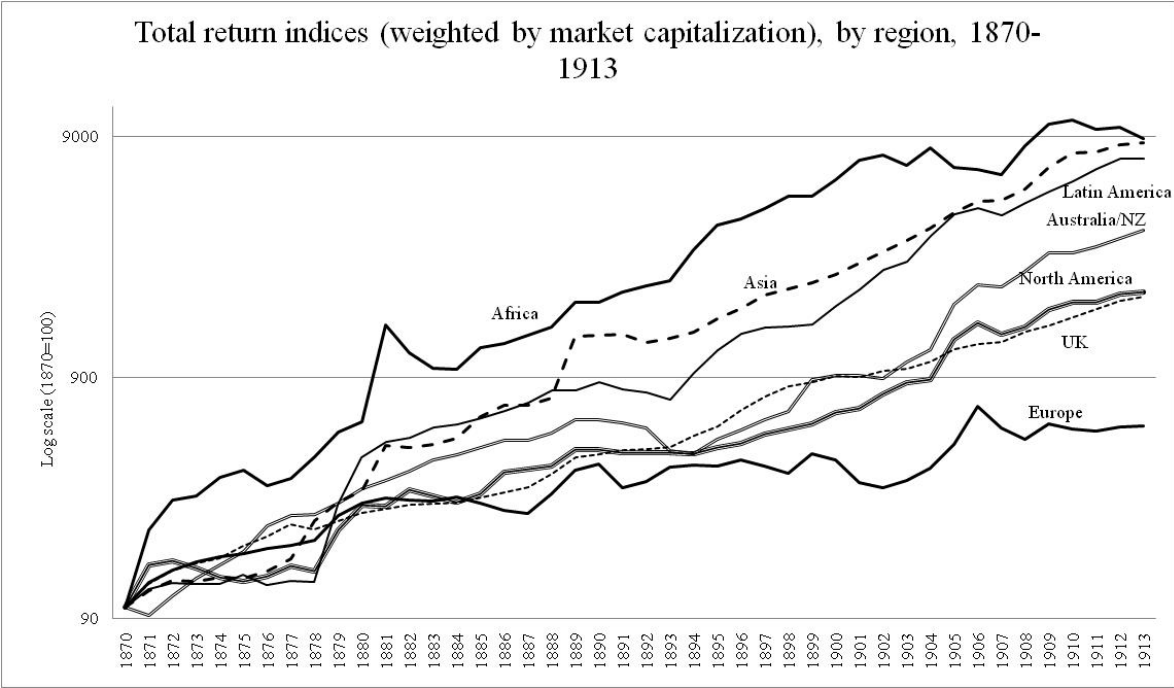


Figure 6

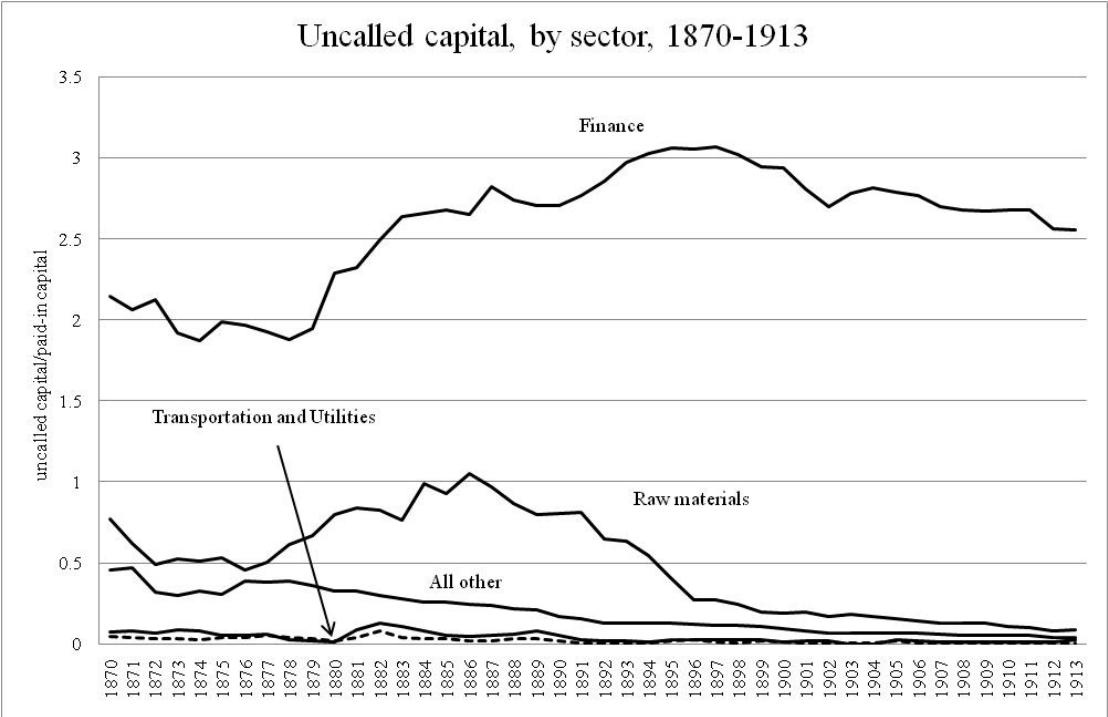


Figure 7

