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FROM EMPIRE TO EUROPE: BRITAIN IN THE WORLD ECONOMY

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From Empire to Europe: Britain in the World Economy

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INTRODUCTION: LONG RUN TRENDS

This chapter provides a brief introduction to the history of Britain's engagement with the international economy between 1870 and 2010. It begins by discussing long run trends in the integration of the British economy with the rest of the world over time. Economic historians are typically interested in four types of flows between economies: trade in goods and services; flows of capital; migration flows; and flows of ideas and technology. The last flow is probably the most important one for countries hoping to catch up to the international technological frontier. While this was not the right way to characterise the British economy in 1870, it probably was at various points after World War II. Unfortunately, such flows are also the most difficult to quantify, and so I follow the bulk of the literature in concentrating on trade, capital flows and migration.

When measuring the extent to which commodity, capital or labour markets are integrated at various points in time, researchers have adopted several approaches. The most straightforward is simply to measure the extent of trade, or capital flows, or labour flows, and see how these vary over time. In order for inter-temporal comparisons to be meaningful, it is common to express the flows as a percentage of GDP, or relative to the total population, as appropriate. Another approach is to focus on the costs of transacting internationally, which will be reflected in price gaps for a homogenous commodity, or financial asset, or type of labour, between two markets. Falling international price gaps are a sign that markets are becoming better integrated over time, rising price gaps a sign of disintegration.

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It is possible that prices could converge internationally for reasons having nothing to do with trade, while trade can increase for reasons other than the integration of international markets. If, however, price gaps converge at a time of falling transport costs, trade liberalisation, and/or rising volumes of trade, then it seems safe to conclude that integration is taking place.

In what follows, I present data on both quantities and prices, beginning with international trade.

International trade

Figure 1 plots the share of exports (including re-exports) and imports of goods and services in GDP between 1870 and 2009. Both here and in later figures, the periods of the two world wars are shaded, while the onset of the Great Depression in 1929, and the first oil crisis in 1973, are marked with dotted lines.

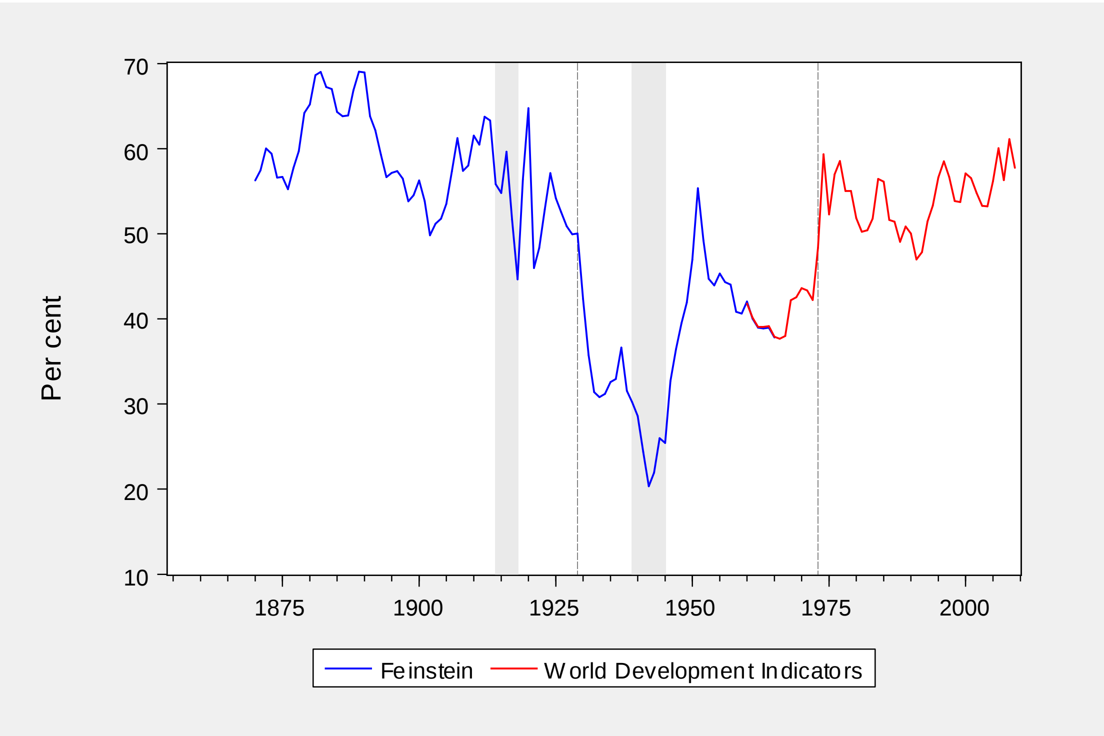

Figure 1. Trade in goods & services (imports + exports) as percentage of GDP

Source: Feinstein (1972), Tables 3, 15; World Bank (2011)

As can be seen, the late nineteenth century (which for the purposes of this chapter will be defined as 1870-1913) saw very high levels of trade, accounting for roughly 60 per cent of GDP on average. The high point was reached in the 1880s, when trade amounted to almost 70 per cent of GDP, and the low point came in 1902, when it accounted for only 50 per cent. After a dramatic decline towards the end of the war, and an equally dramatic postwar recovery, the share slipped over the course of the 1920s, and plunged after the onset of the Great Depression, reaching 31 per cent in 1933. While the share subsequently recovered, it fell again to its absolute low point of just 20 per cent in 1943. Again there was a post-war recovery until 1951, when the share reached 55 per cent; a gradual decline through the mid-1960s; a sharp increase following the oil crisis, presumably reflecting the increased price of oil; decline during the 1980s; and recovery since then, although not to the levels prevailing before World War I.

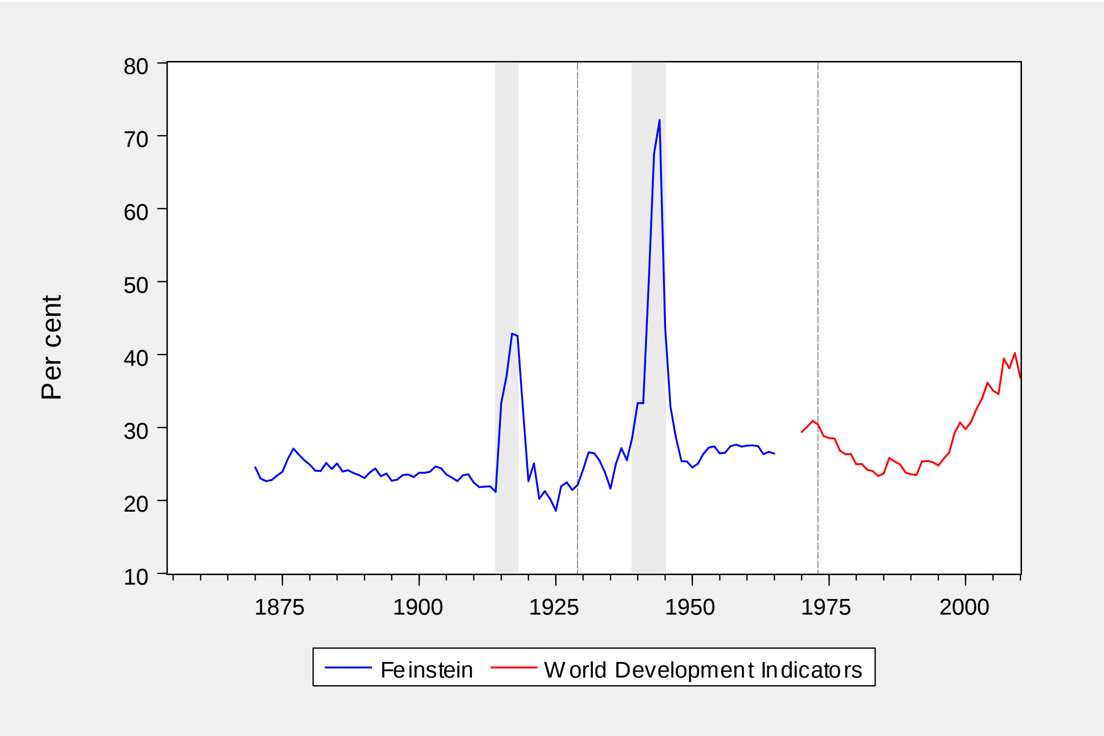

Figure 2. Share of services in total exports

Source: Feinstein (1972), Table 15; World Bank (2011).

Figure 2 shows that services have traditionally accounted for a high share of total British exports – somewhere around a quarter. The share was fairly stable over time, aside from the two spikes during the world wars, but then rose sharply from the 1990s onwards, reaching 40 per cent in 2009. This presumably reflects the more general shift of the UK economy towards services, which is viewed by some as a problem, and by others as a healthy reflection of technological change, increasing incomes, and patterns of comparative advantage.

Figure 3 shows the share of re-exports in total British merchandise exports. As can be seen, this was very high – somewhere around 20 per cent – before World War I, reflecting Britain's status as a major entrepôt for international trade. It collapsed during the Great War, recovered, but then continued to decline at an accelerating rate. It collapsed a second time during the Second World War, and this time did not recover.

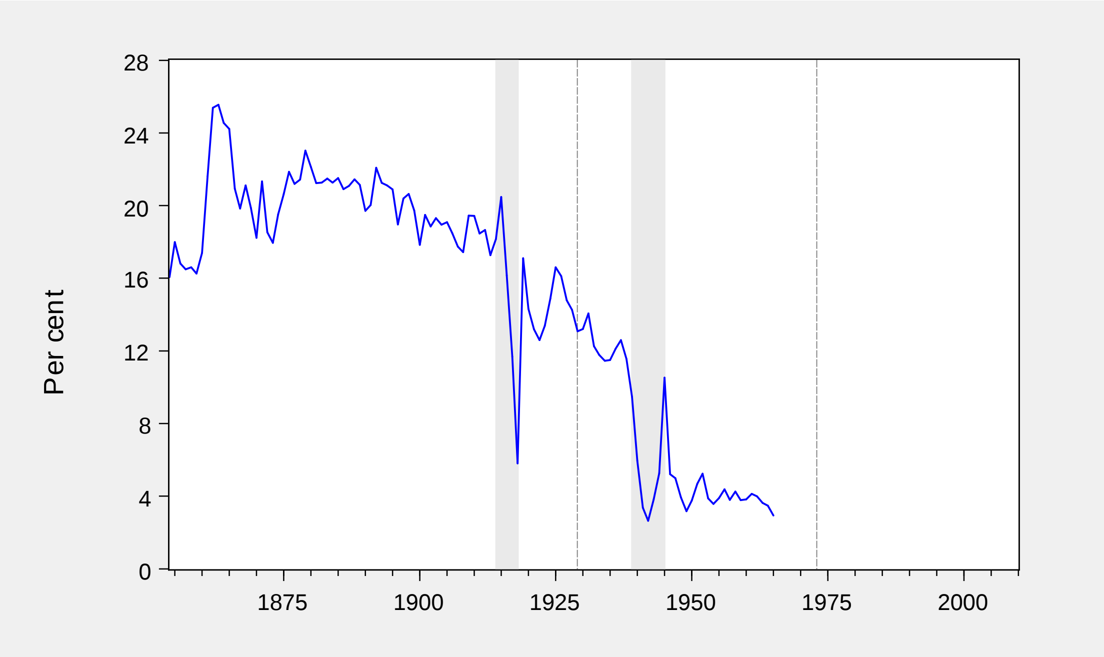

Figure 3. Re-exports as a share of total British merchandise exports
Source: Mitchell (1988)

The late nineteenth century was the high-water mark of Britain's trade engagement with the rest of the world. There followed a period of disintegration during the interwar period, and reintegration after World War II. Price data corroborate this basic pattern, although there have not been many studies of international price convergence for the interwar period by economic historians, and even fewer for the period since 1945.

Table 1 provides estimates of Anglo-American price gaps between 1870 and 1913 for a variety of commodities. In the case of agricultural commodities like wheat, the quoted price gap is between Britain and the US, since food prices were higher in Britain, an agricultural importer, than in the US, an agricultural exporter. In the case of industrial commodities the table shows the extent to which American prices exceeded British ones. As can be seen, price gaps fell sharply, with sugar being a notable exception. The years between 1870 and 1913 also saw price convergence between Britain and a wide variety of other markets. For example, the wheat price gap between Britain and Odessa fell from 37.9 per cent to 6.5 per cent, while the London-Rangoon rice price gap fell from 93% to 26%, and the Liverpool-Bombay cotton price gap fell from 57% to 20% (O'Rourke 1997, O'Rourke and Williamson 1999, p. 53). The fact that such convergence had begun earlier in the century (Federico and Persson 2007, Jacks 2005) should not obscure the fact that the 1870-1913 period was one of impressive price convergence, in which commodity markets between Britain and the rest of the world became far better integrated with each other.

Commodity traded	Markets in which quoted	1870	1895	1913
Wheat	Liverpool vs. Chicago	57.6	17.8	15.6
Meat and animal fats	London vs. Cincinnati	92.5	92.3	17.9
Cotton textiles	Boston vs. Manchester	13.7	3.7	-3.6
Iron bars	Philadelphia vs. London	75.0	43.4	20.6
Pig iron	Philadelphia vs. London	85.2	46.9	19.3
Cotton	Liverpool vs. New York	13.3	11.2	9.7
Coal	New York vs. London	-16.9	-2.0	8.8
Copper	Philadelphia vs. London	32.7	13.6	-0.1
Hides	Boston vs. London	27.7	16.6	8.7
Wool	Boston vs. London	59.1	65.8	27.9
Tin	New York vs. London	15.9	5.3	-2.3
Coffee	New York vs. London	-18.1	-3.5	8.2
Sugar	New York vs. London	50.9	74.2	91.0

Table 1. Anglo-American price gaps, 1870-1913 (per cent)

Source: O'Rourke and Williamson (1994), Table 2.

Price gaps increased very dramatically during World War I (Hynes et al. 2012). For example, the London-Rangoon rice price gap increased from 26 per cent in 1913 to 422 per cent in 1917. Price gaps fell again once peace had been restored, but Table 2 shows that they were still higher in 1922 than they had been before the war. The early to mid-1920s then saw a gradual reversion to what would presumably have been seen as pre-war normality, with price gaps falling between 1922 and 1927. Nonetheless, with the exception of the wheat trade between Britain and North America, price gaps were still higher in 1927 and 1929 than they had been in 1913. After 1929, price gaps increased even more: on 12 out of 18 routes between 1929 and 1933, and on 15 out of 16 routes between 1929 and 1937. The period between 1913 and the Second World War was thus one of disintegration, whether one focuses on the quantity data of Figure 1, or the price data of Table 2.

Commodity	Grade	Markets	1913	1922	1927	1929	1933	1937
Wheat	No. 2 Winter	Liverpool-Chicago	16.0	24.6	12.9	8.7		
Wheat	No. 1 Northern Manitoba	London-Winnipeg	24.5	34.7	7.7	9.9	20.7	17.7
Wheat	Plate	London-Buenos-Aires	9.0	26.3	11.0	11.6	10.1	5.8
Maize	Plate	London-Buenos-Aires	18.7	39.3	25.3	21.0	25.5	33.6
Oats	Plate	London-Buenos-Aires	13.5	33.2	29.1	25.7	26.0	
Rice	Birmanie No. 4	London-Rangoon			25.9	27.7	50.4	55.3
Rice	Saigon No. 1	London-Saigon			76.2	39.7	39.0	44.2
Rapeseed	Toria	London-Karachi			14.7	15.1	21.8	27.3
Groundnut	Coromandel	London-Madras			20.5	15.2	27.1	26.6
Linseed	Bombay	London-Bombay			17.6	16.8	23.9	27.9
Linseed	La Plata	London-Buenos-Aires			16.0	14.7	13.1	22.2
Cotton	Middling	Liverpool-New Orleans	12.0	22.1	12.2	12.2	15.9	16.5
Cotton	Broach	Liverpool-Bombay			4.0	8.4	5.4	8.8
Cotton	Sakellaridas	London-Alexandria			6.2	5.4	13.0	10.1
Cottonseed	Sakellaridas	London-Alexandria			17.5	19.8	23.8	24.2
Eggs	Danish	London-Denmark			43.6	58.7	71.5	73.8
Eggs	Dutch	London-Holland			12.8	23.6	15.4	45.7
Butter	Danish	London-Copenhagen			7.9	10.1	36.7	24.7

Table 2. Average annual commodity price gaps, 1913-1937 (per cent)
Source: Hynes et al. (2012).

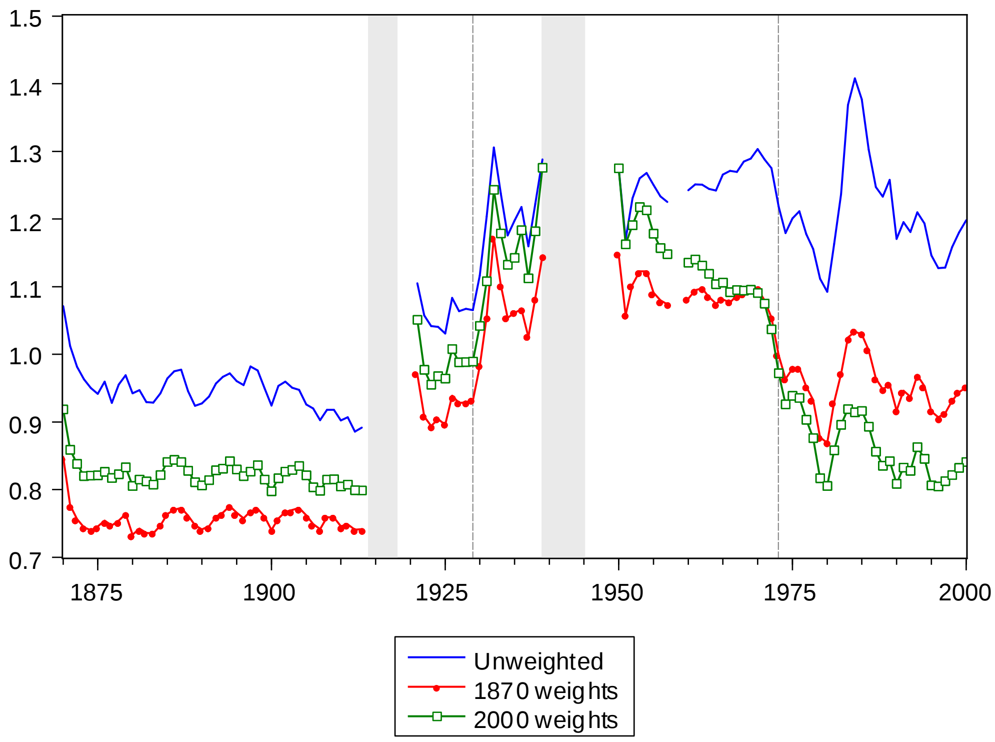

Figure 4. Average UK trade costs, 1870-2000
Source: based on Jacks et al. (2011).

We do not have the same type of price evidence for the post-1945 period, but it seems safe to assume that this saw a gradual reintegration of British and world markets. This was probably not true of all commodities and routes: for example, one would expect agricultural price gaps between Britain and countries like Australia and New Zealand to have increased following Britain's accession to the EEC in 1973. Figure 4 provides theory-based estimates of (trade-weighted and unweighted) average trade costs between Britain and 25 other countries between 1870 and 2000,[2] taken from Jacks et al. (2011). Once again the pattern in Figure 1 –trade integration between Britain and the world in the late nineteenth century, followed by disintegration between 1914 and 1945, and reintegration in the late twentieth century – re-emerges. This pattern was mirrored across the world (Findlay and O'Rourke 2007, Chapters 7-9).

International capital flows

While measuring trade flows is conceptually straightforward, there are alternative ways of measuring international capital flows depending on what one is interested in. If you are interested in international factor mobility, then what matters is the net transfer of capital from capital abundant to capital scarce regions, and the extent of this is one indication of how good a job international capital markets are doing. Net transfers of capital can be measured by the current account. If the current account is negative, then the county must be borrowing: this corresponds to a capital inflow. If the current account is positive, then the country is building up net claims on foreigners: in other words, it is lending to them, which corresponds to a capital outflow.

Simple national accounting identities can be easily manipulated to obtain the following identity:

Current account = Domestic savings minus Investment

If domestic savings are insufficient to finance national investment needs, then the excess must necessarily be borrowed from abroad, implying an inflow of capital, or a current account deficit. If, on the other hand, domestic savings exceed the amount that is invested in the domestic economy, then the surplus

[2] Relative to domestic British trade costs.

savings must be invested abroad, implying an outflow of capital, or a current account surplus.

Figure 5 plots the UK current account between 1850 and 2010. It also plots the UK savings and investment rates, with all three series expressed as a percentage of GDP. As can be seen, there were large (and rising) current account surpluses, or capital exports, during the late nineteenth century, although there were also very pronounced long swings. At the peak of the cycle, British capital exports were huge: in the three years prior to World War I, the UK was exporting capital worth over 8 per cent of its GDP annually. Capital exports fell dramatically during the war, and the UK ran deficits in 1915 and 1918 (the latter amounting to over 5 per cent of GDP). While capital exports rebounded in 1920, they then entered a steady period of decline, and ceased altogether after 1929. There were enormous current account deficits during World War II, as Britain borrowed in order to finance the war. The period from 1950 to 1973 saw almost balanced current accounts, indicating little or no net transfer of capital in either direction. After 1973, current account imbalances began to open up again, in the first instance to finance the consequences of higher oil prices. After surpluses in the early 1980s, the current account drifted steadily into deficit from the late 1980s onwards, indicating that the UK was borrowing from overseas.

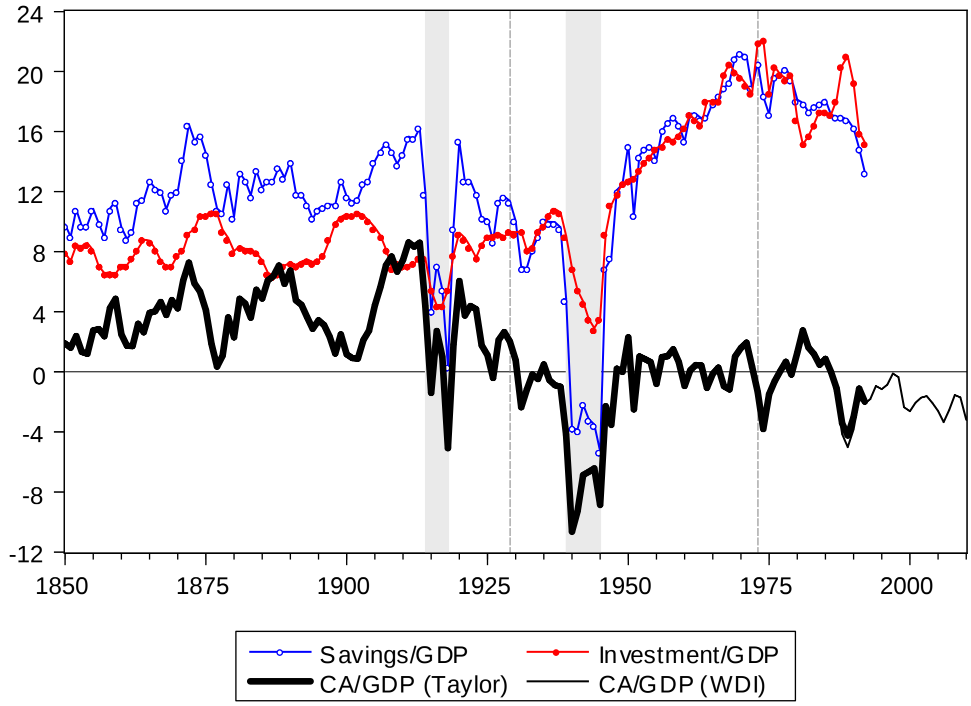

Figure 5. Savings, investment and the current account, 1850-2010

Source: Taylor (2002), World Bank (2011)

These deficits were much smaller than the surpluses of the late nineteenth century. Figure 5 reveals a period of intensive globalization in the late nineteenth century, in the form of large net transfers of capital from Britain to the rest of the world; a period of deglobalization between 1914 and 1950, masked by the large borrowing of the wars; a period of very limited capital mobility between 1950-1973; and a gradual resumption of capital flows since then, although not to the levels achieved before 1914 (and in the opposite direction). As in the case of trade, a pre-1914 phase of international economic integration was followed by disintegration (which lasted until 1973 in the case of capital flows), and then by reintegration. Obstfeld and Taylor (2004) show that precisely the same “U-shaped” pattern applies to international capital markets more generally: this was not just a British phenomenon. It also emerges if alternative measures of international capital mobility are used.

Like Figure 1, Figure 5 suggests that the globalization of recent decades has not been sufficient to bring Britain’s economic exchanges with the rest of the world back to the peak levels achieved before World War I.[3] There is a major qualification to this conclusion however, concerning the distinction between gross and net capital flows. By definition, net capital flows do not capture the explosion in two-way flows of capital across frontiers which has taken place since 1973. In contrast to the relatively large net exports of capital from Britain in the late nineteenth century, which involved British investors putting money into building up the infrastructures of other countries, today's gross flows largely reflect very short term transactions, which are carried out to chase higher returns, diversify portfolios, and hedge against risk, rather than to finance long term investment elsewhere.[4] While accurate data on these gross flows are hard to obtain, it is clear that worldwide they are orders of magnitude larger than today's net flows, and that they surely dwarf the gross flows of the late nineteenth century. If we focus on gross rather than on net capital flows, therefore, today's international capital markets appear much better integrated than those of the classical gold standard era.

[3] This does not necessarily imply that markets are less well integrated today than then, and indeed this is surely not the case. Flows of trade or capital across borders may be smaller today relative to the size of the economy, even though trade costs are smaller as well.

[4] How well these cross-border flows have done in terms of managing risk is another matter entirely. It is also true that a long term financial asset can be bought one day and sold the next, and that short term assets can be repeatedly rolled over for long periods of time. By and large, however, the distinctions in the text between today's gross flows and the net flows of the past are reasonable.

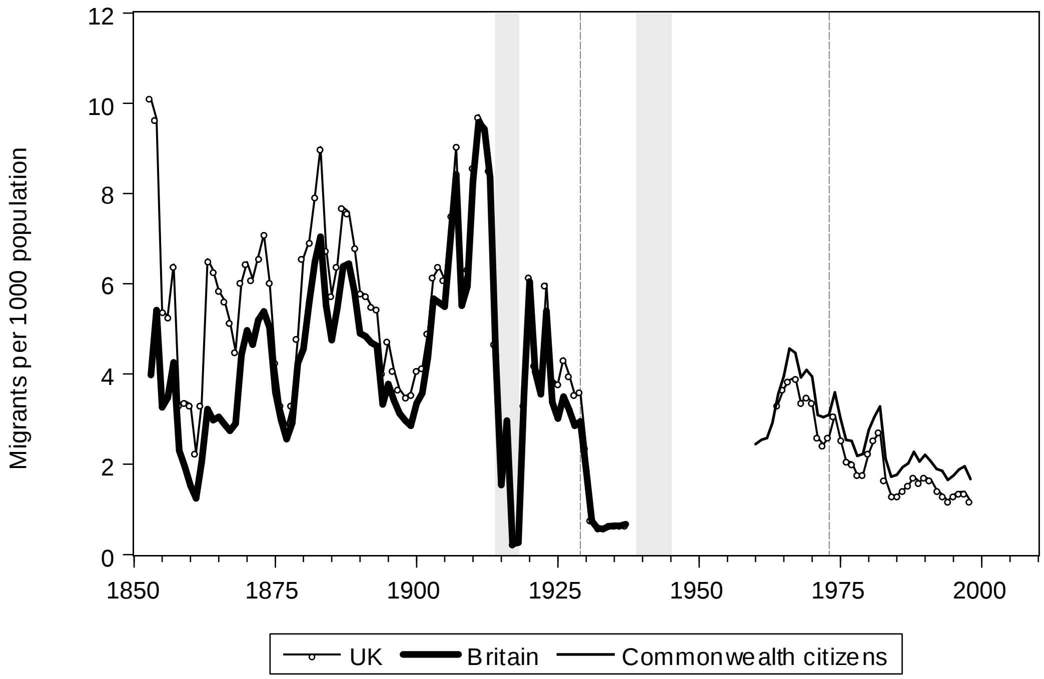

Figure 6. Emigration rates per thousand inhabitants, 1853-1998
Source: Hatton (2004), Mitchell (1988)

International migration

Figure 6 plots the annual emigration rate per thousand inhabitants between 1853 and 1998. Before World War II, the graph distinguishes between the British and UK emigration figures, and prior to 1922 this was an important distinction, given the large numbers of emigrants from Ireland. After 1950, it distinguishes between the emigration (from the UK) of Commonwealth citizens, and the emigration of UK citizens (for which data only become available from 1964 onwards). As can be seen, the late nineteenth century was a period of rising emigration, with long cycles reminiscent of those we saw earlier for capital flows. At its pre-war peak, almost 400,000 migrants were leaving every year. There followed a collapse during the war, an early post-war recovery, and a decline during the 1920s which turned into yet another collapse after 1929. Emigration flows picked up after the end of the Second World War, peaking in the mid-1960s, before beginning a steady decline.

After 1945, Britain became a country of net immigration. Between 1966 and 1970, there was a net outward flow of 75,000 per year, while between 1994 and 1998 there was a net inward flow of 73,000 per year. These numbers are both smaller than the average net outflow of 105,000 between 1876 and 1913, despite the population increase during the intervening years. Yet again, increasing integration during the late nineteenth century was succeeded by disintegration between 1914 and 1945, and recovery after World War II. In the case of migration, this recovery was only partial: migration flows never attained the same relative importance as they had done prior to 1914. Again, this was true not just for the UK, but for the wider international economy as well (Hatton and Williamson 2005).

Summing up

It seems as though there is a common pattern across our three dimensions of globalization: increasing integration prior to 1913, disintegration between and during the two world wars, and reintegration after 1945. The international literature shows that these were not uniquely British developments, but paralleled similar trends in the rest of the world. The rest of this chapter will provide a narrative account of these successive phases. First, however, a brief description of the world as it was in 1870, and Britain's place within it, is required.

PRECONDITIONS

As the title of this chapter suggests, one cannot discuss the history of Britain's engagement with the world economy over the past 140 years without considering the political, and geopolitical, context within which this took place. This is true for all countries: globalization is a political as well as a technological phenomenon, which is why the world has experienced periods of international economic disintegration as well as integration. For countries to remain open to international flows of goods, people and money requires that their domestic political systems accept this, and there is nothing inevitable about this. Globalization creates losers as well as winners, and the losers have often been able to mobilize and obtain protection. But international trading *systems* also require geopolitical stability, since it is difficult for trade to flourish in conditions of upheaval and war; they tend to reflect the geopolitical equilibria of their time (Findlay and O'Rourke 2007).

The Industrial Revolution and population growth had given Britain a vital interest in trade. Trade was needed to secure markets for her manufactured goods, and to obtain the food and raw materials required to feed her people and factories. In turn, this dependence on trade implied a need for naval supremacy, so as to forestall the danger that a rival might cut off trade routes in the event of a conflict, thus turning against the British themselves their preferred economic weapon of blockade. Fortunately for Britain, she had conclusively established her naval supremacy at Trafalgar, but there was always the danger that this might at some future date be called into question by a sufficiently wealthy and determined rival.

By the late nineteenth century, British naval hegemony was increasingly being complemented by a growing and powerful empire. According to John Darwin (2009), there were four crucial components of British world power: the United Kingdom herself, including Ireland, with her industrial and military strength and rapidly growing population; British India, which paid for much of Britain's standing army, and acted as a strategic reserve enabling Britain to project power in Asia, the Middle East, and Africa; the self-governing dominions, with their growing English-speaking populations and economic resources; and Britain's mercantile and commercial empire, which was increasingly global in scope, and yielded both influence and income. By combining these elements, and deploying them in a flexible manner, Victorian Britain was able to leverage her power well above what her own resources could ever have implied on their own.

By 1870, all four components were firmly in place. Following the Bengal Mutiny of 1857, the British government had taken over the responsibility of running India from the East India Company, and in 1877 Victoria was proclaimed Empress of India. The opening of the Suez Canal in 1869 dramatically shortened the distance between Britain and India, making possible the use of steam on the route between Europe and Asia, and increasing the potential economic importance of the subcontinent to Britain. It also made the Middle East in general, and Egypt in particular, an area of crucial strategic significance for the British Empire. There were self-governing British colonies in North America, New Zealand and Australia, while the Cape Colony was given responsible self-government in 1872. The vast growth in trade since 1846 had given rise to the

British provision of ancillary services, such as shipping, banking and insurance, around the world. And as we have seen, Britain had been exporting both capital and people since mid-century.

All this had occurred within a geopolitical context favourable to British expansion. While the generally peaceful conditions which had characterised Europe since 1815 had been disturbed in recent years, with the Crimean War being followed by the wars associated with Italian and German reunification, there seemed little prospect of a dominant European power threatening British security directly. In Asia, meanwhile, the Chinese empire was militarily feeble, while Japan had been forced by the West to open itself to international trade. No great threat was to be expected from that quarter either.

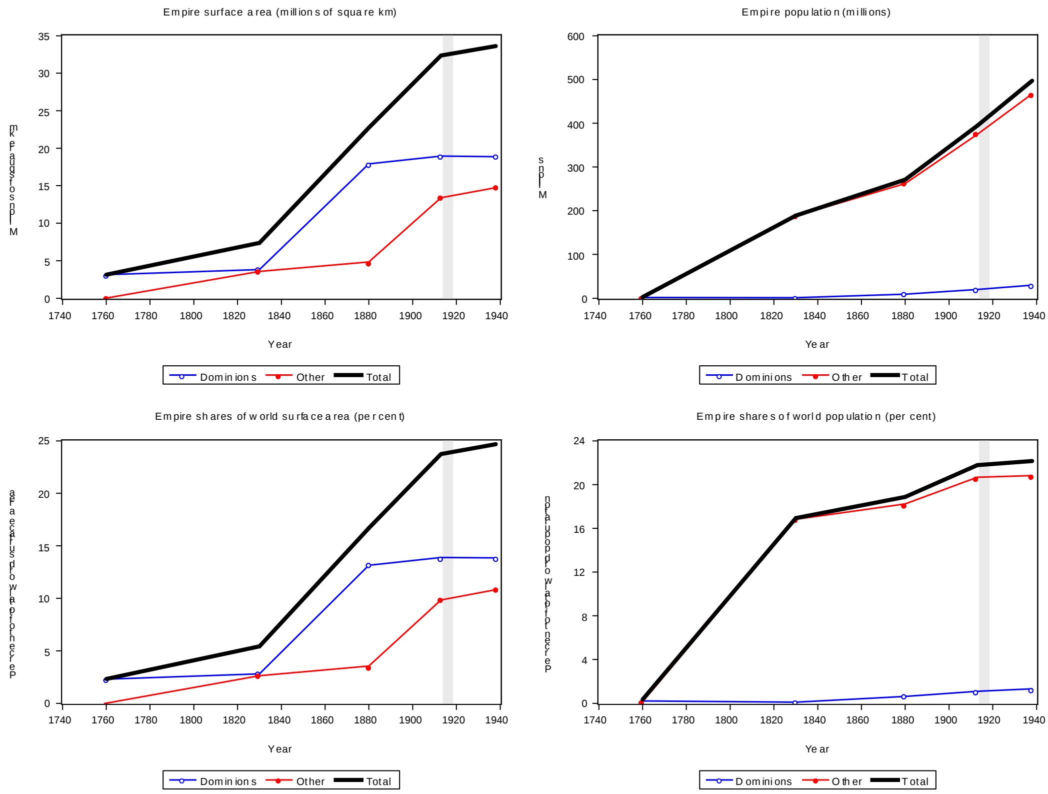

Figure 7. Area and population of British empire, 1760-1938
Source: Etemad (2007).

Over the subsequent half century, the British Empire would grow considerably in territorial extent, notably as a result of the partition diplomacy associated with the "Scramble for Africa", and the disintegration of the Ottoman Empire prior to and during the First World War (Figure 7). Darwin's book urges us to see the evolution of the empire in what an economist might call general equilibrium terms, as a result of the interactions between "men on the spot", who were in many cases urging expansion, and officials in London, who had to balance the demands of public opinion – which came in many shades – with the need for financial prudence, and also, crucially, with wider geopolitical context. In some cases the latter consideration led to policy makers being reluctant to embark on expansionist adventures, for fear of antagonising potential European rivals; in other cases, it led to precisely the opposite, as the danger which those rivals posed forced London's hand.

The world in 1870 also contained the seeds of trends which would eventually bring the globalization of the late nineteenth century to an end. Modern manufacturing was beginning to spread on the European continent, as well as the United States. Since 1850, the UK's share of manufactured exports had always exceeded 40 per cent, and it was 46 per cent in 1870. The subsequent decade would see that share begin to fall however, and this would have major economic, financial and military implications in the years ahead. In 1868 the Meiji restoration ushered in a period of reform and industrialisation in Japan, which would become a formidable regional power by the end of the century. And above all, the Franco-Prussian war of 1870-71 altered the balance of power in mainland Europe, giving rise to a unified German Empire which could plausibly aspire to becoming the dominant power on the Continent, and to one day even challenging the UK.

EMPIRE AND GLOBALIZATION, 1870-1914

The late nineteenth century international economy functioned as an integrated whole, with Britain at its heart. The British empire grew in these years to the point where it encompassed 22 per cent of the world's population, and 24 per cent of the world's surface area. As can be seen from Figure 7, the big additions to both the territory and population under British control came not in the settler dominions, but in the rest of the world, particularly sub-Saharan Africa. The dominions accounted for a large share of the Empire's territory, and of its natural resources as well, but for only a very small share of its population. While the white settler colonies were granted self-government, and allowed to conduct independent tariff policies, those territories under direct British rule, whose populations were (not coincidentally) non-white, had free trade imposed upon them.

Britain was not only the leading imperial and manufacturing power, but the leading nation when it came to trade and foreign investment as well. When it came to trade, Britain's unilateral free trade stance made it the world's consumer of last resort, and the market which spurred investment in primary product production, and associated transport and infrastructure facilities, around the world. And Britain itself supplied much of the capital required to finance this investment, investing overseas at a quite unprecedented rate. Britain was by far the largest overseas investor during this period; the share of British wealth held overseas rose from 17 per cent in 1870 to 33 per cent in 1913, while the share of British savings invested overseas was enormous. At the peak of the foreign investment cycle overseas investment could account for over 40, or even 50, per cent of total British savings (Edelstein 1982, O'Rourke and Williamson 1999).

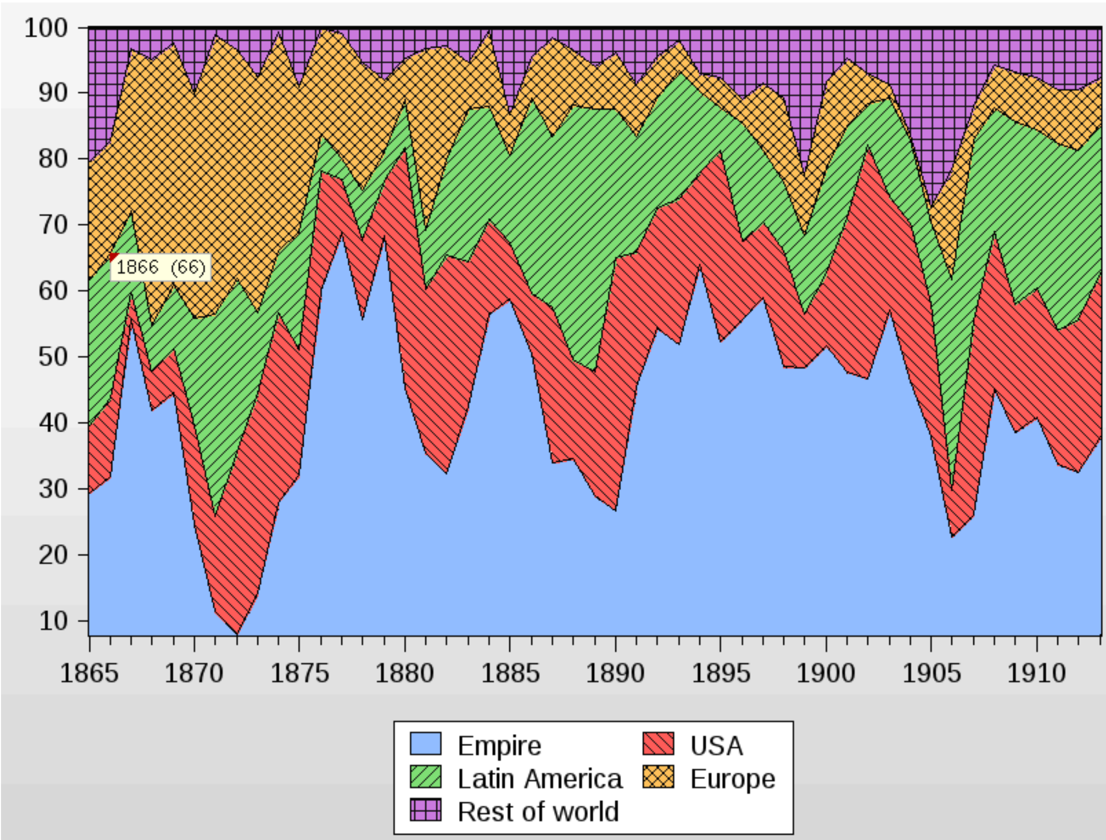

Figure 8. Shares of British overseas investment, 1865-1913 (cumulative percentages)

Source: Stone (1999).

Figure 8 shows the distribution of British foreign lending by region. As can be seen, the Empire took the lion's share of lending, over half in many years, although this share was slowly falling over time. Does this mean that Empire was driving the flow of capital from Britain? Surely not. Neither the United States not Latin America were in the Empire, and yet these regions also took very large shares of British overseas investment, 38 per cent between 1870 and 1913, as opposed to 42 per cent for the Empire. (Europe took 12.5 per cent, and the rest of the world the remaining 7.5 per cent.) The key attraction for British capital was not the flag, but abundant land and other natural resources. Land, especially in temperate climates, offered the promise of elastic supplies of food at a time of rising British incomes and a growing population, but in order to be useful, the frontiers of the New World and elsewhere required massive investments in transportation and other infrastructures, including housing and a variety of public utilities. This British capital supplied: the bulk of British overseas investment went to governments and railway construction. Between 1870 and 1913, these took 40 and 30 per cent respectively of total British overseas investments, while investments in mines, plantations and other sectors producing raw materials accounted for another 10 per cent.

What can explain these enormous flows? One tradition held that they represented, not capital market integration, but disintegration within Britain. According to this view, associated with the Macmillan Report of 1931, the City of London discriminated against domestic industry, preferring instead to lend to overseas borrowers. Michael Edelstein (1976) calculated returns on a sample of 566 securities held by British investors during the late nineteenth century. During overseas investment booms foreign returns exceeded domestic ones, and during slumps the opposite was the case. On average, foreign returns exceeded domestic ones: no great sign of irrationality there.

High and rising levels of British capital exports must therefore have been due to capital market integration (forces reducing the cost of transferring capital between economies); to outward shifts in the foreign demand for capital imports, due to increased investment demand overseas, or to falling savings supply; or to outward shifts in the UK supply of capital exports, due to increases in British savings, or reductions in British investment demand.[5] Claims have been made on behalf of each of these five possible explanations.[6] Booming investment demand on the New World's frontiers is the most obvious explanation for British capital exports, and the destination of UK overseas investments is, as we have seen, consistent with this interpretation. But the New World might also have demanded foreign capital because of a lack of domestic savings, due to high dependency rates, in economies with high fertility levels and low infant mortality by the standard of the time. Taylor and Williamson (1994) find that high dependency rates were associated with low savings rates during this period, and that New World dependency rates were sufficiently high that this on its own could have accounted for a very large share of British capital exports.

Others have argued that conditions in Britain were the root cause of her capital exports. The main driver might have been low and falling British investment demand, due to over-accumulation and falling returns to domestic investment (Lenin 1915). Edelstein's data suggest that returns on British domestic investment were indeed falling during the late nineteenth century. Or it might have been an increasing British savings rate, due to the unequal distribution of British income (since capitalists saved a higher proportion of their incomes than did workers). This was the argument of J.A. Hobson (1902), who like Lenin believed that these overseas investments were the root cause of British imperialism (an argument which seems weaker when one considers the extent to which British capitalists were willing to invest outside the Empire). For this to have caused rising capital exports over the course of the late nineteenth century would however have required rising levels of British inequality, which is not what seems to have happened.

What about a decline in the frictions and costs associated with transferring capital internationally? This might have been driven by either technology or politics. The technology that mattered most was the telegraph. Garbade and Silber (1978) show that the price gap for US Treasury bonds

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[5] O'Rourke and Williamson (1999, Chapters 11, 12), on whom the following in part draws, provide a discussion along these lines.

[6] And very similar claims were made about the sources of global imbalances in the 2000s.

between London and New York fell by 69 per cent immediately following the introduction of the trans-Atlantic cable in July 1866. Before the cable, it took ten days for news to cross the Atlantic, and so investors would only become aware of potential arbitrage opportunities with a lag, and would only be able to instruct agents on the other side of the Atlantic to avail of this opportunity with another considerable lag. The result was that it was excessively risky to try to arbitrage away small price differences. With the cable in place, on the other hand, information could cross the Atlantic in less than a day, and soon the entire world, or at least most of it, was wired.

Politically, some have argued that the Empire must have facilitated overseas investment, by providing investors with reassurance that their property rights would be respected. The other institution that the literature has pointed to was the gold standard (Chapter 15). The gold standard ruled out expansionary monetary policy by definition, since the money supply was fixed by the country's gold reserves, and a loose fiscal policy might also be seen as risky by governments wishing to stay on gold. So long as everyone believed that countries would stay on gold, the gold standard eliminated exchange rate risk, and to the extent that it obliged countries to pursue conservative fiscal policies, it may have helped to reduce default risk as well (Bordo and Rockoff 1996).

There have been several econometric studies seeking to understand what variables were most important in lowering price gaps in international capital markets, but these reach different conclusions (Ferguson and Schularick 2006, Obstfeld and Taylor 2003, Flandreau and Zumer 2004). Clemens and Williamson (2004) follow a different approach: they study the determinants of British capital flows, not price gaps. While they find that both the gold standard and Empire membership lowered bond yields and increased capital exports, ceteris paribus, they also find that these "frictional" variables mattered a lot less for capital flows than variables determining the demand for and supply of savings, such as schooling, natural resource endowments, and demography.

One of the most noticeable features of British capital exports during the late nineteenth century was the extent to which they were associated with British emigration. Figure 9 plots the UK current account surplus as a proportion of GDP against the British emigration rate per 1000 inhabitants, and the positive relationship between the two variables is striking: the correlation coefficient is 0.79 between 1870 and 1913. What also clearly emerges from the figure is the "long swings" in Britain's capital exports and emigration rates which were noted earlier. A long and distinguished literature seeks to explain these long swings, or "Kuznets cycles" as they have sometimes been called (Cairncross 1953, Thomas 1954, Abramovitz 1961, Williamson 1962).[7] The first thing to note is that Figure 5 suggests that investment in Britain and investment overseas were negatively correlated between 1870 and 1913: when overseas investment boomed, domestic investment declined. This is important, since if the main driver of these long swings was fluctuations in savings rates, either in Britain or overseas, then when those savings rates rose, investment should have increased both at home and abroad (as interest rates fell). This is not what we observe: it seems more likely, therefore, that the long swings were driven by fluctuations in investment demand, either in Britain, or abroad, or in both simultaneously.

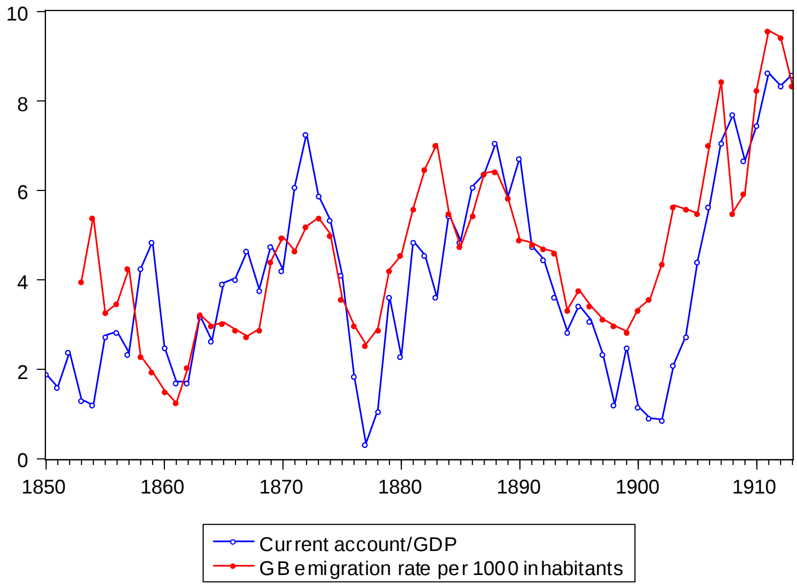

Figure 9. Long swings in labour and capital exports, 1850-1913
Source: Taylor (2002), Hatton (2004), Mitchell (1988)

7 The following discussion draws on that in O'Rourke and Williamson (1999).

If the long swings were driven primarily by booming overseas investment demand, then capital export booms should have coincided with rising returns to capital, while if they were driven primarily by falling British investment demand, then they should have coincided with falling returns. Edelstein's data suggest that capital export booms coincided with rising foreign returns *and* falling domestic returns, suggesting that they were driven by simultaneous increases in foreign investment demand and declines in British investment demand. The fact that migration also rose during these episodes can help explain why foreign and home investment demand moved in the opposite direction: as Cairncross (1953) and Easterlin (1968) pointed out, housing demand was an important component of overall investment demand. When migration increased, this would naturally raise the demand for housing, and hence for capital, overseas, and lower it in the UK. But what drove the cycle in the first place?

The vast majority of UK emigrants went to the US, Canada, and Australia and New Zealand, with other land-abundant countries such as South Africa and Argentina accounting for a substantial share of the residual outflow (Chapter 2). In other words, British (and Irish) labour was headed for precisely the same destination as British capital: the abundant land and resources of the New World. Knick Harley (1980) presented perhaps the most compelling account of the underlying drivers of the long swings, building on this observation. When the price of wheat on the frontier rose sufficiently, this led to the extension of the frontier, which entailed railroad construction and other investments on the frontier, and flows of both capital and labour to develop the newly-cultivated land. This increased the supply of wheat on world markets, leading to a fall in prices, and frontier expansion eventually came to a halt. Ultimately, however, rising demand for food in Europe raised wheat prices again, and the cycle recommenced.

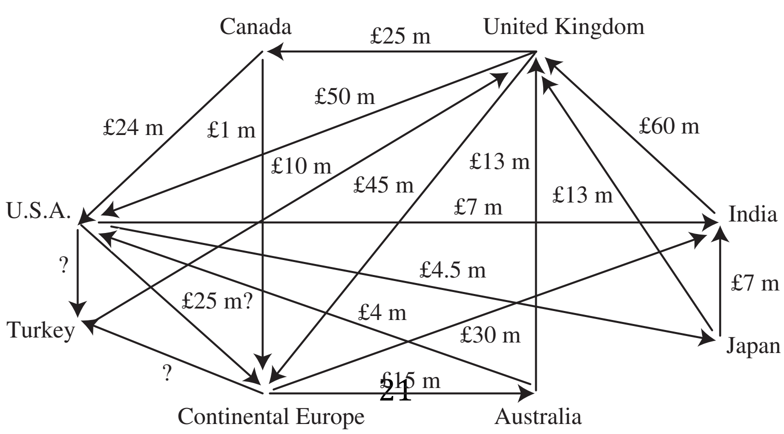

Figure 10. The world settlements pattern, 1910

Source: Saul (1960, p. 58).

The above discussion highlights the fact that when analysing Britain's links with the world economy in the late nineteenth century, one cannot neatly separate trade, migration and capital transfers from each other and study each on its own: they were all related to each other, and to the process of expanding New World frontiers so as to supply a rapidly growing and increasingly affluent European population with food and agricultural raw materials such as wool. Furthermore, one cannot understand Britain's economic relationships with the New World, or Continental Europe, or Asia and Africa, in isolation from each other, since there were so many complex inter-relationships involved. Figure 10 is a famous graph showing the direction of bilateral trade imbalances in the world economy in 1910. It highlights the extent to which the world trading system of the late nineteenth century had become a multilateral one, light years removed from the bilateral trading monopolies of the eighteenth century. The figure shows how the UK relied on its surpluses with Australia, Japan, the Ottoman Empire, China, and above all India, in order to finance its deficits *vis à vis* Continental Europe and the US. This allowed her to continue investing overseas, building up foreign assets and an associated stream of income which could be reinvested abroad. India, meanwhile, financed its deficit *vis à vis* the UK by running surpluses with Continental Europe, the US, Japan and China. This multilateral system was facilitated by the gold standard, while Britain benefited from the formal and informal imperialism which kept Asian markets in particular open to its goods. Asian export markets played a crucial role in helping the UK maintain its unilateral free trade stance, which might otherwise have been difficult to sustain in the face of European and American protectionism (Latham 1978, pp. 67-70). As de Cecco (1974, p. 35) puts it, India was "the pivot of the international settlement system". Open UK markets were in turn a crucial underpinning for the exports of labour and capital to New World frontiers and other primary-product-producing regions. And those factor exports were an important source of British political strength on the international scene.

Trade, factor flows, the gold standard, and empire were deeply intertwined with each other. India was crucial for Britain, not just because it provided her with markets, but for financial reasons: every year the Indian government remitted to Britain the so-called "Home Charges", which were payments related to the armies stationed in India, army stores, pensions, and interest on previous debt. Since these charges were owed in terms of gold, it made sense to tie the Indian currency to gold, instead of silver as had traditionally been the case. But rather than holding gold reserves of their own, the Indian authorities operated a gold exchange standard, holding their reserves in London where they were invested in local government paper and financial institutions, thus helping to keep the rate of interest in the UK lower than it otherwise would have been (de Cecco 1974, Chapter 4).

The impact of late nineteenth century globalization and Empire in Britain

Given all this, it makes more sense to ask what were the effects of 19th century globalization, taken in its economic and political entirety, on the British economy, than to ask what were the separate effects of trade, migration, capital flows, and imperialism. Easier said than done. Nonetheless, it seems safe to say that late nineteenth century globalization was good for British workers, but bad for landowners (O'Rourke and Williamson 1999). O'Rourke and Williamson constructed a CGE model of the British economy, calibrated to 1870 data, and used this to estimate what the effects of transport cost declines were on British factor prices. The results indicate that falling transport costs alone would have raised British real wages by 20 per cent, an extremely large number accounting for more than two-fifths of British wage growth over the period. They also suggest that falling transport costs alone would have led to real British land rents falling by more than half, accounting for almost all the observed decline.

Emigration would also have increased British real wages, by lowering the supply of labour: by 5.6 per cent, according to Taylor and Williamson (1997). On the other hand, British capital exports should have lowered the demand for labour in Britain, and lowered real wages – by 7.3 per cent, according to one estimate.[8] On balance, these estimates suggest a large gain for British labour from late nineteenth century globalization, which makes sense, since it gave workers employment opportunities overseas, and cheap food at home. It was also bad for the landed interest, as it came into direct economic competition with the abundant and cheap land of the New World's frontiers. Globalization made Britain a more equal country during this period: by 1910, the ratio of unskilled wages to land rents was 170% higher than it had been in 1870 (O'Rourke and Williamson 1999, p. 62).

Trade theory provides us with very stark predictions about the distributional implications of globalization, but its overall welfare effects are less clear. In a static neoclassical world, trade (and migration, and capital flows) should increase national income, but not necessarily by very much. Clark et al. (2008) construct a CGE model of trade flows between the UK and the rest of the world, which they calibrate using data from the 1760s and the 1850s. They find that shutting off Britain from trade with the rest of the world (which they model by reducing the endowments of the rest of the world by a factor of 20) would have lowered British utility by less than 4 per cent in the 1760s, but by over 27 per cent in the 1850s, an enormous increase reflecting the growing dependence of the British economy on trade during this period. Presumably as the century progressed, this dependence continued to grow.[9]

The problem with all such calibration exercises, as well as with simpler back-of-the-envelope calculations, is that the theoretical assumptions underlying them restrict the range of results that one can obtain. Modern trade theory provides more ambiguous conclusions regarding the welfare effects of trade than traditional trade theory, since it incorporates various market imperfections and dynamic effects. This theoretical ambiguity provides a compelling rationale for empirical work looking at the impact of trade, or protectionism, on welfare. As it happens, econometric evidence suggests that the manufacturing tariffs which

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[8] O'Rourke and Williamson (1999), p. 237.

[9] Ongoing work suggests that the size of the welfare effect depends on elasticities of substitution in consumption, and especially the Armington elasticity of substitution between home and foreign-produced goods in the "rest of the economy" sector: increasing this sufficiently greatly lowers the welfare effects of trade. On the other hand, much of this sector was non-traded, suggesting that high Armington elasticities are not warranted.

were imposed in Continental Europe and the United States may have been good for growth, but this does not necessarily imply that Britain, with a mature (rather than an 'infant') industrial sector, was wrong to embrace free trade.[10]

Most of the British debate has however concerned itself with the welfare effects of capital exports (Pollard 1985). In a static neoclassical world, the welfare effects of capital exports are straightforward. Capital exports lower British output (GDP), but raise British national income (GNP), since they reallocate capital towards higher-yielding uses. As we have seen, the Macmillan Report queried this characterisation of late nineteenth century capital markets, but Edelstein's work suggests that on average British investors were rational. By chasing higher returns abroad, they were thus raising GNP. Indeed, the net benefits to the British economy were even higher than this, since by investing abroad they were diversifying their portfolios, and obtaining a higher return on their investments per unit of risk (or, equivalently, less risk for a given return) (Goetzmann and Ukhov 2006).

Capital flows might still have lowered British national income, however, if there were negative externalities or other costs or risks associated with foreign investment which investors were not taking into account. Expropriation was one such risk: as Keynes put it,

> "If the Grand Trunk Railway of Canada fails its shareholders by reason of legal restriction of the rates chargeable or for any other cause, we have nothing. If the underground system of London fails its shareholders, Londoners still have their underground system."

On the other hand, such risk should have been factored into the returns which investors demanded, and Lindert and Morton (1989) conclude that historically, overseas investors did well even taking into account the risk of expropriation.

Another possibility is that by exporting capital, British capitalists were building up manufacturing overseas, thus strengthening foreign competition and leading to a terms of trade loss for Britain. This is certainly a theoretical possibility, but as we have seen capital was attracted more towards regions producing primary products which were then transported to Britain and the rest of Europe on ever more efficient ships and railways, again funded by British

10 O'Rourke (2000), Lehmann and O'Rourke (2011).

capital. Viewed in this light, British capital exports led to a positive externality from the British point of view, improving her terms of trade. The logical consequence would then be that Britain was exporting too little capital, not too much. Once again, the importance of looking at the way the world economy as a whole functioned during this period becomes clear.

Or perhaps British investors overlooked, not the impact of their foreign investments on Britain's commodity terms of trade, but on the overseas return to capital itself. Additional overseas investment would have lowered this return, and imposed losses for existing investors: a negative externality which would imply a rationale for restricting capital exports reminiscent of the "optimal tariff" argument. Or one could focus, not on what British capital did when it was invested overseas, but on what it might have done had it stayed at home. Declining domestic returns suggest that investing even more in the UK economy might not have been the best idea. However, if the extra capital counterfactually invested in Britain would have been invested in industry, and if industry involves a variety of growth-promoting externalities, then it is possible that a counterfactual British economy with fewer capital exports might have suffered a static loss, but dynamic gains. These are just theoretical speculations however, and one would need empirical evidence in order to be convinced. Two general points remain, however: any argument that Britain exported too much capital is necessarily an argument about market failure, in some form or another; and any assessment of the welfare effects of capital exports has to take into account general equilibrium interactions between capital, labour, and commodity markets.[11]

Not surprisingly, perhaps, there has been much more focus in the literature on the welfare effects of imperialism on the late nineteenth century British economy than on the effects of globalization. If empire increased British trade or foreign investment, then this is typically taken to be a benefit of empire, to be balanced against the costs. These were most notably military, and involved negative distributional consequences, given the regressive nature of the British tax system of the day (Davis and Huttenback 1986). By how much did the empire increase trade or investment? As we saw earlier, econometric exercises suggest

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[11] And its geopolitical implications, a contemporary might have added.

that empire may have boosted foreign investment somewhat, but that the effect was small relative to the impact of natural resources and other fundamentals: no great gain here. On the other hand, using a gravity model to explain bilateral trade flows, Mitchener and Weidenmier (2008) find that empire membership led to these flows roughly doubling, a large effect.

Edelstein (2003) points out that calculating the trade gains from empire involves counterfactual assumptions not only about how the white Dominions, or crown colonies, would have conducted their affairs if they had been independent, but also (and more importantly, as it turns out) how developed and integrated with the world economy these territories would have been had they not been colonized by the British. He thus proposes two standards by which to judge the impact of empire. His 'marginal' standard assumes that in the absence of empire the countries would have been as developed and globalized in 1870 or 1913 as they actually were, but that they would have been free to impose tariffs like, say, the United States. His 'strong' standard assumes that the colonies had never been colonized by the British, and would thus have been both poorer and more isolated: trade with colonies like India would have been at only a quarter of their actual level, while trade with the Dominions would have been at the level of that with Argentina. On this basis, he calculates that empire expanded British exports by 1.1 per cent of GDP in 1870, and 2.6 per cent in 1913 if the marginal standard is applied, or by 4.3 per cent and 6.5 per cent under the strong standard. If the resources embodied in these exports would have been otherwise unemployed, then empire increased GDP by the same amount, but this is an unsatisfactory assumption. Edelstein's analysis is however useful in that highlights the fact that in asking what the benefits of empire were, the counterfactual you use is both crucial, and tricky. The costs of empire also have to be calculated carefully. Arguably Britain's dependence on imported food made large naval expenditures essential in any case: the marginal military cost of empire would then be much smaller, especially given the Indian contribution to imperial defence.

Add in the inter-linkages between trade and factor flows, inside and outside the empire, and the various complications alluded to in the discussion of the welfare effects of capital flows, and any economic cost-benefit calculus would seem to be hopelessly complicated. In any event, one wonders how seriously contemporaries would have taken such an exercise. Ultimately, strategic considerations were uppermost in shaping imperial policy, and the benefits of empire – and particularly of the Dominions – were most vividly illustrated in their contributions of men and resources during the two world wars that were soon to follow (Offer 1989, 1993).

DISINTEGRATION AND WAR, 1914-1945

Britain's enthusiastic participation in late nineteenth century globalization relied in part on widespread domestic political support for free trade in Britain. Some Conservative politicians, like the Colonial Secretary Joseph Chamberlain, favoured a return to modest protection, partly for economic reasons, and partly in order to forge an imperial "common market" which might help to promote the political integration of the UK and the Dominions.[12] Chamberlain launched a major campaign in favour of an imperial preferential trading area in 1903, and while the Liberal victory in the General Election of 1906, which was fought largely on the trade issue, put paid to such hopes, they would eventually be fulfilled in the 1930s. It would however take a world war and the Great Depression to bring about this sea change in British economic policy.

Nineteenth century globalization relied on the largely peaceful conditions of the period, and these came to a dramatic end in 1914.[13] In Britain, as in all other belligerent countries, the result was an immediate break with the free-trading policies of the past. Both Britain and Germany attempted to blockade each other, with the British ultimately being more successful, despite the German U-boat campaign. The government was forced to ration scarce cargo space so as to ensure that essential supplies were provided: this was part of a more general pattern of intrusive government intervention throughout the economy. In 1915, the McKenna tariff imposed import tariffs of 33⅓ per cent on a variety of luxury goods, including cars and watches. While this was largely designed to save cargo

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[12] A common market would have been meaningless in a situation where the UK continued to offer tariff-free access to all countries.

[13] For an insightful account of the ways in which late 19th century globalization contributed to Anglo-German tensions in the run-up to the war, see Offer (1989).

space, it was not matched by domestic excise taxes (as had been the case for pre-war tariffs on imported alcoholic beverages, for example) and was thus explicitly protectionist. Even more importantly, it was retained after the war.

The war had changed the world in a number of ways which would make it more difficult to return to the extensive globalization of the pre-1914 period.[14] First, heavy industry had expanded dramatically during the war, and the result was excess capacity in such sectors as iron and steel, and shipbuilding. Second, British textile manufacturers had lost market share in overseas markets, including the critical Indian one, during the war, and did not regain them afterwards, as new Japanese (and Indian, and Chinese) competitors proved difficult to dislodge. Third, foreign income from invisible exports, such as shipping, was now much lower than before the war (Darwin 2009, p. 373). Fourth, Britain owed large debts to the United States, and had run down many of its overseas assets in order to fight the war. All of this made Britain's international payments position more precarious, and meant that an increasing number of sectors within Britain now favoured protection from foreign competition. Fifth, the economic dislocations of the war, and the political disintegration of the Austro-Hungarian and Russian empires, which created new nation states in Central and Eastern Europe, meant that new protectionist constituencies had emerged around the world which would make it more difficult to restore the pre-war multilateral trading system. Various Asian economies, even including India, regained the ability to set their own tariffs. Nor did the legacy of the war, including disputes about reparations and war debts, make it easier to achieve international economic cooperation. Sixth, countries of immigration had already been tightening immigration controls during the late nineteenth century; in 1917 the US instituted a literacy test; and immigration restrictions were further tightened after the war (Timmer and Williamson 1998). Labour mobility was thus greatly restricted during the interwar period. And finally, while as we will see progress was made in restoring the gold standard and capital mobility during the 1920s, the economic and political climate was now much less conducive to maintaining the international monetary system of another era.

[14] The following follows the account in Findlay and O'Rourke (Chapter 8).

The McKenna Act was followed by the 1919 Key Industries Act which protected defence-related industries, and the 1921 Safeguarding of Industries Act which protected a variety of other, non-strategic, industries (Kindleberger 1989). The UK also passed anti-dumping legislation in 1921: while Britain was still a broadly free-trading nation after the war, it was no longer unambiguously and unilaterally so. The 1920s was spent trying to reconstruct the liberal pre-war international economy, but despite many meetings sponsored by the newly established League of Nations, progress remained slow. World trade recovered however, while the information on price gaps in Table 2 suggest that Britain did gradually become better integrated with the international economy during that decade.

Unfortunately, as part of this project to restore the international economy of the late nineteenth century, Britain went back on to gold in 1925, and by 1928 the international gold standard had been largely reconstructed. In 1928 the US Fed raised interest rates in order to curb the runaway stock market, and US capital exports slumped. Economies elsewhere were forced to raise interest rates, money supplies contracted, and the world entered a severe recession in 1929. In June 1930 the US enacted the infamous Smoot-Hawley tariff, and many countries followed suit, although Britain retained a liberal trade policy for a while longer. Then in 1931 a second crisis hit, sparked by bank panics in Continental Europe. The crisis started in Austria in May, and soon spread to Hungary and Germany, which eventually responded by imposing capital controls. By the late summer, investors were focussed on the UK. The dramatic break with the gold standard in September linked the countries of the Empire more tightly together through the formation of a sterling bloc (which also included countries in Scandinavia and elsewhere). This eased the transition for the UK (Chapter 15). However, this large-scale devaluation also placed countries still on gold under competitive pressure: some responded with exchange controls, and others with tariffs and quotas. Eichengreen and Irwin (2010) show that countries which stayed on gold were more likely to adopt protectionist policies, which might lead one to predict that Britain should have maintained its traditional free trade policies. This was not the case, however.

In October 1931, a landslide election returned a new National Government dominated by Conservatives to power. Industry in Britain had as mentioned become increasingly protectionist, and the City was no longer a strong pro-free-trade political counterweight (Darwin 2009, p. 436). And despite devaluation, there were still concerns about external imbalances. These led to the introduction of the emergency Abnormal Importations Act in November, and the Import Duties Act in February 1932. The latter marked the definitive break with a free trade tradition stretching back to 1846: it introduced tariffs of 10 per cent on manufactures, which in certain cases were increased to 20 or even 30 per cent.

At the same time, the British government offered to delay the introduction of tariffs against Empire countries (which had in many cases long protected their infant industries against British competition), allowing time for negotiations about mutual tariff reductions. This discrimination in favour of the Empire's manufacturers was of no great use to the Dominions, whose major exports to the UK were still agricultural. Britain therefore agreed at the Ottowa conference later that year that while Empire goods would be admitted duty free to the UK market, new duties on non-Empire goods such as wheat would be introduced, so as to give a preference to imperial producers. Since British farmers could not compete with those of the Dominions, they were guaranteed a minimum price for their output. Because Empire food was admitted duty-free, and since cheap food for workers was still politically necessary, prices for British consumers were not raised: instead, the government made "deficiency payments" to farmers, so as to make up the gap between the market price and the guaranteed minimum price. 1932 thus saw the realisation of Chamberlain's dream of imperial preferences, although in the case of Ireland it also saw the beginning of a trade war, rather than mutual trade concessions, which was only solved in 1938 on terms highly favourable to the Irish.[15] In the following years Britain went on to strike bilateral trade deals with other countries, notably the Argentinians and Scandinavians, and in 1938 they signed a trade agreement with the United States.

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[15] O'Rourke (1991).

Imperial preferences went far short of intra-imperial free trade, but in a decade when protectionism was rife, and the world economy was increasingly fragmenting into rival economic blocs, the British economy became more reliant on trade with the Empire. The Empire accounted for 49.9 per cent of UK exports in 1938, up from 44.4 per cent in 1929, while the Empire's share of British imports increased from 30.2 per cent to 41.9 per cent over the same period (Findlay and O'Rourke 2007, p. 461). The relatively modest increase in UK exports to the Empire might have been a disappointment in the depths of the Depression, but as the UK economy recovered, and economic warfare was succeeded by fears of actual warfare, guaranteed supplies of food and raw materials began to seem increasingly important, as they had been during the First World War. And indeed the Empire played a crucial role after 1939, and especially in the critical months between June 1940 and the entry of the US and USSR into the war in 1941. Trade between the UK and Continental Europe virtually ceased, and Britain became increasingly reliant on trade with the Empire and the USA. As in the First World War, British exports fell sharply during the conflict, as resources were redirected from export-oriented activities to the war effort, while imports were maintained to the greatest extent possible. The result was growing trade deficits, and a fall in British dollar and gold reserves. From 1941 onwards, military imports from the US were largely financed via the so-called "lend-lease" arrangement, while imports from the Empire were financed by the build-up of sterling balances in London.

The impact of interwar British protection has been the subject of fierce debate. In a small country neoclassical trade model with full employment, protection should lead, ceteris paribus, to output in the protected sectors expanding, but output elsewhere should fall, as should aggregate economic welfare. There has been disagreement in the literature about whether British sectors that received more protection grew faster than others during the 1930s (Kitson et al. 1991, Capie 1991), but if they did then this would be compatible with tariffs having been harmful, while if they did not, then this would suggest either that other things were not equal, or that the standard full employment trade model was not applicable to Britain in the 1930s. Indeed, given that the switch to protection occurred during the Great Depression, its short run impact surely has to be understood in macroeconomic terms. Unfortunately, the effect of tariffs on output and employment is theoretically ambiguous. In an IS-LM framework, tariffs will be expansionary under fixed exchange rates, but under floating rates (the relevant case here, although Britain imposed tariffs against non-Empire sterling bloc countries) they will lead to higher interest rates and currency appreciation, which will undo many or all of the benefits of the tariff on output and employment.[16] However, Bank Rate was fixed at 2 per cent through this period, suggesting that this channel was irrelevant, while the newly-established Exchange Equalization Account intervened to prevent an excessive appreciation of sterling. The presumption may then be that the tariff had a modest expansionary effect, if only by raising prices and profits and halting the deflationary spiral in the economy. Foreman-Peck's (1981) back of the envelope calculation suggests that it boosted GDP by 2.3 per cent; but this remains an under-researched area.[17] And as Chapter 1 emphasizes, any short run benefits of protection have to be set against the longer-run consequences for competition and productivity. As in other European countries, the main complaint to be made about interwar protection may be that it was not reversed sufficiently quickly after the crisis had passed.

FROM EMPIRE TO EUROPE, 1945-2010[18]

By 1945, Britain was victorious, but in a precarious financial position (Darwin 2009, pp. 518-20). It had no more dollar assets, and its sterling area assets were offset by the Empire's sterling balances in London. The Americans were prepared to waive the majority of their wartime debts, but wanted a return to sterling convertibility and an end to imperial preference, both of which threatened British industry and her long-term economic and financial viability. Even if British industry had been in a fit state to embark on an export drive, the world economy was deeply fragmented, characterised by inconvertible

[16] In some models tariffs may even lead to contraction, whereas in others (Eichengreen 1981) they may lead to short run expansion but long run contraction. The impact of tariffs may also depend on whether they are temporary or permanent.
[17] See also Kitson and Solomou (1990).
[18] This section draws heavily on O'Rourke (forthcoming).

currencies, quotas and high tariffs. Britain's ability to maintain her imperial commitments was greatly weakened, especially given the nascent Cold War which also demanded military resources, and the new Labour government's push to build the welfare state. 1947 saw not only Britain's brief fling with sterling convertibility (Chapter 15), but her rapid exit from India.

Fortunately for Britain, and Western Europe as a whole, 1947 also saw the beginnings of active US involvement in the reconstruction and political stabilisation of Europe. In June the Marshall Plan was announced, and a conference was held in Paris in the following month to which all European countries were invited, so as to decide how to use Marshall Aid. The Americans insisted that the European Recovery Programme be administered by the Europeans themselves, and to that end the Organisation for European Economic Co-Operation (OEEC) was founded in 1948, with 17 members. These countries can be classified into three groups: "the Six" (the three Benelux countries, plus France, Germany and Italy); the "Other Six" (the UK, Austria, Switzerland, and the three Scandinavian countries); and five peripheral countries (Greece, Iceland, Ireland, Portugal and Turkey).

The Americans were understandably keen to promote European integration, after the second European war in just three decades. The OEEC had as one of its objectives the advancement of European economic integration: its members agreed to to "achieve as soon as possible multilateral systems of payments amongst themselves" and "cooperate in relaxing restrictions on trade and payments between one another" (Article 4); to reduce tariffs and other trade barriers (Article 6); and to study the possibility of "customs unions or analogous arrangements such as free trade areas" (Article 5). The Americans strongly favoured a customs union, but the UK was opposed. Article 5 thus represented a watered-down version of what the American sponsors of the OEEC had wanted (Camps 1964, p. 7).

The British opposition to a customs union reflected several factors. First, they (along with the other members of the "Other Six") were opposed to supranational European institutions, despite Churchill's call for a "United States of Europe". A customs union involved too much supra-national pooling of sovereignty for British tastes. Second, Britain's relationship with the

Commonwealth was still very important, and it could not contemplate discriminating against Commonwealth suppliers in British markets by agreeing to erect a common European tariff against them. Third, Britain's deficiency payment system contrasted with the Continental approach of subsidising farmers by raising consumer prices as well as producer prices (by means of tariffs and quotas). Britain's preferred option of an industrial free trade area, as opposed to a comprehensive customs union, was perfectly logical given these considerations. "The Six", on the other hand, who had all been defeated in one way or another during the war, were more in favour of supranational integration as a means of bolstering what little power they still possessed. Furthermore, agricultural exports were important for countries like France and the Netherlands, implying that any free trade arrangements they might be involved in had to include agriculture.

It is important to stress that in 1948 the UK was still the leading European power, and the leading member of the OEEC. Indeed, it was also the leading European member of NATO, founded in 1949, and of the Council of Europe, established in the same year. Britain was at the heart of Europe in these years, and in the economic sphere the OEEC did its work well. It made good progress in abolishing non-tariff barriers among its members. Crucially, the European Payments Union (EPU), established in 1950, facilitated the reconstruction of a multilateral European trading system, and made possible the resumption of currency convertibility in the late 1950s, without which further moves towards European economic integration would have been impossible.

In 1950, however, Robert Schumann announced a plan to pool Europe's coal and steel industries, his declaration stating that "Europe must be organised on a federal basis". The European Coal and Steel Community was established by the Six at the Treaty of Paris in 1951. Its members agreed at Messina, in June 1955, to set up the Spaak committee to study plans for a European customs union; this committee started drafting a treaty in May 1956; and in March 1957 the Treaty of Rome was signed, establishing the European Economic Community.[19]

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[19] And EURATOM.

This posed a challenge for the UK, which still wished to see a European industrial free trade area; to avoid supranational political entanglements with the Continent; and to maintain its privileged economic relationship with the Commonwealth. Britain initially forged ahead with plans for a European industrial free trade area, of which the EEC would be one member, and negotiations commenced under the auspices of the OEEC. However, Britain's insistence that agriculture be excluded left it isolated: Britain under-estimated the extent to which the Six were determined to maintain political unity among themselves, and never paid enough attention to the interests of other countries, as opposed the domestic political constraints which it faced (Kaiser 1996, Ellison 2000, Camps 1964). Finally, in November 1958, De Gaulle vetoed the industrial free trade area plan.

The immediate British response was to start negotiating a smaller industrial free area agreement, involving the Other Six plus Portugal. The Stockholm Convention establishing the European Free Trade Area was signed in January 1960. Although the new organisation rapidly succeeded in establishing an industrial free trade area, initially the UK saw it more as a means of negotiating a broader deal with the EEC, hopes which were soon frustrated. There followed a startling reversal of policy: Macmillan's decision in July 1961 to apply for EEC membership. There were both economic and political reasons for this. Economically, trade with the EEC was far more important to Britain than trade with EFTA, and the EEC was growing very rapidly: perhaps, it was hoped, closer integration with Germany might spur competition and growth. Just as important, trade with the Commonwealth was becoming less important in relative terms, and with the wind of change blowing through Africa, nationalist economic policies there and elsewhere risked excluding Britain from developing world markets.

But the political arguments in favour of British membership may have been even more compelling (Camps 1964, Kaiser 1996). Since World War II, Britain's increasingly weak claims to great power status had relied on its being at the intersection of three overlapping circles: "The unity across the Atlantic, the unity within the British Commonwealth and Empire, and the unity with Western Europe" (Kaiser 1996, p. 2). Decolonisation was making the imperial connection less valuable, and staying outside the EEC obviously risked making Britain a marginal player there as well. Even worse, it risked alienating the United States. The US was willing to pay the economic price of being discriminated against by European preferential trade agreements, if this meant that its long term goal of European political integration was furthered. From this point of view, EFTA was all pain and no gain. While EFTA membership harmed UK-US relations, EEC membership might mean that the UK could ensure that the EEC did not develop in an anti-American direction.

This was also the view of De Gaulle, however, who vetoed Britain's application in January 1963.[20] Nothing more clearly symbolises the political marginalisation of Britain within Europe incurred over the previous eighteen years. However, while a second application was again vetoed by De Gaulle in 1967, negotiations eventually began again in 1970, and the UK (along with Ireland and Denmark) joined the EC in 1973. While Britain's former partners in EFTA were able to negotiate industrial free trade agreements with the enlarged EEC, Commonwealth countries such as Australia and New Zealand found themselves facing high levels of European agricultural protection in what had traditionally been their major market. In the realm of trade policy, the transition from Empire to Europe was complete.

The net impact of membership in all these European institutions – the EPU in the 1950s, EFTA in the 1960s, and the EEC and EU from the 1970s onwards – was to move Britain back towards a much more liberal, free trade policy. From the 1960s onwards, successive GATT and WTO rounds worked in the same direction. As emphasized in Chapter 1, the opening up of the British economy to trade increased competition in manufacturing and stimulated productivity growth. Trade also speeded technology transfer from the rest of the world into Britain, again leading to higher productivity (Cameron et al. 2005). The EU Single Market Programme of the late 1980s and early 1990s led to an increase in foreign investment in Britain, which was associated with faster productivity growth among domestic firms (Aghion et al. 2004). All this served to

[20] A desire to pin down funding for the Common Agricultural Policy before Britain entered may also explain the French decision: see Moravcsik (1998, 2000).

increase British growth rates and average incomes. At the same time, globalization also had distributional implications, and these were very different in the late twentieth century than 100 years before. Haskel and Slaughter (2001) find that changes in prices raised skill premia during the 1980s, and that changes in tariffs raised inequality through their impact on prices. Hijzen et al. (2005) find that international outsourcing had a strong negative impact on the demand for unskilled labour between 1982 and 1996. Late nineteenth century globalization increased both average incomes and equality, but late twentieth century globalization probably made Britain richer, but more unequal.

Britain is no longer an imperial power, but the legacies of the nineteenth century are still visible on the British economic landscape. Britain remains a semi-detatched member of the European Union, a member neither of the Schengen Zone nor of European Monetary Union. True to its 1950s instincts, themselves a product of Britain's imperial legacy and wartime experiences, it has systematically favoured widening the EU over deepening it. The UK remains relatively liberal when it comes to trade, although today it has to argue its case in the context of a common European trade policy.

Even more strikingly, the City of London has reemerged as a major player on international capital markets. As we saw earlier, these had been largely closed in the aftermath of World War II, in accordance with the logic of the Mundell-Fleming trilemma. Postwar policy makers wanted domestic monetary policy autonomy and exchange rate stability: capital controls were a logical consequence. However, market participants managed to largely undermine these beginning in the 1960s, the fixed exchange rate system broke down in the early 1970s, and the UK abolished its exchange controls in 1979. The rest of Europe followed suit in the late 1980s and early 1990s, as part of the development of the European Single Market. The City today has global connections just as it did 100 years ago, with consequences for London, average UK incomes, Government tax revenue, and financial stability.

Most obviously, perhaps, the legacy of the past is visible in today's British population: of the 8.4 per cent of the population which was foreign-born in 2001, about half came from former colonies. Globalization and Empire have made Britain the country it is today.

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