The shift from sterling to the dollar 1965-76 : evidence from Australia and New Zealand

SINGLETON, John <http://orcid.org/0000-0002-9286-5559> and SCHENK, Catherine

Available from Sheffield Hallam University Research Archive (SHURA) at:
http://shura.shu.ac.uk/11040/

This document is the author deposited version. You are advised to consult the publisher's version if you wish to cite from it.

Published version


Copyright and re-use policy

See http://shura.shu.ac.uk/information.html
The shift from sterling to the dollar, 1965–76: evidence from Australia and New Zealand†

By JOHN SINGLETON and CATHERINE R. SCHENK*

The management of foreign exchange reserves has recently attracted attention from both policy-makers and historians. Historical research has focussed on the nineteenth century and the interwar period, with less attention to the strategies of smaller countries in the final transition from sterling to the dollar in the post-1945 period. This article examines the evolution of reserve currency policy from the perspective of Australia and New Zealand in the 1960s and early 1970s. As in the 1930s, economic uncertainty and a shift in global economic power prompted changes in reserves strategy. Patterns of trade and debt and falling confidence in British economic policy prompted a move away from sterling, but the timing and extent of this transition were affected by the fragility of the sterling exchange rate, lack of alternative assets, and continued dependence on the London capital market. The choices for Australia and New Zealand were thus constrained, but they were able to leverage their position as holders of sterling to engage in agreements that provided an exchange rate guarantee for their sterling holdings and continued access to the London capital market. This mitigated the effect of the final global transition from sterling to the dollar while protecting their interests.

The management of foreign exchange reserves has recently attracted attention from both policy-makers and historians. This interest was prompted in part by the accumulation of large reserves by China and other surplus countries in the 2000s, and also by debates about the future of the US dollar as the balance of the global economy appeared to shift. In investigating past episodes of changing global reserves portfolios, Eichengreen and Flandreau found that the dollar briefly surpassed sterling as the main international reserve asset in the interwar period but that sterling reasserted its dominance by the time of the Second World War.1 An important finding from this research was that primary reserve currency status can be lost quickly, but also reversed, which undermined other studies that had stressed inertia in reserves portfolios. This article extends the historical literature on shifting reserves portfolios into the postwar period. While the ascendance of the dollar after 1945 is uncontroversial,2 the pace and pattern of the shift away from

*Author Affiliations: John Singleton, Sheffield Hallam University; Catherine R. Schenk, University of Glasgow.
†We are grateful for the assistance of staff at the Reserve Bank of New Zealand Knowledge Centre, the National Archives in London and Wellington, the Australian Treasury, the Australian Office of Financial Management, the Reserve Bank of Australia Archives, and the Bank of England Archive. The research was partly funded by ESRC RES-165-25-0004 and ESRC RES-062-23-2423. Michael Reddell and George Peden provided helpful feedback on an earlier draft. A version of the article was presented at the Economic History Society Conference in Cambridge in 2011. All remaining errors are our own.
1 Eichengreen and Flandreau, ‘Rise and fall’. See also idem, ‘Federal Reserve’.
2 Eichengreen, Exorbitant privilege.

© 2015 The Authors. The Economic History Review published by John Wiley & Sons Ltd. This is an open access article under the terms of the Creative Commons Attribution License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.
sterling is less well understood. Sterling was slow to disappear as a reserve asset, and still made up over 20 per cent of global foreign exchange reserves in the mid-1960s, despite persistent claims that it was overvalued. Moreover, the geographical distribution of sterling held in foreign exchange reserves was very uneven, partly due to postwar exchange controls and the sterling area system. Despite repeated devaluations and the dominance of the dollar in international transactions, as late as 1971 sterling made up on average 62 per cent of the reserves of 34 countries in east and south Asia, Africa, Australasia, and the Middle East. The reserves strategies of these countries were starkly different from Europe and other developed nations where sterling was less than 5 per cent of reserves. Was the relatively large share of sterling in the reserves of some countries a relic of imperial relations or of postwar exchange controls, or the result of a deliberate strategy reflecting patterns of trade and borrowing? The causes of the US dollar’s ascent as a reserve currency after 1945 are uncontroversial: the dollar’s dominance as an international commercial currency, the instability of sterling, and the dominant economic power of the US. But several questions arise: how was this process managed, what were the practical challenges and obstacles, and what determined portfolio choice?

This article examines the reserves policy developed by Australia and New Zealand to show how their portfolios were diversified during the 1960s and 1970s and the factors that were most prominent in their portfolio management. These cases allow us to examine countries with strong historic ties to the UK but which were in the process of diversifying their trade and payments. Australia was the largest official holder of sterling until the mid-1960s, and New Zealand held an unusually large share of its reserves in sterling. They both had central banks and were actively engaged as borrowers in the international capital market. Changing patterns of trade and debt and falling confidence in British economic policy prompted a movement away from sterling, but the timing and extent of this transition were also affected by other factors. In 1968 both countries entered into formal agreements with Britain to manage the process of diversification, and in return were granted continued access to the London capital market and a US dollar value guarantee of the bulk of their remaining sterling holdings. This extended the preponderance of sterling in their reserves, but archival evidence shows that, even before the agreements were signed, neither Australia nor New Zealand wanted to replace all their sterling holdings with dollars; they preferred a more balanced portfolio of dollars, sterling, Deutsche Marks, yen, and gold. They were both reluctant to restrict their options, but they committed to levels of sterling reserves that they were comfortable with and moved toward their ex ante target under the agreements by 1971. They used their leverage with Britain to ensure continued access to the London capital market while at the same time raising capital in other countries to diversify their reserves portfolio.

In section I we discuss the literature relating to the choice of reserve currency. Section II outlines the development of the sterling area and the place of Australia and New Zealand within that system. In section III the economic fundamentals and other considerations relevant to the choice of reserve currency by Australia and New Zealand in the late 1960s and 1970s are examined. Section
IV traces the development of reserve currency policy, drawing upon government and central bank archives in those countries as well as international sources.

I

There is a broad consensus on why assets denominated in particular currencies tend to be held as foreign exchange reserves. From the supply side, Chinn and Frankel’s review of the economic literature emphasizes characteristics of the issuing economy as determinants of a currency’s appeal: size, share of world trade, size and liquidity of capital markets, monetary stability, and network externalities. Thus the reserves role is closely identified with a currency’s international status as a unit of account, store of value, and means of exchange. Once established, externalities may prolong the life of a dominant reserve currency so that it outlives its rationale based on the share of world trade or financial pre-eminence of the issuer. Using a common international currency reduces transactions costs for international payments and this may also influence the denomination of reserves.

In the late 1960s, Kindleberger argued that network externalities would lead to convergence on a single or narrow range of international currencies. The share of global reserves denominated in dollars peaked in the mid-1970s, when it reached almost 80 per cent and seemed to vindicate Kindleberger’s conclusions, but it then declined in favour of Deutsche Marks, yen, and Swiss francs, as controls on foreign ownership of these currencies were relaxed. By 1982 the dollar share was down to 60 per cent, where it has remained more or less for most of the subsequent two decades. In 2010 the UN noted that ‘the present system already has more than one reserve currency, but the other currencies remain a secondary feature in a system’, so this did not comprise a multi-currency reserve system. Nevertheless, there is clearly a preference for some diversification in reserves portfolios and room for more than one reserve asset.

Given that a transition from one dominant currency to another is infrequent and the relative proportions of global reserve assets are very stable, inertia or persistence is a key theme in the literature. Krugman commented on the ‘surprising persistence’ of sterling’s use as a reserve asset after the First World War. Explaining this persistence through the post-1945 period, Eichengreen stressed that it was ‘mainly . . . a matter of loyalty by members of the Commonwealth and by colonies with limited choice in the matter’. He also noted that the collective interest in avoiding sterling’s collapse was formalized in the Sterling Agreements of 1968 that limited diversification to protect the value of all holders’ sterling reserves. Clearly there are costs which constrain the diversification of reserves portfolios. While the range of supply side factors is uncontroversial, the relative importance of each is less well understood and depends on exchange rate regimes and the purposes for which reserves are accumulated.

4 Chinn and Frankel, ‘Euro’, pp. 56–9. See also Cohen, Geography.
5 Kindleberger, Politics.
6 United Nations, World economic situation, p. 35.
7 See Eichengreen, ‘International monetary system’, for a discussion of a future multiple reserve currency system.
9 Eichengreen, ‘Sterling’s past’, p. 11.
Still on the supply side, international political economy theory stresses the role of governments and other institutions in promoting (or discouraging) the use of particular currencies. The use of an international currency may confer reputational or strategic benefits on the issuer. In the 1960s Valéry Giscard d’Estaing identified the ‘exorbitant privilege’ that the US enjoyed: substantial overseas direct investment financed by central bank purchases of short-term US government debt as the reserves of European countries increased.10 On the other hand some countries with strong and stable currencies discouraged their use as reserve currencies, the obvious example being West Germany, which feared the inflationary consequences of permitting large foreign Deutsche Mark holdings.11 Japanese authorities also imposed exchange controls that limited foreign holding of yen denominated assets. Government bonds were sold directly to private financial institutions in Japan rather than to an open market until 1978 and only a very small proportion of government debt was available for purchase in the international market. Supplying reserve assets brought risks as well as benefits since it increased vulnerability to portfolio choices of other countries.

In line with what Helleiner and Kirshner termed the ‘geopolitical’ approach to explaining why currencies win or lose reserve status, most accounts of the postwar transition have focused on Britain’s management of sterling’s international role rather than the strategies of sterling holders.12 The classic accounts by Shonfield and Strange argued that successive British governments promoted sterling’s international role to enhance Britain’s global influence.13 This interpretation has been repeated by generalist accounts, such as that of James, and to some extent by Cain and Hopkins who stress the British elite’s promotion of sterling as a defence of the City’s international leadership.14 While these arguments focused on the commercial role of sterling, the role of sterling reserves held overseas was also an important element of their analysis. Schenk described Britain’s management of the decline of sterling as a more deliberate and internationally coordinated strategy to defend the Bretton Woods system, but focused mainly on British, European, and American perspectives rather than on the demand for sterling reserves.15

On the demand side, the literature suggests that key considerations determining the portfolio of reserves are the share of a country’s transactions denominated in particular currencies and the balance of risk/return on these assets. Empirical studies of the demand for reserve currencies became more common in the 1970s, when it seemed there might be a shift away from the dollar toward currencies like the Deutsche Mark and Swiss franc. Thus Heller and Knight suggested that in the mid-1970s the proportion of a nation’s reserves held in each currency was influenced strongly by the exchange rate regime, so that countries pegging to the US dollar held a relatively large proportion of US dollars as reserves.16 Research began to focus on the optimal portfolio of reserves, bearing in mind the motives for holding reserves, the risk and return associated with different reserve currencies, and the authorities’ interest in promoting international financial stability. On this

13 Shonfield, British economic policy, p. 218; Strange, Sterling, p. 47.
14 James, International monetary cooperation, p. 100; Cain and Hopkins, British imperialism, p. 274.
15 Schenk, Decline of sterling.
16 Heller and Knight, Reserve-currency preferences.
basis Ben-Bassat also concluded that between 1976 and 1980 the reserves portfolios of industrial countries were excessively dominated by US dollar assets. One explanation was that the liquidity and convertibility of US dollar assets meant that the benefits of currency diversification receded while the positive network externalities of holding dollars increased.

Bringing this literature together, Dooley, Lizondo, and Mathieson identified trade, debt, and the anchor currency as the key determinants of reserve composition after 1976. They also found distinctive reserves portfolio strategies for developing countries that showed greater sensitivity to the denomination of debt service, which tied them disproportionately to the US dollar. Eichengreen and Mathieson confirmed the stability of those three determinants during the 1980s and 1990s. There remains a gap for 1965–75 that is addressed by this article; this period saw capital account liberalization, a breakdown in a pegged exchange rate regime, and ambitious economic development policies based on international borrowing, all of which contributed to an uncertain environment for policy-makers.

Research on earlier transitions confirms the importance of transactions factors for portfolio management. Hatase and Ohnuki’s analysis of Japan’s reserves policy between the wars shows that the anchor currency and denomination of trade and debt were key determinants of the choice of reserve currency. The large share of Japan’s debt service due in sterling encouraged the maintenance of substantial sterling balances throughout the interwar period. As the value of total reserves plummeted through the 1920s, the share of dollars increased as sterling was run off, but this trend was reversed in 1933 when the dollar was devalued and the yen pegged to sterling. Accominotti, however, found that the Banque de France’s interwar strategy prioritized the stability of the reserve currency in order to minimize capital losses. That strategy prompted a shift from sterling to the dollar that was only halted in October 1930 to avoid precipitating a collapse of the pound. Substantial losses were then incurred when sterling was devalued in September 1931. These cases emphasize the constraints on the pace of diversification and the challenges posed by exchange rate instability.

For the nineteenth century, Flandreau and Jobst emphasized persistence due to the transactions costs of switching from one primary international currency to another. They found that the costs of shifting from an incumbent increased the share of sterling and the French franc in global transactions relative to the dollar, although the US was a rising economic power. The apparent under-representation of the dollar reflected the US economy’s smaller share in world trade. These cases all suggest that trade, debt, monetary stability, and currency anchor (in a pegged rate regime) influenced the currency distribution of reserves. A key feature of pre-1939 studies, however, is that foreign exchange comprised a smaller proportion of global reserves than in the 1960s, the balance consisting of gold. The currency allocation of foreign exchange reserves was thus a more critical issue in

17 Ben-Bassat, Reserve-currency diversification.
19 Eichengreen and Mathieson, ‘Currency composition’.
20 Hatase and Ohnuki, ‘Structure of trade’.
21 Accominotti, ‘Sterling trap’.
22 Flandreau and Jobst, ‘Empirics of international currencies’. 

the postwar period than previously, although monetary authorities faced similar challenges from the disintegration of pegged exchange rate regimes.

The literature thus points to several determinants of the denomination of foreign exchange reserves. The currency denomination of transactions (trade, debt, anchor) appears to be the most important factor from the mid-1970s. During periods of unstable exchange rates, however, calculations of risk and return on assets came to the fore. The timing of shifts in portfolios may be affected by the drag effects of persistence, but interwar experience suggests that transitions can be accomplished quickly and even reversed. During the interwar period, there were multiple reserve currencies although the predominant reserve asset was gold. The historical cases show that the risk that sales could provoke capital losses by prompting depreciation also affected the pace of diversification. The next section explores how the international monetary policies of Australia and New Zealand developed up to the 1960s.

II

The economies of Australia and New Zealand were developed by British capital and migrants in the nineteenth century. Britain was the main trading partner of Australia until the 1960s and New Zealand until the 1970s. Australia and New Zealand were on a sterling exchange standard by the late nineteenth century, which meant that the bulk of their external reserves consisted not of gold but of sterling assets held in London. This arrangement was convenient for the British authorities because the Bank of England did not maintain large gold stocks, and did not want to share gold with colonial banks. In 1902 the British even forced India to exchange its gold reserves for sterling balances. Although the sterling area was not created until 1940, a distinctive sterling group of countries already existed before 1914.

Australia and New Zealand lacked central banks until well into the interwar period. The Commonwealth Bank of Australia, set up as a state-owned commercial bank in 1911, developed gradually into a central bank with responsibility for managing the sterling reserves and the exchange rate during the 1920s and 1930s. The Reserve Bank of New Zealand (RBNZ) was created in 1934, principally to effect monetary separation from Australia. Both Australia and New Zealand pegged to sterling after Britain’s departure from gold in 1931 and thus became members of the sterling ‘bloc’. As Cain and Hopkins show, although Australia and New Zealand continued to be part of the gentlemanly capitalist nexus and depended on London financially and commercially, they were also becoming increasingly assertive. Economic and financial relationships with Britain were now matters for negotiation. Rather than outposts of the Bank of England, the Commonwealth Bank and RBNZ were set to become partners and agents of the governments in Canberra and Wellington. The economic alliance with Britain strengthened in the 1940s, but the relationship was increasingly grounded in intergovernmental cooperation. Governments now mediated between the dominions and the City of London.

---

23 Tocker, ‘Monetary standards’.
24 de Cecco, Money and empire, pp. 68–73.
Australia and New Zealand (alongside other sterling area countries) accumulated vast sterling balances between 1939 and 1945. Partly as a result of US agricultural protectionism, they struggled to earn US dollars directly, and found it convenient to remain in the sterling area, exporting produce to Britain and exchanging sterling receipts for US dollars from the ‘pool’ in London in order to buy goods from America. Although some colonies were compelled to hold sterling up to the late 1950s, other major sterling holders faced fewer external controls, and Australia and New Zealand faced none.27 Perceived national self-interest rather than loyalty explains these arrangements.

During the 1950s, however, the financial and commercial links between Australasia and Britain began to decay. The British started to think that western Europe might offer a more dynamic market than the Commonwealth, while sterling area countries grew unsettled by the limited capacity of UK capital and commodity markets and by the subsidization of British farmers. Australia and New Zealand started to borrow in New York as well as in London. They embarked on a search for new trading partners in the Asia-Pacific. Australia’s trade with Japan, which was normalized in the 1950s, boomed in the 1960s. The Japanese had a seemingly limitless appetite for Australian natural resources. Trade between New Zealand and Japan also grew, but less explosively.28 In the 1960s Australia and New Zealand tapped into the Euromarkets by making official bond issues.

As their trading and financial networks expanded, the Australian and New Zealand authorities reassessed the wisdom of maintaining the bulk of their reserves in sterling. Wider trends had a bearing on their choice. By 1960 many colonies were either independent or on the verge of independence, and Britain could no longer curb their spending. Although sterling became convertible on current account for non-residents in December 1958, the pound remained weak relative to the Deutsche Mark and the US dollar because of Britain’s lacklustre competitiveness, heavy military commitments, and the overhang of sterling balances. The US and other financial powers were persuaded that sterling must be propped up because, in the event of its sudden collapse as a reserve currency, sellers would turn their attention to the dollar, which in the Vietnam era was beginning to experience financial problems of a similar nature to those afflicting Britain. Even in the 1960s, however, sterling was not entirely lacking in appeal as a reserve currency. Interest rates were higher in London than in New York or West Germany, compensating sterling holders for increased risk. In addition there was unease about the stability of the US dollar, while the Deutsche Mark, though attractive, was scarce.

The British objective in the 1960s was to secure a gradual and smooth exit from the burdensome role of supplying and managing a reserve currency, preferably without harming their sterling area partners.29 Once sterling holders had suffered capital losses from Britain’s 14.3 per cent devaluation in November 1967, the threat of further exchange risk made holding sterling less tenable. As part of a deal to obtain further backing for sterling from leading central banks, Britain negotiated Sterling Agreements with official sterling holders in 1968. These agreements limited the pace of diversification in return for a US dollar

29 Schenk, Decline of sterling, pp. 244–5.
exchange rate guarantee. Countries that retained significant trade links with Britain and debts in London found it convenient to sign up to Sterling Agreements and continue to hold some sterling until the mid-1970s. Figure 1 confirms that, for most of the 1950s and 1960s, the retreat from sterling as a global reserve currency was gradual rather than abrupt; indeed sterling’s share was stable during the second half of the 1960s despite the 1967 devaluation.

III

We now examine in more detail the economic fundamentals and other factors underpinning the persistence of sterling as the reserve currency of Australia and New Zealand into the 1960s and early 1970s. Figures 2 and 3 demonstrate that the commitment of Australia and New Zealand to sterling (as measured by the proportions of reserves, the stock of official overseas debt, and trade denominated in sterling) eroded in the 1960s and 1970s. In the early 1960s both countries held more than 90 per cent of their reserves in sterling. In Australia’s case this was greatly in excess of the sterling share of official overseas debt and trade. New Zealand’s trade and official external debt remained heavily skewed towards Britain, and the reliance on sterling reserves at that stage is perhaps less worthy of comment.

Both countries explicitly recognized the likelihood that reserves would eventually be diversified along with the direction of international economic relations. From 1951 Australia began to invest the proceeds of premium gold sales in the US and from 1965 the Reserve Bank of Australia (RBA), which had demerged from the Commonwealth Bank in 1960, retained the dollar earnings of US investments in US dollar assets.30 This led to a modest accumulation of dollars, and sterling’s share of reserves fell to about 64 per cent by June 1967. At this point the Australian Treasurer reassured the Chancellor of the Exchequer that the decline in sterling

30 Reserve Bank of Australia Archives, Sydney (hereafter RBAA), BM-Pe-87, memorandum for RBA board, meeting 8 Nov. 1967. European central banks informed the RBA that holding of substantial reserves in European centres would not be welcomed.
was mainly due to balance of payments deficits and ‘our policy has been and still is to hold our main overseas reserves in sterling’. The pace of change accelerated sharply after the 1967 sterling devaluation, which reduced the value of official reserves by A$98 million. While the RBA considered that sterling was ‘not very attractive as a reserve asset’ by 1968, alternatives were not unproblematic since ‘there is a good chance that the [US] dollar will continue to experience troubles’ and ‘other countries are not keen to have their moneys become reserve currencies’. Most countries were reluctant to have their currencies develop as major global reserve assets because of the danger that this would make their monetary systems vulnerable to changes in external sentiment, so the RBA had to enter into bilateral consultations with the West German and Japanese central banks to acquire Deutsche Marks and yen. The RBA reassured the Bundesbank and the Bank of Japan ‘that unless there were quite abnormal circumstances we would not be a volatile mover of funds’. This limited the liquidity of such assets.

Britain remained a more important trading partner of New Zealand for longer and the diversification of reserves occurred later. Even so, in April 1968 the deputy secretary to the New Zealand Treasury advised the Bank for International Settlements (BIS) that ‘as a result of the possible future pattern of trade of NZ, his country’s reserves would naturally become diversified without the need to convert

---

32 There were further losses of A$34 million on forward banks’ exchange commitments and A$26 million in other foreign exchange obligations, bringing the total to A$158 million. RBAA, BM-Pe-89, aide memoire for governor, 30 Jan. 1968.
sterling balances’. Reserves policy was expected passively to reflect the changes in New Zealand’s international economic relations.

Figure 4 shows the declining share of Australian official obligations repayable in sterling, mainly due to increased US dollar borrowing in the 1950s and 1960s, and Deutsche Mark and Swiss franc borrowing in the 1970s. Data are valued in Australian dollars at current exchange rates, but valuation effects are not significant until the 14.3 per cent sterling devaluation of 1967. In that year, the sterling value of obligations from London fell by 8 per cent in addition to the valuation effects. There was a direct relationship between foreign currency borrowing and the denomination of reserves when the proceeds of foreign loans were converted to domestic currency for local government spending. The tightness of the US and British markets for lending to New Zealand and Australia in the mid-1960s encouraged their central banks to borrow in other currencies such as Deutsche
Marks and Swiss francs, which increased foreign exchange reserves.36 During this period, Treasury and central bank officials from both countries toured European financial centres to meet bankers and negotiate loans. Australia also began to accumulate yen reserves from August 1972 from the proceeds of loans raised from Japanese banks.37 Rather than the historic ties of empire or Commonwealth, the driving factors in the distribution of Australia’s reserves were increasingly the tightening of the London capital market and the opening of international capital markets in the US, Europe, and Japan, tempered by the desire to forestall a costly run on sterling.

Data on currency of repayment are not available for New Zealand, but the currency composition of the stock of New Zealand’s official overseas debt, as shown in figure 5, followed a similar path to Australia’s, although at a different pace. In New Zealand the proportion of official debt denominated in sterling did not fall below 40 per cent until the mid-1970s. As sterling debt matured, however, New Zealand (like Australia) was inclined to replace it with debt denominated in Deutsche Marks, Swiss francs, or guilders because interest rates were lower on the

37 RBAA, BM-75-234, RBA board minute, 1 Sept. 1972. $A26.7 million worth of yen were raised at the end of July 1972; 70% was invested in Japanese government T-bills and bonds and 30% deposited with the BIS.
By the mid-1960s, the gradual erosion of trade and financial relations with the UK was diminishing the motives to use sterling as the sole reserve asset for Australia and New Zealand. Reserves were diversified through foreign borrowing as access to the London capital market became more difficult. This was also part of a deliberate longer-term strategy to reduce the sterling share of reserves in response to the changing geography of international economic relations. However, both countries continued to peg their exchange rate to the pound until 1972 so sterling was needed for intervention and precautionary purposes. The pace of diversification was affected by the need to avert capital losses that might arise from rapid sales of sterling assets that could precipitate further devaluation. The archive evidence also shows doubts about the attractions of the US dollar as an alternative and difficulties in accumulating the more attractive currencies such as the Deutsche Mark and yen. The next section discusses how, from 1968, the diversification process was transferred from voluntary action to contractual agreement.


In 1971, 53% of New Zealand’s borrowing from the IBRD was repayable in US dollars, 15.7% in sterling, 12.1% in DM, and the balance in other currencies. RBNZA, box A0369, brief for Commonwealth finance ministers and IMF annual meetings 1971, p. 182.
We contend that Australia and New Zealand held sterling reserves during the 1960s for economically rational reasons. Britain was the main trading partner of Australia until the 1960s and of New Zealand until the 1970s. Sterling area countries enjoyed preferential access to the London capital market, and both Australia and New Zealand were significant international borrowers. The risk of holding sterling was mitigated by the relatively high interest rates earned in London and the declining resilience of the gold value of the US dollar. Archival evidence shows that decisions on the composition of reserves were frequently debated and the strategies deployed were based on calculation rather than sentiment or coercion. Negative network effects also mattered since news that either country planned to diversify risked a stampede that would devalue remaining reserves. From the outside, holding sterling when it was apparent it would soon lose value might be seen as loyalty, but there was also self-interest and a careful evaluation of risk. For example, in July 1967 the governor of the RBA reassured his counterpart at the Bank of England that ‘we are very conscious of the possible effect which a rapid change in our figures or our practices could have and we have been . . . very careful to avoid going so fast or so far in currency re-arrangement as to attract undue attention to the moment’.  

Two weeks before the November 1967 sterling devaluation, the International Department of the RBA noted that ‘on pragmatic grounds an attempt by Australia to make a very large switch [out of sterling] quickly would at once become common knowledge, and would be likely to start a flood of speculation against sterling’ so ‘we see no alternative to the present policy of changing the balance of the holdings rather more slowly than, on investment grounds, we might wish’. To some extent, therefore, sterling holders had a common interest that justified cooperation. While Australia and New Zealand left themselves vulnerable to capital losses from devaluation, they also had too much to lose to take the risk of themselves prompting a collapse of the sterling exchange rate or a suspension of convertibility. We shall see below that they were eventually rewarded with a dollar value guarantee for their official sterling reserves.

IV

Relying on common interest and fear to prop up sterling was a fragile proposition once global confidence in the pound was battered by the devaluation in 1967. Given the unstable international financial climate, in 1968 the Bank of England approached other leading central banks through the BIS, to secure further support for sterling. Under the Basel Agreement the G10 central banks (plus Switzerland) extended a US$2 billion credit to the Bank of England as a safety net during the diversification of overseas-held sterling reserves, thereby hoping to forestall a run on the pound that would extend to the US dollar. To minimize the likelihood that the credit would be drawn, the BIS insisted that Britain negotiate bilateral Sterling Agreements with 34 members of the sterling area to keep a minimum proportion of their reserves in sterling. In return, Britain had to guarantee the US dollar value of 90 per cent of the official sterling reserves of these countries so long as the minimum sterling proportion (MSP) was met. According to one contemporary

41 RBAA, BM-Pe-87, memo for governor by International Department, 6 Nov. 1967.
economist, sterling suddenly became ‘the “safest” international asset available to central monetary authorities’. The Bank of England guarantee subsidized the use of sterling as a reserve asset since central banks earned high London interest rates on assets that, under the dollar value guarantee, were equivalent in many ways to US dollar assets. After surviving the collapse of Bretton Woods, the floating of the pound, and the formal end of the sterling area in 1972, the Sterling Agreements were discontinued in December 1974, by which time the burden on Britain from outstanding sterling liabilities had been eroded by inflation. These Sterling Agreements underpinned the diversification strategies of Australia, New Zealand, and the other signatories through the early 1970s. The regime was an exercise in managing risks for Britain, overseas sterling holders, and Britain’s other creditors.

Just before the MSP negotiations began, on 3 July 1968 the RBA board ‘noted the longer-term trends in the directions of Australian trade and in the location of public indebtedness, and felt that on these grounds the disposition of our reserve remained too heavily weighted towards sterling’. The target was to achieve equal proportions of gold, sterling, and other foreign exchange, thus bringing the sterling share down to one-third from about one-half of total reserves. The RBA governor H. C. Coombs explained to the Treasurer William McMahon that ‘we feel that this distribution recognises our interests in having access to capital markets, and improves our defence against international monetary disturbances. We also believe that the proposal is consistent with our international responsibilities including a willingness to share in international support for sterling’. To sustain confidence in sterling despite diversification, the RBA was willing to lend gold and currencies to the UK, directly or through the BIS, to give the appearance of bolstering the UK reserves. The key priority for the Australian Treasury was continued access to the London capital market for government borrowing. This provoked some tension between the RBA board in Sydney and the Treasury in Canberra, with the former adopting the more aggressive stance on the issue of diversification away from sterling.

The RBA board discussed diversification again at the end of July 1968. The new governor Jock Phillips noted that ‘one’s currency only stays in demand as a reserve currency when one is a dominant trader’ but Britain’s position was eroding. On the other hand, he observed that ‘one can earn over 8 per cent on local governments in the UK and that this is a handsome return’. He acknowledged that ‘no one can pick the uniquely right time to leave sterling (perhaps it was last October) and certainly a total change over-night is impossible. But in the long-run sterling seems pointed towards the abandonment of its role as a reserve currency. Hence our need to move towards other assets’. He noted that ‘The prospects for the US economy (and therefore the US dollar), whilst not overly rosy, were better than for Britain’. He suggested four reasons to accumulate dollars:

1. large and unfavourable trade
2. prospects for borrowing
3. security yields are fairly attractive
4. large market—i.e. securities marketable.

42 Zis, ‘Sterling problem’, p. 348.
43 RBAA, BM-Fe-95, board meeting minute, 3 July 1968.
44 RBAA, GDB-70-3, telegram from Coombs in Sydney to Treasurer in Canberra, 21 June 1968.
Just as Britain was about to ask Australia to restrict diversification, therefore, the RBA favoured continuing the process begun in the mid-1960s.

New Zealand was still overwhelmingly dependent on sterling reserves. Alan Low, governor of the RBNZ, treated the British proposals as an opportunity to accelerate New Zealand’s reserves diversification. Low had already informed the Bank of England that New Zealand wanted to diversify its holdings to some extent, not least because the amount of non-sterling debt coming due for repayment was anticipated to rise. Low noted that each reserve currency had pros and cons. The US dollar, while far from strong, was unlikely to depreciate relative to sterling (three years later, it did). Like Australia, New Zealand had already started to retain dollar earnings rather than selling them to the Bank of England and Low wanted to continue this practice. Furthermore, Low felt that when New Zealand borrowed currencies that might appreciate, such as the Deutsche Mark, it should cover the risk by leaving borrowed funds in the same currency. The government already had a NZ£13 million Deutsche Mark liability, and a further loan in Deutsche Marks was being negotiated. The return on reserves also mattered. US interest rates were attractive, but lower than nominal rates on British assets, reflecting differences in risk. Overall, Low did not favour a decisive switch out of sterling: ‘While . . . alternative forms of reserve holdings are available to us there continue to be significant advantages in holding sterling, notwithstanding the risk that sterling might be devalued’. Sterling was still a ‘usable’ currency and ‘London continues to offer the best interest rates and the best facilities for the investment of funds, and most of our trade will continue to be denominated in sterling. We should continue to regard sterling as the basic component of our reserves’. The RBNZ contemplated moving towards the following composition: sterling (50–60 per cent), US dollars (20–5 per cent), European currencies (10 per cent), and gold (10–15 per cent). New Zealand clearly regarded the holding of multiple reserve currencies rather than a simple move to the US dollar as the best way forward, if practicable.

At the New Zealand Treasury, Cop Davis signified general acceptance of the British proposals: ‘Basically this appears to be a reasonable approach to strengthen sterling and to provide some protection against a further sterling devaluation’. However, the initial British offer, which included an MSP of 80 per cent, was unacceptable, for it ‘would penalise New Zealand “for having played the game” while other sterling area countries have been diversifying their reserves as rapidly as practicable’. New Zealand negotiators also sought assurances about borrowing rights in London.

In the end, the outcome was to sustain the status quo of reserves denomination through mutual agreement for three years, with provision for extension. Both Australia and New Zealand made concessions over the MSP. While the record shows that the internal targets on the eve of the negotiations were 33 per cent for

---

47 Ibid., p. 6.
48 Ibid., p. 7.
50 Ibid., p. 3.
Australia and 50–60 per cent for New Zealand, the minimum sterling proportions under the Sterling Agreements concluded in September 1968 were 40 per cent for Australia and 70 per cent for New Zealand. Both countries also agreed to informal targets of 45 per cent and 80 per cent respectively. In return for the loss of autonomy over reserves management, both countries sought continued access to the London capital market.

The link between the denomination of reserves and access to the London capital market was formalized at Australia’s insistence. In March 1966, as part of an effort to restrict drains on the balance of payments, the UK Treasury had introduced controls on the reinvested profits of British companies in Australia, New Zealand, and South Africa. The Australian Treasury insisted that their Sterling Agreement include a proviso to reconsider the MSP commitments were the UK to introduce any further capital controls. Additionally, Australia was able to negotiate a special provision whereby maturing sterling loans that could not be refinanced in London could be added to the calculation of the MSP, thus linking the continued holding of sterling reserves to access to the London capital market. In effect, if the Australian government could not borrow in the London market, they could diversify their reserves to the extent of debts repaid in London. New Zealand was given an informal undertaking along the same lines, but the Australians insisted on formal recognition of the principle, and a side letter to this effect was forthcoming in November, and then extended to New Zealand. Thus when New Zealand did not renew a £15 million loan in September 1968, because the London interest rate was too high, £15 million was added to the calculation of New Zealand’s sterling reserves. This kept reported sterling reserves above the statutory minimum 70 per cent at the end of 1969 and 1970. Additionally, the foreign exchange proceeds of government overseas borrowing in Deutsche Marks or US dollars were not included in the calculation of the MSP until three months after funds were received to allow for short-term effects on reserves composition.

The first renewal of the Sterling Agreements came just after President Nixon suspended gold convertibility and allowed the US dollar to depreciate in August 1971. The new terms included a 10 per cent across-the-board reduction in the MSP (the new MSPs were 36 per cent for Australia and 63 per cent for New Zealand), thus allowing for controlled diversification towards the target levels identified in each country in 1968. But the Bank of England and the UK Treasury insisted that the threshold of the guarantee would not be changed despite the devaluation of the US dollar against the pound in August 1971. Once the exchange rate was stabilized at £1 = $US2.60 in December 1971, an 8.5 per cent depreciation of sterling was required to trigger compensation under the guarantee. Nevertheless, Australia and New Zealand accepted renewal because the MSP did not seriously constrain them, while the guarantee offered some degree of protection for the real returns on sterling assets arising from high nominal interest rates.

In practice during the first agreement, the RBA kept a margin of about 2% above the desired level to cover unexpected fluctuations. RBAA, BM-I-60, memorandum for International Committee, 30 July 1970.


TNA, T312/2811, minute for Mr Hay by A. F. Case, 2 March 1970.
Three months after renewal, both Australia and New Zealand shifted their formal exchange rate peg in the IMF from sterling to the US dollar under the Smithsonian Agreement of December 1971. This marked an important dislocation from sterling, but did not immediately affect reserves policy because of the Sterling Agreements. Six months later in June 1972, sterling was floated against the US dollar, and the sterling area was formally wound up with the removal of the ‘scheduled territory’ designation under the Exchange Control Act. Nevertheless, the British almost immediately signalled interest in a further three-year extension of the Sterling Agreements, with a smaller amount of sterling guaranteed and a further reduction in MSPs. This time, the renewal negotiations prompted collective action. Australia, New Zealand, Malaysia, and Singapore held a joint meeting in Canberra in July 1972, a week before a British delegation arrived. Australia and New Zealand were in favour of renewing in order to protect the value of their remaining sterling balances, but they wanted a new trigger rate for compensation and lower MSPs. The RBA noted that Australia was likely to remain a substantial sterling holder since the range of alternative investments was limited by restrictions on the use of European currencies as reserve assets, and because ‘the US dollar is an uncertain asset’. Bernard Galvin of New Zealand noted that his country’s trade and debt remained heavily oriented to sterling so ‘New Zealand was likely to hold sterling anyway and therefore it would be helpful to have a guarantee’. Considerable support emerged at this meeting for linking the guarantee to the sterling/special drawing rights (SDR) exchange rate (to reduce exposure to the dollar) and for an option of compensation payable in US dollars, gold, or SDRs. Overall, ‘The basic line of thought [at Canberra] . . . was to seek to obtain the highest possible amount to be covered by the guarantee with the lowest MSP’. The British were in a hurry to settle, fearing that continued uncertainty about the international monetary system and the effects of Britain’s membership of the European Economic Community could unsettle confidence in sterling. They assured former members that abolition of the sterling area would not constrain their access to the London capital market. But their insistence on reducing the proportion of reserves covered by the guarantee in any extension encouraged Australia and New Zealand to reject the offer. British officials perceived ‘a marked apathy’ toward renewing the agreements among former sterling area countries and the search for a quick commitment was abandoned.

Instead, when the 1971 agreements expired in September 1973, the British offered to extend them for six months on a ‘take it or leave it’ basis. Most countries, including Australia and New Zealand, accepted. The level of sterling balances covered by the US dollar guarantee was now the lower of the amounts held on 24 September 1973 or on 29 March 1974, with compensation due if the average

55 Schenk and Singleton, ‘Basket pegs’.
57 RBAA, IT-h-327, note of meeting in Australian Treasury with representatives from Singapore, Malaysia, and New Zealand, 14 July 1972.
59 ANZ, AALR 873, Acc. W3158/84, 61/4/2/1, pt. 4, notes on meeting on sterling area held in Mr H. G. Lang’s office, 19 Feb. 1972.
sterling/US dollar exchange rate fell below US$2.4213.\textsuperscript{60} Rejecting the British offer would have threatened a fire sale of sterling securities so a modicum of solidarity was preserved by the agreements.\textsuperscript{61} Unlike previous agreements, the MSP required the RBA to buy sterling regularly, up to a total of £115 million by March 1974.\textsuperscript{62} By this time the shift to the dollar anchor had proved to be a short-lived answer to economies seeking exchange rate stability. In July 1973 New Zealand adopted a basket peg.

When the second agreement was due to expire, British officials tried to interest key sterling holders, including Australia, in a less formal gentlemen’s agreement, but met with no enthusiasm. Instead, in March 1974 the British offered a final extension until December to mitigate pressure on sterling during the general election campaign. The MSP was reduced to 32 per cent for Australia and 56 per cent for New Zealand, and the trigger for implementing the guarantee was now expressed in terms of the effective exchange rate for sterling against a currency basket.\textsuperscript{63} Compensation would be paid if the average effective depreciation of sterling over the period of the agreement exceeded the average effective depreciation of sterling from 23 September 1973 to 31 April 1974. The three sets of agreements brought modest compensation to sterling holders when the pound depreciated—£58 million in total after the float in 1972 and £100 million in total in 1973–4. Compensation amounting to £12.9 million was paid to Australia in January 1973, while New Zealand eventually received £3.7 million.\textsuperscript{64} In May 1974, Britain paid Australia £15.763 million in compensation, and New Zealand a further £6.937 million.\textsuperscript{65} However, the success of the Sterling Agreements should be measured not by the amount of compensation paid but by the avoidance over the previous five years of a precipitate flight from sterling which would have harmed all parties.

Although the commodity boom of the early 1970s brought Australia and New Zealand a large influx of sterling reserves, the underlying rationale for diversification remained. Timing was a key consideration, as was the need to avoid a stampede. As explained in an internal RBNZ paper in January 1974, the goal of reserves policy was ‘to preserve liquidity in important currencies, spread exchange risk, and earn a reasonable income’. One option, albeit not pursued, was to shadow the evolving pattern of trade.\textsuperscript{66} The policy in early 1974 was to hold 65 per cent of reserves in sterling, 20 per cent in US dollars, and 15 per cent in other currencies. The New Zealand Treasury argued that the ‘objectives should be to lower the proportion of our reserves held in sterling and to acquire greater freedom of choice in their management’.\textsuperscript{67} Less tangible factors were not ignored, and in January 1974 the deputy governor of the RBNZ felt that ‘a total shift [out of sterling]
would not be practicable on political grounds'. As late as October 1974, New Zealand officials expressed anxiety about being ‘locked into sterling’ because at current interest rates any sale of British securities would result in a loss. A further extension of the agreement might have been viewed favourably in Wellington, but it was not to be.

In June 1974 Frank Crean, the Australian Treasurer, notified the British that Australia intended to withdraw from its Sterling Agreement. The British Treasury remarked sanguinely that ‘this is not unexpected—we have known for some time that the Australians have found strict observance of the complicated guarantee conditions to be irksome’. The timing was influenced by the expectation of substantial balance of payments deficits over the following year that would halve Australia’s overall reserves and make it more difficult to retain the sterling share. Crean explained that he was seeking ‘greater freedom of action in respect to the disposition of our reserves . . . moreover we do not think it appropriate that we should be seeking compensation from you in respect of further changes in the value of sterling’. By August the sterling share had fallen to 18 per cent. At the request of the Chancellor of the Exchequer, Denis Healey, no publicity was given to the abrogation of the Sterling Agreement, since ‘the market could in present circumstances easily misinterpret or over-react’. After the publication of Australia’s reserves in August 1974, however, a low key announcement was made.

When New Zealand’s Sterling Agreement expired in December 1974, the RBNZ began to sell sterling, and the retreat gathered pace in the latter half of 1975. Relieved officials in Wellington remarked, in December 1975, that ‘the recent improvement in the United Kingdom gilt market has given us the opportunity to move out of long term sterling investments’. Admittedly, finessing the exit from sterling was not the primary focus of policy when New Zealand was struggling with an acute balance of payments crisis in the wake of oil price increases and the collapse of export prices. By March 1976, sterling, the US dollar, and the Deutsche Mark had almost equal shares of New Zealand’s official reserves, though the dominance of the US dollar was cemented thereafter.

Figure 6 shows the adherence of Australia and New Zealand to the MSP levels in the Sterling Agreements based solely on their actual sterling reserves, and with the un-refinanced London loans added to the notional sterling reserves to calculate the MSP. At times the inclusion of un-refinanced loans kept New Zealand above the MSP, but, for Australia, that was true only in the last months of adherence to their Sterling Agreement. At the time of the renewal in September 1971 the MSP was not binding on Australia since sterling reserves were well in excess of the MSP. There was stronger seasonality to New Zealand’s reserve

---

71 TNA, FCO59/1124, telegram relaying message from Crean to Healey, 26 June 1974.
72 TNA, FCO59/1124, telegram from Healey to Crean, 2 July 1974.
73 In mid-December RBNZ ordered US$60 million for delivery in the first quarter of 1975. The Bank of England assumed this was to adjust to the end of the MSP; BEA, OV44/235.
75 Deane et al., eds., External economic structure, p. 337.
distribution, with the sterling share falling in the last quarter of each calendar year. In both cases the commodity boom of 1971 led to increased holdings of sterling but Australia quickly diversified these assets and had approached its MSP by November 1972.

The value of the guarantee to participants can be measured by the nominal spread between returns on US and British reserve assets, assuming that most of the gap reflected the risk premium on the exchange rate of sterling. The continuous threat of sterling depreciation increased the nominal cost of borrowing in sterling for the British government and the returns on British government securities. Table 1 summarizes the average monthly spread between US and UK Treasury Bills during the four phases of the agreements.

![Figure 6. Adherence to Sterling Agreement (% sterling reserves), Sept. 1968–May 1974](image)


**Table 1. Spread between UK and US Treasury Bills during sterling agreements**

<table>
<thead>
<tr>
<th>Agreements</th>
<th>Average spread (percentage points)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I: 1968–71</td>
<td>1.242292</td>
</tr>
<tr>
<td>II: 1971–3</td>
<td>1.406667</td>
</tr>
<tr>
<td>III: 1973–4</td>
<td>4.105</td>
</tr>
<tr>
<td>IV: 1974</td>
<td>3.251</td>
</tr>
</tbody>
</table>

**Sources:** UK: Office for National Statistics; USA: Board of Governors of the Federal Reserve System Historical Data, [http://www.federalreserve.gov/releases/h15/data.htm](http://www.federalreserve.gov/releases/h15/data.htm).
Once sterling had floated in June 1972, the greater exchange rate depreciation required before compensation was triggered undermined the benefits of the guarantee. In August 1972 the RBA board noted that:

on income grounds there would be a strong preference for sterling assets over US dollar assets at present—the margin on 3-month Treasury bills is about 1.7 per cent p.a. in favour of the UK. However, future movements in US interest rates may whittle this margin away. Moreover, with sterling floating, only a small exchange rate variation would be necessary to offset substantial rate differentials.

They concluded that:

on balance, we are inclined to think that we should not hold unnecessary amounts of sterling. Thus we would favour keeping the MSP ratio not too far above the minimum requirement of 36 per cent. As has always been the case, we need a margin over the MSP minimum to protect against any unexpected fall in our sterling funds and other contingencies. An actual minimum ratio of 41/42 per cent is a safe but not excessive minimum working level for the ratio, consistent with the formal minimum of 36 per cent.

At the time the sterling proportion was about 44 per cent and it was agreed to keep it at about that level and ‘in any case not below 42 per cent’.76

The Sterling Agreements of 1968–74 are an important, but sometimes neglected, aspect of the management of the diversification of reserves during the end of the Bretton Woods era. They allowed official reserves to be held in sterling with little risk to their dollar value during a period of volatile dollar–sterling exchange rates. The value of the guarantee eroded after 1971 when both currencies became more unstable and both Australia and New Zealand preferred to accumulate Deutsche Marks, yen, or Swiss francs, but there were restrictions from the issuing countries on accumulating these currencies as reserves. Both countries pegged their currencies to the dollar from the end of 1971 and received compensation for the depreciation of sterling in the ensuing years.

V

The late 1960s and early 1970s, like today, were a multipolar era for reserve currencies especially within the sterling area. This point has not been adequately recognized in the literature where the assumption is that the US dollar was all-conquering by the mid-1960s. In fact the US dollar was weakening during the Vietnam era, and its growing dominance as a reserve currency in the 1970s mainly reflected the absence of a strong alternative. The Deutsche Mark and yen could have become alternatives but their respective monetary authorities, perhaps sensibly, did not want to get into the troublesome business of supplying a reserve currency. Given the pattern of debt service and trade in sterling, even the RBA did not advocate reducing sterling below one-third of reserves, while New Zealand continued to aim for at least half of its reserves in sterling. Between 1968 and 1974 the Sterling Agreements facilitated the managed and orderly diversification of

reserves to these levels. Sterling area members were offered protection against capital losses, enabling them to take advantage of the high nominal returns on sterling assets.

Through examining the historical record in the Australian and New Zealand Treasury and central bank archives we have been able to reconstruct the evolution of reserves policy in the 1960s and early 1970s. Our reasons for paying so much attention to two relatively small economies are as follows. First, very few investigations of the reserve currency choice have been conducted from the perspective of holder countries using official archives from within those countries as opposed to the issuer nations. Second, we found that although the techniques of foreign reserves management in the 1960s and 1970s were crude by today’s standards, the strategy was carefully considered. Australia and New Zealand realized that economic fundamentals were driving them away from sterling, admittedly at different speeds, but they also understood that initiating a run on the central reserves of the sterling area would be disastrous, hence their willingness to cooperate with Britain in the Sterling Agreements of 1968. The exchange guarantee enhanced the real return on sterling assets, the limits were rarely binding, and sterling reserves were managed down to the ex ante target levels. Moreover, the agreements allowed Australia to exert pressure to keep open the still important London capital market. Equally importantly, they lacked confidence in the stability of the US dollar, which was the only possible alternative. They were eager to hold more third currencies, especially the Deutsche Mark and yen, but were constrained by the reluctance of West Germany and Japan to make large sums available. In a period of uncertainty, they sought a portfolio of currencies rather than relying either on sterling or the US dollar, partly on grounds of stability and the preservation of value, but also because their economic interests were becoming global and not overwhelmingly dependent on either the UK or the US. This final (and permanent) transition from sterling to the dollar was carefully managed not only by the UK and G10 central banks but also through the negotiating strategies of small countries such as Australia and New Zealand, which sought to achieve diversification and continued access to the London capital market without prompting a damaging run on the pound.

Date submitted 23 September 2011
Revised version submitted 17 July 2013
Accepted 19 September 2013
DOI: 10.1111/ehr.12060

Footnote references

© 2015 The Authors. The Economic History Review published by John Wiley & Sons Ltd.

Eichengreen, B., Exorbitant privilege; the rise and fall of the dollar and the future of the international monetary system (Oxford, 2011).


Eichengreen, B. and Flandreau, M., ‘The rise and fall of the dollar (or when did the dollar replace sterling as the leading reserve currency?)’, European Review of Economic History, 13 (2009), pp. 377–411.


Shonfield, A., British economic policy since the war (1938).


Strange, S., Sterling and British policy: a political study of an international currency in decline (1971).


Official publications


International Monetary Fund, Direction of Trade Statistics (Washington, DC).

