

**Week 8. Overseas Investment.**

Why did Britain lend abroad on such a large scale in the period 1870-1914? Was it rational? What were the consequences for the balance of payments, domestic industry and economic growth?

**Readings.**

Floud, R., and D. N. McCloskey, *The Economic History of Britain since 1700*, vol. 2 (1860-1970). (First edition, 1981). [Chapter 4 (Edelstein)]. Discusses the quantity and pattern of foreign investment and why it occurred.

Kennedy, W. P., 'Foreign Investment, Trade and Growth in the United Kingdom, 1870-1913,' *Explorations in Economic History* (1974). Argues that overseas investment was irrational and harmful.

Edelstein, M., *Overseas Investment in the Age of high Imperialism*. [Chapter 3]. Reprinted in McCloskey, D. N., *Essays on a Mature Economy*. Argues that foreign investment was rational and benign for industry.

Michie, R. C., 'The Finance of Innovation in Late Victorian and Edwardian Britain: Possibilities and Constraints,' *Journal of European Economic History* (1988). Very critical of Kennedy (and links to the debate on entrepreneurial failure).

Ford, A. G., 'Overseas Lending and Internal Fluctuations, 1870-1914,' *Yorkshire Bulletin of Economic and Social Research* (1964). Reprinted in Hall, A. R., *The Export of Capital from Britain, 1870-1914*. Classic paper on the relationship between capital and exports.

Hatton, T. J., 'The Demand for British Exports, 1870-1913,' *Economic History Review* (1990). The latest view on capital and exports.

Rowthorn, R. E., and S. N. Solomou, 'The Macroeconomic Effects of Overseas Investment on the UK Balance of Trade, 1870-1913,' *Economic History Review* (1991). Examines the crucial effects on *imports* as well as exports.



## OVERSEAS INVESTMENT.

### The Reasons For Overseas Investment.

1. Were funds "pushed" abroad by low domestic returns or "pulled" abroad by high overseas returns?

2. Pull:

a) Generally it appears that funds were pulled abroad by very high overseas returns (especially before 1870). This is reflected in the rise in the savings ratio during foreign booms.

b) The returns to overseas investment may be increasing over a certain amount of investment (basic infrastructure opens up new profitable opportunities - the Hayek Effect).

c) The migration of UK residents may have further drawn capital abroad via family and trading contacts. (Thomas, 1973).

3. Push:

a) Funds may have been pushed by very low domestic returns around 1900.

b) There were inadequate domestic supplies of the "right" type of stocks (safe fixed interest securities such as railways).

c) There may have been "excessive" UK saving due to the skewed distribution of income (Hobson, 1902). This saving would also make domestic projects less remunerative by reducing aggregate demand. There is some evidence for this from Edelstein's estimates of the savings function. (He predicts savings ratios which exceeded the rate of domestic investment in booms and it is noticeable that overseas booms followed peaks in domestic investment).

Obviously, the outflow of funds was probably some combination of the two effects.

### The Rationality Of Foreign Investment.

1. The returns on overseas investments were higher for a given level of risk (Edelstein). Hence the fluctuations in domestic and overseas investment were optimal responses to changes in relative returns. However, this has been challenged by Pollard (1985) who argues that domestic returns may have been higher (and *any qualitative divergence can be deemed evidence of irrationality*).
2. If the UK offered the "wrong" type of risky assets then combinations of uncorrelated equities could have been used as substitutes and achieved a higher rate of return (Kennedy, 1974).
3. There may also have been a divergence between private and social returns (domestic investment implies lower bankruptcy losses; higher employment and growth; more tax revenue; endogenous growth). Hence a tax on overseas investment may have been optimal (Temin, 1987).
4. UK financial institutions were attuned to overseas investments (market information and contacts). Consequently they were "biased" against domestic issues (Kennedy). Surely we could argue that this was international specialisation (i.e. efficient)?
5. There were additional advantages to overseas issues (e.g. large issues were a signal of safety; the market was "thick" and offered greater liquidity).

### The Balance Of Payments.

1. The balance of payments has to "balance" (especially with a fixed exchange rate). Hence the large capital outflows must be offset by a balance of trade surplus. But which way does causality run?
  - a) Overseas lending creates demand for UK exports (Ford, 1965).
  - b) Export surpluses create foreign investment (sterling appreciates and overseas assets become cheaper; or the money supply rises, domestic interest rates fall and overseas returns become relatively higher).
  - c) They are jointly determined by overseas booms (Brown, 1965). This is plausible: given

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that UK investment contributed only a small amount to the rise in foreign aggregate demand during overseas booms, it is unlikely that the rises in UK overseas investment could be fully responsible for the rise in exports. [Yet they may be a trigger; they may also have a disproportionate effect given that both loans and exports were concentrated in capital industries].

Evidence from Hatton (1990) suggests that overseas lending was not an important cause of UK exports. He finds that world trade and foreign industrialisation were much more important.

2. Overseas lending can affect the balance of payments adversely as well as beneficially.

a) The rise in domestic incomes raises domestic absorption (lowers exports and raises imports). Rowthorn and Solomou (1991) find that the rise in income from foreign assets was responsible for the adverse trend in the trade balance. (Fluctuations in domestic investment and the propensity to consume only caused the "long swings" in the trade balance, rather than the underlying deterioration).

b) They do not find that Dutch Disease was a problem. (A rise in overseas income should raise the price level - given a fixed exchange rate - and make exports uncompetitive. There does not appear to have been such a rise in prices).

### Domestic Industry.

1. We might expect domestic industry to be credit constrained given the lack of domestic investment (compared to Germany and the US).

a) Edelstein argues that domestic industry was not seriously credit constrained (alternative sources of funds such as: personal contacts; extended overdrafts; new firms created by firms diversifying laterally).

Cottrell (1979) points out that German investment banks were only half as profitable as UK banks (and many went bankrupt around 1901).

b) Kennedy (1974) argues that firms were credit constrained. The firms which particularly suffered were new firms which needed equity capital and mature firms which needed funds for long term investment. (Difficulty of evidence due to bankruptcy).

2. The systematic failure of new sectors to expand is consistent with an alternative explanation. Michie (1988) argues that government regulations stifled advance. Motor

cars and electrical generation and engineering were severely hit. It is therefore *not* capital constraints which explain the small size of UK generator plants.

We might also highlight the role of company law. How were entrepreneurs supposed to know which sectors were profitable? (This rebuts Dintenfass).

### **Economic Growth.**

1. Would higher domestic investment have raised economic growth (as seems likely, if there were positive externalities or capital market biases)?

McCloskey refutes this argument. The rate of return on domestic investment would have fallen very quickly (two Forth Bridges et cetera).

[Nor can we use a general equilibrium model to evaluate second order effects, such as the negative externality from "spurts" of investment. It is just too intractable].

2. There was certainly a beneficial side effect in lowering the cost of living and the price of raw materials.

**EDELSTEIN, "Foreign Investment And Empire, 1860-1914",  
(in Floud And McCloskey).**

1. The outflow of UK capital began to expand vigorously after about 1855 and on average accounted for approximately 4% of GDP per annum (that is, one third of gross domestic fixed capital formation). The net stock of overseas assets rose from 8% of total wealth stocks (home and abroad) in 1855 to 33% in 1913. (p70, 72).

2. The debate has centred around several issues:

Was the capital "*pushed*" abroad by declining returns on domestic investment; or was it "*pulled*" abroad by exceptionally high returns available overseas?

Was it *rational* to invest abroad on such a large scale, or was it a result of bias in capital markets?

Was it *beneficial* for the UK economy (raising rentier incomes, reducing the price of raw materials, raising the standard of living for the working class)? Or was it *harmful* (assets were lost due to default, British industry was starved of capital, the distribution of income was skewed)? (p71).

3. Stylised features of UK investment:

UK foreign investment occurred in long swings of 16-24 years duration (troughs in 1861, 1877 and 1901; peaks in 1872, 1890, 1913). After 1870 the peaks in overseas investment moved inversely with the peaks in domestic investment. Note, however, that this pattern is not due to overseas investment "crowding out" domestic investment because the *savings ratio rose* during overseas booms.

Most UK investment was portfolio investment concentrated in social overhead capital (70%) and extractive industries (12%). (p73). (The main advantage of portfolio rather than direct was that it greatly reduced the level of risk, particularly in large projects such as railways).

The largest single borrower was the US (34% of the outflow, 1865-1914) and the largest growth area was South America (17%). The vast majority of capital (68%) went to those and other areas of recent settlement (such as Australia) where the demand for social overhead capital was very high.

The stream of investment to any one country (except the US) tended to be concentrated in a relatively short period - for example, northern Europe (1870s), Australia (1880s),

Canada and South Africa (1900s), southern Europe (1910s). This reflected the "lumpy" nature of social overhead capital.

4. The causes of foreign investment:

a) Hypotheses:

The "classical" explanation for overseas investment is that returns were higher abroad (although it is not clear a priori whether this was due to falling domestic returns or increasing overseas returns).

The Hobson (1902) view was that Britain had a maldistribution of income which led to "excessive" saving (since rich people tend to save more than poor people). This drove down the return on domestic projects because domestic outlets for investment were exhausted; in addition, the lack of aggregate demand (caused by a lack of consumption) reduced the value of any given domestic investment project. The result was an outflow of capital. (p75).

b) Evidence:

Up To 1870:

The evidence suggests that capital was initially drawn abroad in the 1850s and 1860s by exceptionally high returns - on projects such as railway extensions in India and the US, and gold discoveries in Australia. This occurred when returns were falling in the UK due to saturation of investment (for example, the return on railway investment made during the 1855 boom was very low). The fact that up to 1870 the domestic and overseas booms coincided supports this "pull" interpretation, as does the expansion of French foreign investment at this time. (p76).

After 1870:

Edelstein (1976) finds that the preference for overseas securities was created by higher returns on overseas investments (when adjustments are made for risk et cetera). Periods of overseas investment were characterised by a rise in overseas returns above domestic returns (and vice versa). On average, overseas investments earned a 5.7% return rather than 4.6%. (p80). [Why did perfect arbitrage not occur? Unclear explanation given on p80, 81].

(Note: the return on *all* types of investment was falling 1870-1914 - but we are concerned about the differential between home and overseas returns if we are trying to explain the level of overseas UK investment). (p80).

In general, it appears that investment was *pulled* abroad by rising returns on overseas



investments. However, in the last period of overseas dominance (1897-1909) the return on UK securities was exceptionally low, suggesting that investment may well have been *pushed* abroad to some extent. (p81).

More generally, the pull of overseas returns need not imply that push factors were absent or unimportant. Indeed, there is some evidence to support the Hobson hypothesis that there was "excessive" UK saving. Edelstein's (1977) model of UK saving is based on rates of return, the propensity to save et cetera. He finds that following the domestic peaks of 1877 and 1901 the actual level of *UK investment was lower than the level of savings* predicted by the model. The implication is that the strong overseas investment booms in the years around 1879 and 1904 were initially prompted to some extent by surplus savings generated in the UK economy (although the cause of the surplus may not have been due to the reasons which Hobson gives). (p82).

Another example of "push" is the British desire for high return/medium risk bonds around 1870. At that time the only bonds which fulfilled that criterion were US railway bonds. By contrast, "pull" forces were clearly at work in the 1890s when the UK invested heavily in Argentine paper offering very high returns. (p82).

##### 5. The consequences of UK overseas investment:

It is generally thought that foreign lending must be beneficial for the lending country, since it secures a higher rate of return than would otherwise be possible. In addition, British investment in overseas capital lowered the price of foreign foodstuffs and raw materials. This improved Britain's terms of trade by approximately 0.1% per annum. (However, it is not clear how much the price of imports would have fallen in the absence of UK investment, so we cannot attribute all of the improvement to UK investment overseas). (p85).

However, there may be some reasons for social welfare to diverge from private welfare and it is necessary to verify that these were not problems in the case of UK overseas investment.

a) There is little evidence that British firms suffered from a lack of capital as a result of UK overseas investment.

Firstly, established firms or industries found it easy to gain more funds (for example, by issuing equity. See Thomas, 1973). Secondly, many new industries such as telegraph and telephones had easy access either to London funds or provincial capital markets (Aldcroft, 1968). Thirdly, tests for bias find that any bias was small and the direction of bias changed erratically over time (McCloskey, 1970; Edelstein, 1971). Fourthly, the absence of investment banks can be ascribed to their lack of usefulness (Davis, 1966) and profitability (1975). None were successfully set up in England despite the imperial tendencies of continental investment banks (Cameron, 1961). Fifthly, the laws governing trusts

stipulated that funds had to be invested in certain stocks - but that list was biased towards domestic securities such as gilts. (p83).

b) Britain did not lose out from foreign bankruptcies. Keynes (1924) pointed out that if a foreign firm goes bankrupt then Britain will not get the use of any assets which remain (even though UK investors may have paid for some or all of them). If a British firm goes bankrupt then the UK economy will certainly benefit from any remaining assets.

But it is not certain that the remaining assets will have any value (given their sunk nature). It also seems likely that the residual claimants on a bankrupt overseas firm will be UK investors and they will therefore recoup much of their investment. (For example, after the Argentine government defaulted approximately 50% of the debt was recovered). Finally, the overall level of bankruptcies was not high (probably lower than the level of domestic bankruptcies). (p84, 85).

c) Increasing the quantity of capital will lower its marginal return and increase the return to labour, thereby increasing the share of wages in national income. If this occurred in Britain then British workers would be better off - but if it occurs abroad then *foreign* workers may be better off (possibly to the detriment of Britain because import prices may rise). (Note: it is not clear that social welfare would rise if British workers were better off, nor that it is detrimental to Britain if foreign workers are better off - especially if they then purchase UK products).

d) Foreign UK investment may depress the return on existing overseas investments (i.e. there is a negative externality). [But this cannot be true if the existing loans are made at a fixed rate of interest, as most of them were]. However, if the extra investment would have occurred anyway (for example, from French sources) then it is undoubtedly better that the price should be depressed by increases in UK investment (since the UK is then at least gaining the extra increment as well as losing on the infra-marginal units). (p86). [Alternatively, the return on overseas investments may *rise* as a result of increased investment if there is a positive externality].

[It seems to me that this debate about the "second order effects" is completely unquantifiable without a detailed general equilibrium model of the world economy - which we do not have - and therefore utterly pointless. Edelstein says something similar to this on p87].

**ROWTHORN AND SOLOMOU, "The Macroeconomic Effects Of Overseas Investment On The UK Balance Of Trade, 1870-1913", *Economic History Review* (1991).**

1. Overseas income as a proportion of GDP rose from 2% in 1872 to 7% in 1913. Rowthorn and Solomou examine the effects of overseas income on the balance of trade. They concentrate on two possible mechanisms: Dutch Disease (changes in relative prices which reduce exports) and absorption effects (increases in income raise the volume of imports).

2. There are two facets of the trade balance which need explaining - the long swing variations and the deterioration in trend (from a surplus of 3% of GDP in 1872 to surplus of 0.9% in 1913).

3. Alternative explanations for the deterioration in trend have focused on two issues. Firstly, some people have highlighted exogenous trends in the British economy (there was limited scope for further productivity increases in industries such as cotton; there is always a product "life-cycle" and it happened that many British industries were approaching the end of the cycle). Secondly, the demand for UK products was constrained by the industrialisation of other countries and the tariff barriers that they raised.

The adverse income effects of overseas investment do not attempt to *supersede* these other arguments, merely to *supplement* them. (p654).

4. Dutch Disease makes itself felt in a fixed exchange rate regime as follows.

Trade surpluses due to the returns on overseas investments create an inflow of gold which raises the domestic price level and makes British traded goods uncompetitive (this was accentuated around the turn of the century by very large coal exports which created further surpluses).

The uncompetitiveness of UK exports would reduce their price relative to non-traded goods, so that although export goods would rise in price they would do so by less than the rise in the GDP deflator. (p655).

5. The evidence regarding Dutch Disease is mixed. Between 1856 and 1873 there was a substantial rise in overseas income, but the period saw a rise in the price of exported goods relative to the GDP deflator. By contrast, the period 1873-1913 saw a fall in the relative price of traded goods. Hence, although a rise in overseas income "fortuitously"

offset the deterioration in the trade balance, it is not clear if the relationship was causal. (p656).

In order to further test for Dutch Disease, Rowthorn and Solomou construct a real exchange rate for the period 1872-1913 (based on a weighted index for Australia, France, the US, Belgium and Germany). The real exchange rate index shows a substantial appreciation between 1870 and 1883 (due to the rise in export prices compared to our overseas competitors) but it then falls back before rising again after 1897.

However, the real exchange rate does not show any marked trend and nor is it correlated with the deterioration of the trade balance. If there were any Dutch Disease price effects then it appears that they were offset by other factors. (p662).

6. The evidence regarding absorption effects is more suggestive. The mechanism is expected to work as follows.

The rise in overseas incomes generates a rise in consumption and domestic absorption (lower exports, higher imports) which worsens the trade balance. Rowthorn and Wells (1987) construct a model in which the expansion of overseas assets and income can spontaneously lead to a permanent balance of trade deficit which turns the lending country into a rentier nation. The crucial condition for this to occur is that the rate of return on overseas investment is greater than the growth rate of the domestic economy (this creates a situation where the rise in consumption cannot be met by the increase in domestic production). During the period 1870-1913 the real rate of return on overseas assets was considerably higher than the UK growth rate. (p657).

7. Changes in the trade balance must be offset by changes in other elements of the national income accounts. In particular, they can be offset by changes in domestic investment, the propensity to consume and a change in foreign income. (p658).

The worsening trade balance saw temporary improvements in two periods (1877-1890 and 1898-1913). The improvement in those periods can be largely attributed to a fall in domestic investment reducing absorption, although the second period was assisted by a fall in the propensity to consume. (p659).

The point to note is that the overseas income effect was adverse throughout the period. It was *the income effect which created the downward trend* whilst the other factors created the long swings. (p660).

[Why does the income effect become less important in the later periods, when overseas income was rising? And why should change in domestic investment affect the trade balance adversely, since most investment goods were produced domestically? These points worry me].

8. Rowthorn and Solomou support their analysis with an econometric estimation of the consumption function. They find a propensity to consume out of domestic income of 0.5, and a propensity to consume out of overseas income of 0.53. However, their equation exhibits some autocorrelation. (p660). [I am not convinced that a regression with only three variables and an R-squared of 99% is really telling us very much].

9. Hence Rowthorn and Solomou conclude that absorption effects were significant and adverse, but Dutch Disease was not a problem for the UK economy in this period. (p663).

**KENNEDY, "Foreign Investment, Trade And Growth  
In The United Kingdom, 1870-1913",  
*Explorations In Economic History (197)*.**

1. It is widely believed that the Victorian and Edwardian economy was operating below its full potential (it was felt widely at the time; the UK was being overtaken by foreign competitors; the uninspiring inter-war economy had faster growth). (p415).
  
2. McCloskey rejects this weighty evidence. He argues that the Victorian economy grew to the limits of its capacity and that the poor productivity performance has been overestimated.
  
3. Kennedy begins by re-examining McCloskey's work and suggests that the economy was not at full capacity and redirecting foreign investment could have increased growth. Secondly, a discussion of the Victorian capital market suggests exactly to what extent the growth performance could have been improved. (p416).
  
4. Kennedy argues that McCloskey's model depends on four assumptions:
  - a) The rate of growth of output is determined by the rate of growth of three inputs - capital, labour and technology (which is disembodied). [These are invalid assumptions - we had excess labour supply (emigration), capital can be influenced by the market-makers and technology must be embodied].
  - b) Structure is irrelevant and therefore the volume of all inputs can be fully represented by simple index numbers. [This is wrong if there is Verdoorn's Law et cetera].
  - c) Only the capital stock is endogenous.
  - d) There is a Cobb-Douglas production function.
  
5. If the capital-output ratio is given at 4.9% and gross domestic fixed capital formation is 7% (?) then the growth rate of the capital stock is 1.43% and the growth of output is 2.4% per annum.

However, Kennedy argues that the *potential* growth of capital stock must be found by assuming that all investment was directed to domestic industry - which would raise the growth rate of capital to 2.1% per annum and the potential growth rate to 2.7%. [As McCloskey points out, the return on UK investment may then have been driven very low

and the increase in growth may not have been very great]. (p416).

Furthermore, if the capital-output ratio was only 4 (it dipped below that level for several years in the 1890s); and if savings were increased to 13% per annum (the US level); and if there had been labour inflow rather than outflow; then the growth rate of output per annum would have been 3.54%. (p419, 420).

The alternative assumptions made by Kennedy do not seem unreasonable (although it is interesting to ask *why* the capital-output ratio was so low in 1898). His central point is that McCloskey's result is very sensitive to the assumptions that he makes - and it is easy to generate alternative conclusions. (p420).

6. Kennedy argues that redirecting large volumes of capital would have fundamentally altered the structure of the economy - this in turn would have shifted the entire marginal efficiency of capital curve (rather than merely moving along it). The result could have been much higher growth. Hence Kennedy sets out to construct a counterfactual model. (p421).

[The model seems to have some rather odd assumptions - such as perfect elasticity of demand and wage rates unaffected by changes in the interest rate]. (p423).

7. Kennedy points out, however, that a full general equilibrium model is required. The difficulty is constructing one in which the assumptions reflect historical reality. (p424). Until such a model is constructed McCloskey's point cannot be proven - and may be false. (p425). [It may be true that McCloskey's conclusion is both inaccurate and seriously misleading - but not to provide an alternative is a cop out which does not advance the debate at all].

8. It could be argued that British investors were simply more risk averse than foreign investors - and therefore they opted for less risky assets with a lower rate of return. (In that case, the preference over risk ought to enter into the production function). (p425).

However, it is possible that UK capital markets "failed" in two senses. Firstly, it has been suggested that the social rate of return on investment is higher than the private rate. Hence, not only was there insufficient UK capital investment but the positive externality which was created by the investment was captured by foreigners (because of the volume of overseas loans). (p426). [There were also positive externalities from lending abroad, however, such as the fall in the price of food imports].

Secondly, it may have been possible to reduce the riskiness of domestic investment by greater diversification (removing the need to invest abroad). Then Britons could have had their cake and ate it. (p427). (Alternatively, it is possible that greater diversification of overseas holdings could have raised the return without increasing risk. This is probable,

given the British fetish for very safe bonds). (p428).

9. The conservatism of UK investments can be seen from three factors: the low level of defaults (p429); the preponderance of fixed-interest securities (p429, 430); the low rate of return compared to domestic investment (p432).

Paish (1909) found that of British overseas portfolio investment in 1907: 38% earned 3-4% interest; 42% earned 4-5% interest; 16% earned 5-10% interest; and 2% earned more than 10% interest. But those earning more than 10% accounted for 25% of all returns! Only about 10% of total overseas investment was direct (i.e. high risk) investment. (p432).

More noticeably, the average return on domestic investment was 11% from 1910 to 1914 (although, of course, the risk was higher). (p433).

10. There were three adverse consequences of excessive overseas investment:

a) When the available foreign investment outlets were choked off (for example, 1876-80 and 1893-98) the result was a substantial fall in fixed domestic capital formation (with adverse effects on the capital stock, export demand, domestic demand and output). The alternative for investors was to increase consumption or hold idle balances. (p435, 436).

b) Structural change within the economy was reduced. This was partly because the level of demand was low (due to prolonged periods of idle balances) and partly because UK firms depended so much on export demand derived from overseas loans (export demand was geared towards the staples such as steel rather than the newer industries). (p437). In addition, the exports of engineering and electrical products which did occur went to less industrialised countries which had much more basic requirements. (p438).

c) Entrepreneurs found it much more difficult and costly to raise funds to enter new markets than established ones. This was due not only to the higher risk involved, but also because British investors were risk averse. Examples include the bicycle and motor industries [really?]. (p438, 439).

11. It is easy to conclude that rational utility maximisers were acting rationally and efficiently in the late Victorian economy, given the constraints that they faced. The interesting questions emerge when we hypothetically alter those constraints in order to see how difficult it would have been to do so in reality and what the result would have been. (p439). Clearly, Kennedy thinks that this is a valid question (unlike McCloskey). [The only problem is that he is fascinated with a general equilibrium model - which is hocus pocus].



**POLLARD, "Capital Exports, 1870-1914: Harmful Or Beneficial?",  
*Economic History Review* (1985).**

1. One of the most noticeable features of the UK economy after 1870 was the large proportion of capital which was exported (roughly 4% of GDP per annum, out of a total capital formation of 12% of GDP per annum). Since this expansion of foreign lending is correlated with lower growth et cetera, many have asked if there was a causal relationship. (p489).

2. Pollard does not seek to address the following elements of the (wide-ranging) debate:

- a) International migration.
- b) Income redistribution.
- c) The trade cycle.
- d) Short-term international credits.
- e) The effect on borrowing countries.

3. Pollard begins by outlining the quantitative elements of overseas lending. He highlights the main recipient countries (the Empire - especially areas of recent settlement - followed by the US and South America, with Europe very far down the list). He also recounts the main recipient sectors (mainly transport but also public works, utilities et cetera). (p490).

4. Pollard then begins by criticising the data. There are three alternative sources of data: the balance of payments records; the inland revenue returns; lists of overseas stock issues. Various authors have employed each of these and they all come to broadly the same result. However, this is worrying on three counts.

Firstly, each method measures something slightly different and therefore they should not all add up to the same amount. [They differ quite a lot, it seems to me. There is a large difference between £2220m (Cairncross) and £3000m (Imlah)].

Secondly, the estimates diverge markedly between 1870 and 1914, but all miraculously come together at the terminal date.

Thirdly, recalculations by Platt (1980) have revised downwards the estimate to only two-thirds of its previous level - and suggested that the role of *direct* investment has been underestimated. (p493).

5. We must be aware that the outflow of investment funds was not a constant drain on

UK funds. By the early 1870s the inflow from dividends et cetera was generally greater than the annual outflow. (Hence we may be wise to worry about the effects of the *inflows* more than the *outflows*). One can still question, of course, whether the UK economy would have benefitted from redirecting the funds towards domestic investment projects.

6. One of the fundamental questions is whether it was rational to invest abroad on such a large scale. Calculations of risk-adjusted returns by Edelstein show that on average the returns on overseas investments were higher than domestic investments. (p496). However, this can be criticised on three counts:

a) If overseas returns were consistently higher than domestic returns then it demonstrates irrationality, just as much as the overseas loans had been less profitable. [But, as Pollard points out, the returns fluctuated over time and during domestic booms it was the domestic returns which were higher. If there was some market inertia or imperfect knowledge then we would expect a temporary wedge to appear between the returns to different stocks. Then the higher average return to overseas investment is merely a function of the fact that overseas booms were more common or long-lived. It is not irrational].

b) The returns ought to be calculated on the basis of the purchase price of the assets, whereas in fact Edelstein had to use market valuations. (p487).

c) Edelstein's definition of risk (i.e. variance) is not the only or necessarily best criterion [although it is the one which theory finds most useful!]. There are additional problems. For example, when making his adjustments Edelstein uses the risk assessment of a generic type of investment ("mines") whereas he ought to use the expected risk level of that particular investment ("American silver mine in upper California"). (p489).

[This whole criticism of Edelstein is clutching at straws. It is utterly unreasonable to expect any calculations to be that specific. Although it is *possible* that Edelstein's work is misleading, we must decide whether that is *likely*. Personally, I do not think that it is very likely to be seriously wrong].

7. We can use alternative indicators of rationality, such as the timing and extent of overseas investment. Pollard suggests that the "boom" or "spurt" nature of most overseas lending is consistent with mania behaviour rather than rational planning. (p499). [It is also consistent with the "pull" characteristics of most overseas lending. Social overhead capital was lumpy; the presence of other investors made a "thick" market and signalled that at area was likely to be quite "safe"; substantial investment in items such as transport suddenly made other investments in that region more profitable].

8. Was there bias amongst stockbrokers? In the sense that the majority of funds directed

through the City went abroad, there was obviously a bias. (p500). [However, this is not surprising. Most people who wanted to invest in the UK did not go to the City to invest. They bought houses, lent money locally or put money into the regional stock exchanges].

9. Was UK industry short of investment funds? The evidence is mixed (as qualitative evidence always is). Pollard clearly feels that even relatively "safe" firms were constrained by lack of capital. He also suggests that constrained firms are likely to be under-represented because they are more likely to have gone bankrupt. (p501). [Edelstein would disagree].

10. Pollard questions whether there would have been diminishing returns to capital if more investment had been directed to UK projects (which is what McCloskey has argued). (p502). Pollard suggests that there may have been increasing returns but they were not taken up because some of the return was a positive externality. (p503). This is particularly likely if there was unemployment of labour resources (which there was in the late Victorian economy). (p504).

11. It is not clear what effect the capital exports had on the gold standard mechanism. In theory, UK capital exports were analogous to importing goods and services, putting downward pressure on the exchange rate (upward pressure on interest rates and downward pressure on the price level). In practice, these affects are very difficult to find in the case of the UK in this period. (p505).

12. There is some debate as to whether capital exports went to "competing" or "complementary" economies to those of Britain. For example, developing railways and improving the comparative advantage of those countries which produce raw materials was clearly to the advantage of the UK (which had to purchase most raw materials). But investing in German capital projects which then enabled them to trounce UK producers would have had less benign secondary effects. (p507). But Pollard is sceptical as to whether the distinction between competition and complementarity is a useful one (for example, some of the Empire countries began as one and ended as the other). In addition, in some cases it might still be beneficial for the UK to loan funds to her competitors [an example from Pollard would be useful at this point]. (p508).

13. The relationship between lending abroad and selling abroad has recently been criticised. The markets of highest lending were not those of highest sales; for British exporters to benefit from overseas lending it is not necessary that all the funds must immediately be spent in the UK (they might come via third countries). Moreover, it is most likely that *direct* investment overseas would reap more "value-added" returns because they tended to be accompanied by transfers of know-how and technology. (p508).

14. There is little evidence that Empire countries were particularly favoured in terms of access to funds. Colonial governments borrowed on marginally more favourable terms, but that is all. There is also little evidence that the Empire existed in order to create an outlet for UK funds, since new territories attracted very little capital. (p509).

15. Generally, domestic booms preceded overseas booms and it can be strongly argued that "excessive" saving forced down the rate of return on UK investments and therefore encouraged funds to flood abroad in order to maintain their profitability. In that sense, capital exports were "pushed" abroad. (p510).

An alternative interpretation of the capital outflow is that after 1870 the persistent balance of payments surplus caused by a strong invisibles account had to be offset somehow (i.e. by increasing imports or reducing exports). The mechanism by which this occurred was a further capital outflow. This may have been less damaging to aggregate demand and growth than the alternatives. Of course, this only exacerbated the problem for the future because the result would be higher invisible earnings. (p511).

16. Pollard believes that the Victorians may have been short run optimisers, but they were probably acting irrationally. He certainly believes that in the long run they sacrificed future economic performance for current consumption. (p514).

**HATTON, "The Demand For British Exports, 1870-1913",  
*Economic History Review (1990).***

1. The role of exports in UK economic development is well known (over 25% of GDP exported; 30% of industrial output exported; the staples were to a great extent export industries).

The poor growth of UK exports has been linked to the slow growth of industrial productivity (although it is not clear in which direction the causality runs).

Furthermore, exports are often argued to have played a key role in determining domestic fluctuations (Ford, 1965). This is partly because they were one of the most volatile components of GDP; they were large; to some extent they were exogenously determined. (p576).

2. The role of Britain in world trade was very large. The UK accounted for 19% of total trade in 1872 and 13% in 1913; furthermore, she accounted for 41% of manufactured trade in 1880 and 30% in 1913. Hence *any* alterations to the extent or pattern of world

trade would affect the UK. Various factors were at work:

a) Scholars have investigated the influence of *complementary* and *competitive* growth amongst overseas economies (Sayers, 1965).

To an extent the distinction is artificial, in that foreign markets were rapidly transformed from one into another. Certainly, up to 1870 Britain exported a great deal of capital goods to Europe but after that date the output of European producers became a serious threat to UK producers (firstly in domestic markets and then in third markets such as Africa and South America).

The effect of UK price competition appears to have been important. In industries where foreign producers held a price advantage (such as steel) their markets grew much more rapidly [although we could also question the direction of causality here]. (p582).

b) Attention has also focussed on "cyclical parallelism" amongst European economies (particularly France, Germany and the UK). Europe was Britain's largest market, although it declined slightly towards the end of the nineteenth century.

c) The export demand from the US and areas of recent settlement was also very large. (The fluctuations in the US were larger absolutely than the European fluctuations, despite the smaller absolute value of exports to the US). (p579).

d) The export demand from the "Atlantic Economy" is particularly interesting because it was highly correlated with UK capital exports. The question arises as to whether the relationship was causal, and if so which way causality runs.

Firstly, it can be argued that the surplus created by rising exports was naturally used to invest abroad (a surplus would put upward pressure on sterling which would make foreign assets cheaper; or it would lead to a fall in UK interest rates and make overseas and make overseas stocks more remunerative).

Secondly, it can be argued that overseas issues preceded export booms and the financing of foreign capital expenditure was directly reflected in exports of capital goods (Ford).

Thirdly, it must be recognised that - although the booms in overseas lending were very large - the volume of lending was usually quite small compared to the increase in foreign aggregate demand. Hence it is more probable that *both* the rise in investment and the rise in exports were actually created by a third factor (an exogenous foreign boom). (Brown, 1965). (p581).

e) It does not appear that Britain's position in slowly growing markets (both geographically and sectorally) contributed substantially to her declining export performance. This structural problem was most severe in the 1880s (when exports fell

slowly) and quite unimportant in the 1890s and 1900s when the UK export performance was noticeably poor. (p583).

3. Hatton sets out to estimate a model which examines the effect of world economic activity, overseas lending, overseas production and competitiveness on the demand for UK exports. (In order to avoid simultaneous equation bias he uses instrumental variables to estimate the regression). (p584).

Hatton finds that the coefficient on overseas lending is not significant. (It becomes significant on alternative formulations but only with a very small coefficient).

The equation appears to be stable over time and there is no structural break (despite the rise of multilateral trade in the 1890s). (p585).

4. The long run elasticity of UK exports with respect to world trade is estimated as 0.83 (i.e. UK exports would grow at only four-fifths of the rate of world trade). The price elasticity of UK exports was estimated to be 1.8 in the long run. A rise in the growth rate of core competitor countries of 1% would raise the *level* of UK exports by 2%. In general, it seems that there is approximately a two year lag between changes in the independent variables and exports. (p586).

5. Broadly similar results are obtained when the equations are applied to individual product groups (cotton and steel). [However, it is noticeable that removing the growth of industrial production variable changes the coefficients on the other variables greatly. This implies some kind of mis-specification]. (p588).

6. The price elasticity estimate is quite high compared to Tinbergen's aggregate estimate of Victorian export elasticities and also compared to inter-war and post-war estimates. (p590).

The elasticity of exports with respect to overseas lending is much lower than Tinbergen estimates, however. They are 0.07 rather than 0.42.