Studies in Applied Economics

AN ANALYSIS OF SEYCHELLES' CURRENCY BOARD (1914-1978)

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Johns Hopkins Institute for Applied Economics, Global Health, and Study of Business Enterprise



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About the Series

The Studies in Applied Economics series is under the general direction of Prof. Steve H. Hanke, co-director of the Institute for Applied Economics, Global Health, and Study of Business Enterprise (hanke@jhu.edu). This working paper is one in a series on currency boards. The currency board working papers will fill gaps in the history, statistics, and scholarship of the subject. The authors are mainly students at The Johns Hopkins University in Baltimore. Some performed their work as summer research assistants at the Institute.

About the Author

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Abstract

We examine to what extent Seychelles' monetary system operated as a currency board system from 1914 to 1978 (before the establishment of the Seychelles Monetary Authority, now the Central Bank of Seychelles). We use statistical tests based on balance sheet data and analysis of legislation. We then analyze some measures of economic performance in Seychelles to address some common criticisms of currency boards. We also provide the spreadsheet data series and legislative history of note issue by the Seychelles Currency Board during the period. This includes a companion workbook, which makes the balance sheet data available in machine-readable form for the first time.

Acknowledgments

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Keywords: Seychelles, currency board.

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Introduction

Before the establishment of the Seychelles Monetary Authority on December 1, 1978, Seychelles had a long period of note and coin issue by its Board of Commissioners of Currency. The period started in 1914. There are almost no secondary accounts of this period, let alone detailed information. Some very brief summaries of the Board were published on the Central Bank of Seychelles' website, along with a book issued by the central bank, *History of Paper Currency in Seychelles*, which talks about the Board in a few pages.

Even sparser are the machine-readable balance sheet statistics that are necessary for quantitative analysis of the Board. Here we add substantially to the existing base of information by providing a spreadsheet containing relevant currency items from the annual Board balance sheets and monthly government balance sheets found in the Seychelles Government Gazettes (1917-1975). The spreadsheet also contains data from the annual Colonial Reports (1919-1968) and Blue Books (1914-1939).

We focus on determining the extent to which and during which years the Board of Commissioners of Currency operated as an orthodox currency board, by analyzing legislation concerning the Board and performing statistical tests on balance sheet items. We also analyze some broader measures of economic performance that may be closely connected to the currency board, such as government budget balances and trade balances. We do not examine monetary alternatives that might have improved economic performance during the period. Our hope is that the paper provides a useful first look at Seychelles' currency issue, and that the spreadsheet data be useful for further research into the topic.

Origins and Workings of the Board of Commissioners of Currency's Note Issue

Seychelles was administered as part of Mauritius until 1903, when it became a separate British colony and so was free to introduce its own currency. The difficulties of introducing a new currency, however, meant that it continued importing and using Mauritian notes up till 1919 (Central Bank of Seychelles 2006: 11). The currency unit in Mauritius was the rupee, equal to the Indian rupee. Mauritian notes were issued by a currency board. Mauritius had a local issue of coins, but only in denominations smaller than a rupee, so the Indian silver rupee coin circulated extensively in Mauritius and in Seychelles. The Mauritian rupee was divided in 100 cents, unlike the non-decimal Indian rupee.

In 1914, the Board of Commissioners of Currency (hereon referred to as the BCC) was established by the Seychelles Governor as a means for a government-controlled note issue. This was done under the very important Paper Currency Ordinance of 1914, enacted on August 10, 1914, which empowered the BCC to issue up to 180,000 rupees in denominations of 5 and 10 rupees. The limit on the amount was set because the note issue was supposed to just be a temporary measure to deal with a World War I emergency situation concerning the import of Mauritius notes, which themselves were printed in England and hence subject to the hazards of wartime shipping. The Seychelles notes were printed locally and lacked the sophisticated design

and other anti-counterfeiting features of typical notes. The key aspect of the 1914 ordinance was that it required a six-month waiting period before holders could redeem the notes in Indian silver, at a one-to-one exchange rate (Central Bank of Seychelles 2006: 11).

The next major change took place in 1919, under the Paper Currency Ordinance of 1919, enacted on November 8, 1919. It authorized the issuance of new note denominations of 50 cents and 1 rupee, which were to replace the coins used previously. The key point was that the notes were required to be fully backed by silver coins. The rationale for the legislation may have been that the world market price of silver was high at the time, creating an incentive for people to melt down silver coins for their metallic value and hence reducing the supply of currency. Even with this new currency issuance, Mauritian currency continued to be legal tender in Seychelles. The six-month waiting period for redemption established in the 1914 ordinance continued in the law, but the Governor could reduce it at his discretion and it is unclear whether it was still in effect in practice. The period 1914-1919 arguably set the stage for the BCC to function as a currency board in the future.

The Seychellois rupee remained at a one-to-one exchange rate with the Indian rupee. When the Indian rupee began to float against the pound sterling in August 1917, so did the Seychellois rupee. Because of the importance of India in regional trade, the Seychellois rupee was fixed to the Indian rupee rather than to the pound sterling. The currency system of the 1919 ordinance continued for a few years, with the enactment of minor supplementary ordinances regarding increased note issue of certain denominations. In 1928, a revised Paper Currency Ordinance was passed on May 30, authorizing the issuance of up to 250,000 Seychelles rupees by the BCC. Additionally, the ordinance gave the government the option to redeem Seychelles notes in Indian currency, meaning notes, as well as Indian coins (Central Bank of Seychelles 2006: 15). Several ordinances were enacted in the following years making minor changes to the note issue. An interesting fact to note is that according to the annual Blue Books (colonial statistical reports), 1931 marked the beginning of the Notes Security Fund which was to back the currency in circulation. It was not until 1936, however, that the fund's value reached 100 percent of the value of outstanding currency.

The Paper Currency Ordinance of 1936, published on February 1, 1936, repealed all previous Ordinances and effectively put in place an orthodox currency board. The Seychelles rupee was officially fixed to the pound sterling at 13.33 rupees to the pound (Central Bank of Seychelles n.d.), or 1 shilling and 6 pence sterling per rupee. The Indian rupee had by this time been pegged to the pound sterling at the same rate for some years, so the one-to-one exchange rate between the Seychellois rupee and the Indian rupee remained intact. Furthermore, the ordinance mandated that all currency was to be fully backed by sterling assets, eliminating any reference to redemption in silver coins. Responsibility of the note issue was given to the Colonial Treasurer, who was designated as Currency Commissioner (Central Bank of Seychelles 2006: 15).

In 1939, local coins were introduced to replace the 50 cent and 1 rupee notes due to hygienic concerns. This step, under the Seychelles Coinage Ordinance of 1939, marked the beginning of

Seychellois coin issuance backed by the Coin Security Fund (Central Bank of Seychelles 2006: 17).

Up to this point, the amount of currency in circulation was small. According to data published in the annual colonial reports during the 1930s, the value of notes in circulation did not exceed 500,000 rupees, while the population of the country was around 30,000. Furthermore, the Seychelles Savings Bank had less than 300,000 rupees of deposits. All of this changed by 1946, as the value of currency in circulation and savings banks deposits climbed to over 2 million and 3 million, respectively, spurred by wartime activity and inflation in the pound sterling. This influx was followed in 1947 by the issuance of more denominations of coins, which in turn helped enable the government to demonetize Mauritian currency in Seychelles except for coins of 1, 2, and 5 cents. This step marked the beginning of local domination of currency in circulation. In 1948, the BCC maintained a 110 percent reserve only against notes (Seychelles annual report 1948: 8), but by 1952 this ratio extended to coinage as well (Seychelles annual report 1951 & 1952: 12).

There were no major changes in the laws governing the currency board for several years. It apparently functioned well in line with the previous ordinances, especially that of 1936. The Seychellois rupee remained fixed at 13.33 rupees per pound sterling. The currency circulation in Seychelles climbed steadily to 8 million rupees by 1968 (Seychelles Colonial Report 1968: 14), and then skyrocketed to over 20 million by 1975 (Seychelles Government Gazette 1975: 410), as the country's GDP per capita in 1990 constant dollars rose from around US\$2,000 to over US\$4,000 (Maddison Project 2013). Savings banks deposits, on the other hand, stayed rather steady around 3 million rupees during the whole period.

For much of the period, there was only one bank in Seychelles: the Government Savings Bank. Branches of the Bank of Mauritius and the London-based New Oriental Bank had closed before 1916, leaving the country without a commercial bank for much of the 20th century. For the most part, merchants acted as unofficial bankers to the citizens. This changed in 1959, when a branch of Barclays Bank D.C.O. opened in Victoria and became the only true commercial bank in Seychelles. Then in 1964, the Government reconstituted the Seychelles Agricultural Bank, increasing the total number of banks in the country to three.

The next milestone in Seychelles' currency history came in 1974, when the BCC was overhauled. Under the Seychelles Currency Ordinance, the responsibility for currency issuance, re-issuance, and redemption was placed in a Board which consisted of the Financial Secretary and Accountant General. Furthermore, the Board was permitted to hold and manage the country's domestic and foreign assets, although it still did not have control over monetary policy. The exchange rate remained unchanged.

However, big changes in the currency system were coming. The Seychellois government believed that the country's growing domestic banking sector would be too constrained by a currency tied to external capital, as was the case with the Seychelles Currency Board. In 1976, the IMF performed a study of the Seychellois financial system and suggested that the Currency

Board be replaced by a central bank (Central Bank of Seychelles n.d.). Because the country had no experience with such an institution, the Seychelles Monetary Authority was created, under the Monetary Decree of 1978, to replace the Currency Board as an interim measure. The Monetary Authority was to be overseen by a Board consisting of the Permanent Secretary of Finance, the Accountant General, and a third person appointed by the President.

The Seychelles Monetary Authority opened on December 1, 1978, marking the end of the currency board. The Monetary Authority differed from the BCC in not being required to keep a fixed exchange rate. Although the rupee remained at the same exchange rate with sterling in practice, the President of the Monetary Authority could change the rate at any time. Furthermore, only a 70 percent external reserve was kept, and not exclusively in sterling (Central Bank of Seychelles 2006: 29).

The Monetary Authority worked closely with the Department of Finance over the next few years to regulate the money supply and the banking sector. On December 29, 1982, the Central Bank of Seychelles Act was approved by the People's Assembly, and three days later, on January 1, 1983, the Seychelles Monetary Authority was replaced by the newly formed Central Bank of Seychelles (Central Bank of Seychelles n.d.).

To What Extent Was the Board of Commissioners of Currency a Currency Board? A First Cut

By definition, an orthodox currency board is one that has a fixed exchange rate between the local currency and the foreign anchor currency, while providing immediate and full convertibility between the two currencies. An orthodox board must also maintain net foreign reserves that are 100 percent or slightly more of its entire monetary base, to provide completely credible backing for the convertibility requirement (Hanke 2002: 205). We must examine to what extent the Seychellois Board of Commissioners of Currency fit these criteria during the period 1914-1975.

Although the BCC began printing its own notes in 1914 under the Paper Currency Ordinance of 1914, these notes were not convertible immediately. There was a six-month waiting period before any currency could be redeemed, and the government did not hold any sort of foreign assets as backing for the notes. It was only in 1919, under the Paper Currency Ordinance of 1919, that reserves were required to be held in Indian or Mauritian currency.

Throughout this period and till 1936, the Seychellois rupee was issued and maintained at a one-to-one exchange rate with the Indian rupee, which in turn had a rigid exchange rate with the pound sterling except from 1917 to 1924. Although the BCC issued Seychellois rupees and maintained reserves to back its currency during this period, it wasn't until 1936 that the Seychellois rupee was officially fixed to sterling. The Paper Currency Ordinance of 1936 also mandated that 100 percent reserves were to be held in sterling assets, as opposed to Indian or Mauritian currency. The six-month waiting period also remained on the books until 1936, though the BCC may have ceased it in practice sometime after 1919. *De jure*, the BCC only really began functioning as a currency board from 1936.

The Notes Security Fund, which was the backing for the notes in circulation, was joined by the Coins Security Fund when the BCC began issuing Seychellois coins in 1939. Although the BCC was issuing its own currency throughout this period, its monopoly only began in 1947, when Mauritian notes were no longer present in Seychelles. By 1952 the note and coin security funds had both reached 110 percent reserves in sterling assets, indicating solid backing of the monetary base. There was no further legislation that affected the orthodoxy of Seychelles' currency board until 1976, when the Seychelles Monetary Authority was established.

It seems that the BCC was not *de facto* an orthodox currency board until at least the 1920s. To better determine the orthodoxy of the board between the 1920s and 1970s, we will perform statistical tests on the collected balance sheet data to calculate some technical criteria.

The Data and Our Tests

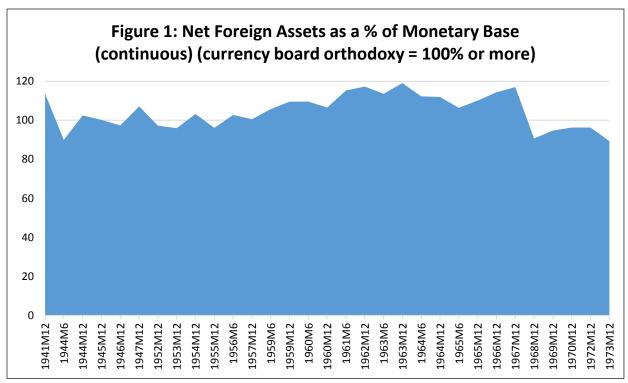
We digitized annual and semiannual balance sheet data on the Board of Commissioners of Currency from 1914-1975. From 1914-1939, the only sources available were the Blue Books, which contained very little data about the currency in circulation. The *Seychelles Government Gazette* started becoming available at the Library of Congress, where we conducted much of our research, in 1917, but the financial statements of the BCC were only published starting 1942. It contained the currency board balance sheets which provided detailed annual (and sometimes semiannual) data. However, there were a few years in between where either the *Gazette* did not contain relevant data or the Library of Congress, where we conducted our research, was missing issues. The years 1948-1949 were filled in using sparse information from the annual colonial reports.

Test # 1: Foreign Assets and the Monetary Base

As mentioned before, one of the core requirements for currency board orthodoxy is that the board maintain foreign reserves of 100 percent or slightly more of the monetary base. Preferable these should be net rather than just gross foreign reserves. The graphs below in this section show the amount of net foreign assets held by the BCC as a percentage of the monetary base.

We began by calculating Seychelles' monetary base for each year, which is the sum of BCC notes in circulation and coins in circulation. Net foreign assets are the sum of silver and foreign securities in the Notes Security Fund and Coinage Security Fund (there were no foreign liabilities, so gross foreign assets are equal to net foreign assets).

Data were only available for the period 1941-1973, and since there were no data for 1942, 1948, 1949, 1956, or 1958, we decided to split the information into two separate graphs. Figure 1, included below, is the continuous version, meaning it does not show years with missing data. Figure 1b is the discrete version, which includes all the years with missing data, and it can be found in the accompanying Excel workbook.



Main sources: Seychelles Government Gazette; calculations.

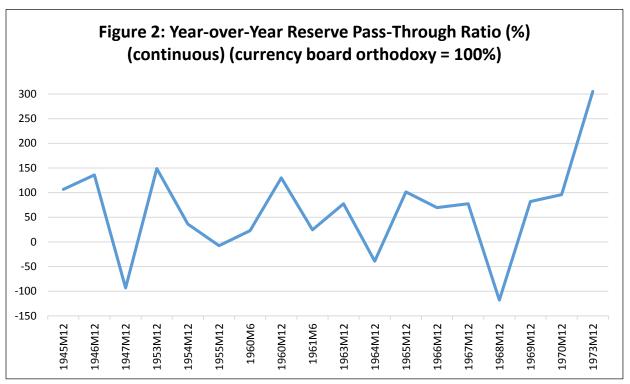
As mentioned before, the Paper Currency Ordinance of 1936 mandated that the ratio of foreign reserves to monetary base was to be at least 100 percent. We can see in the graphs that between 1941 and 1956, this ratio hovered around 100 percent. Even though there were times when the foreign reserves were less than the monetary base, for the most part they were around 100 percent of the base.

From 1956 onwards the currency board maintained significantly more than 100 percent reserves, even reaching upwards of 115 percent at times. There was a sudden drop in 1968 after which the board only held around 90 percent reserves. These statistics suggest that the Board of Commissioners of Currency did not function strictly according to government legislation throughout the period; it acted somewhat orthodoxly from 1941 to 1957, and then acted strictly as an orthodox currency board from 1957 to 1967.

Test # 2: Year-over-Year Reserve Pass-Through

Another important test of currency board orthodoxy is year-over-year reserve pass-through, which measures the annual change in the monetary base as a percentage of the annual change in foreign assets. For an orthodox currency board, this ratio typically hovers between 80 percent and 100 percent (Hanke 2008: 57), the reasoning being that any change in the monetary base must be accompanied by a change in the foreign reserves in order to maintain a 100 percent backing.

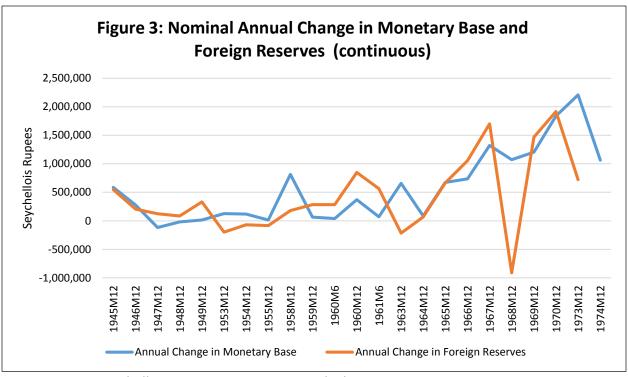
Relevant data were only available for 1945-1973, and even then we were missing the years 1948-1952, 1956-1959, 1962-1963, and 1972. For this reason, we once again split the information into a continuous graph (Figure 2), shown below, and a discrete graph (Figure 2b), which can be found in the accompanying Excel workbook.



Main sources: Seychelles Government Gazette; calculations.

The reserve pass-through ratio was extremely volatile throughout 1945-1973. It rarely even crossed 100 percent, let alone hovered there. Test #1 suggested that the board was orthodox only from 1941 to 1967, but reserve pass-through suggests that even that period is too broad. In fact, the board never really hovers stably between 80 percent and 120 percent at all. According to this test, the Board of Commissioners of Currency was never orthodox. It should be noted, however, that especially for small currency boards, changes in the market value of securities (if carried on the balance sheet at market value rather than at cost) or "lumpy" costs such as note printing can affect the reserve pass-through ratio in ways that are hard to adjust for.

To examine the relation between the monetary base and foreign reserves from another perspective, we decided to look at the nominal changes in the monetary base and net foreign reserves. Once again, we created a continuous graph (Figure 3), shown below, and a discrete graph (Figure 3b), which can be found in the accompanying workbook.



Main sources: Seychelles Government Gazette; calculations.

This graph sheds some light on why the reserve pass-through was so volatile. We can see that net foreign reserves somewhat tracked the monetary base, albeit rather inconsistently. For the most part, changes in net foreign reserves were close to changes in the monetary base, although there were some periods when there were major deviations. In particular, 1958, 1963, and 1968 stand out as years when net foreign reserves were incongruous with the monetary base.

There is no obvious explanation as to why there were such deviations in these years. However, it is interesting to note that the deviation in 1958 occurred in the period preceding the establishment of a branch of the Barclays Bank D.C.O in Victoria in 1959. Similarly, the deviation in 1963 occurred during the lead-up to the reconstitution of the Seychelles Agricultural Bank in 1964.

The huge drop in foreign reserves in 1968 is a puzzle. It is possible that the BCC decided to sell some sterling assets after the devaluation of sterling against the U.S. dollar on November 19, 1967, but we were not able to find any conclusive information regarding the matter.

It is possible that we are trying too hard to find reasons for the deviations between changes in net foreign reserves and the monetary base. Two of the major deviations occurred in 1958 and 1963, and from our previous test, we know that during the period 1956-1967, the board maintained well over 100 percent in reserves. This could mean that there was no critical

rationale behind the lagging of the change in net foreign reserves, as the board was still maintaining upwards of 100 percent in reserves.

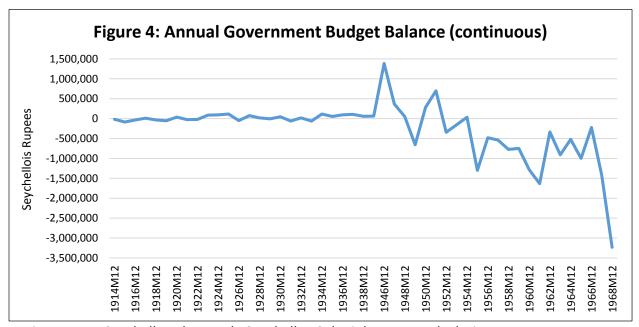
Economic Performance under the Currency Board

There have been several criticisms of currency board systems in the past, mainly regarding the stunting of economic performance and growth (for a summary, see Schuler 1992: 111-119). One of the main criticisms is that currency boards require a balance of payments surplus for the money supply to expand. Another common criticism is that currency boards tend to enforce government budget surpluses, which is seen as damaging to economic performance.

Now that we have studied the origins and functioning of Seychelles' currency board system, we can start looking at whether or not these criticisms are valid in the context of Seychelles. Some of the main questions we seek to answer are whether or not currency boards promote balanced government budgets, and whether or not they have to run trade account surpluses for the monetary base to expand.

Government Budget Balance

We began by collecting annual government revenue and expenditure data from the Blue Books and annual colonial reports. Data were available for 1914-1968, although we were missing data for 1940-1945. We then calculated the annual government budget balance by simply subtracting the expenditure from the revenue. Figure 4, shown below, is a continuous graph of the annual government budget balance between 1914 and 1968.



Main sources: Seychelles Blue Book, Seychelles Colonial Report; calculations.

As we can see, the government budget balance hovered rather stably around zero from 1914 to 1939. Although it constantly fluctuated between positive and negative amounts, on average it stayed quite close to zero. From 1939 onwards, it seems like the balance became very volatile, with huge jumps between surpluses and deficits. In fact, the overall trend eventually became negatively sloped, as the budget deficit slowly increased to upwards of 2 million rupees.

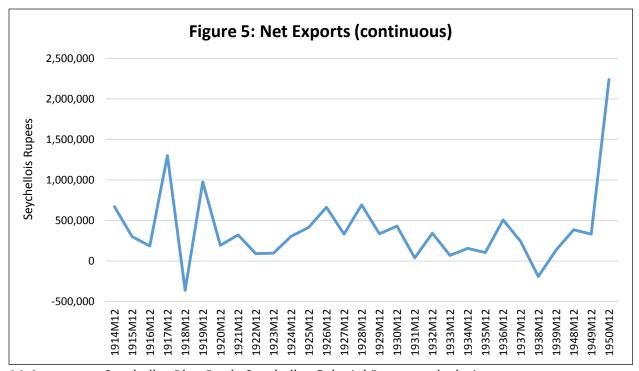
From our investigation of the legislation surrounding the currency board, we know that the board could only have begun functioning orthodoxly after 1939, following the Paper Currency Ordinance of 1936 and the establishment of a Coinage Security Fund. Taking this fact into consideration, it seems as though the establishment of a potentially orthodox currency board may have played a significant part in the declining budget balance. It is hard to call the sudden volatility a coincidence, especially considering that the balance had been very stable up until that point.

Based on these data, it seems as though the criticism that currency boards promote balanced government budgets is invalid. In fact, it appears that Seychelles' currency board actually may have led to a severe budget deficit.

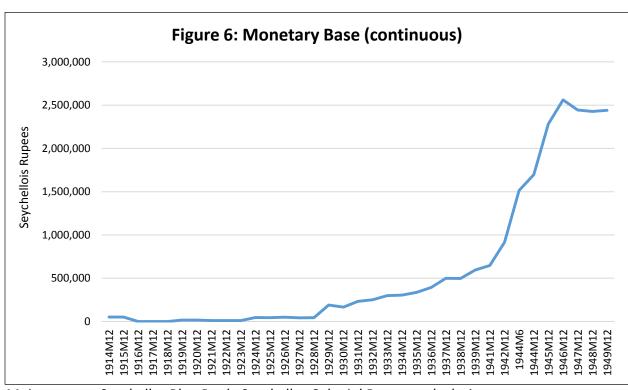
Trade Account Balance

We began by collecting annual imports and exports data from the Blue Books and annual colonial reports. These data were available for the years 1914-1950, although we were missing data for 1940-1947. We then calculated the annual trade account balance by simply subtracting the imports from the exports, to get net exports.

To compare this with the expansion of the monetary base, we also graphed our previously collected monetary base data for the corresponding period of time. By examining the two statistics side by side, we will be able to make an informed judgment regarding the criticism that currency boards require trade account surpluses for the monetary base to grow. Figures 5 and 6, shown below, are continuous graphs of the annual trade account balance and the monetary base between 1914 and 1950.



Main sources: Seychelles Blue Book, Seychelles Colonial Report; calculations.



Main sources: Seychelles Blue Book, Seychelles Colonial Report; calculations.

As we can see in Figure 5, Seychelles' net exports were never really stable. More important, though, is the fact that it was still consistently positive throughout the period. There were only two instances when imports exceeded exports, in 1918 and 1938.

In Figure 6, we can see that monetary base was rising throughout the period. It started stably around zero and began slowly expanding after 1928, with steep growth between 1941 and 1946. Overall, the monetary base grew from zero to upwards of 2.5 million rupees in a little over 30 years.

Based on these data, it seems as though the criticism that currency boards require a trade surplus for the monetary base to expand could be valid. Seychelles' balance of payments was largely positive throughout the period, as its monetary base expanded steadily. However, we still cannot make a decisive statement on whether or not the criticism is valid. In order to do that, we would need to observe a scenario of trade account deficits where the monetary base was still expanding. That would allow us to see if the currency board truly needed a trade surplus for money supply growth.

Conclusions

An examination of monetary legislation in the Seychelles suggests that the BCC was intended to act as an orthodox currency board between 1936 and 1975. The Paper Currency Ordinance of 1936 mandated the maintenance of foreign reserves such that at least 100 percent of the monetary was backed by sterling assets. The ordinance also effectively fixed the exchange rate between the Seychellois rupee and Sterling pound. All of this suggests that the Board was meant to function as a perfectly orthodox board from 1936 to 1975.

The data, on the other hand, suggest that the Board often deviated from orthodoxy. Although the legislation mandated that the Board keep at least 100 percent foreign assets, the data show that in practice this was untrue outside 1956-1967. Even from 1956-1967, the high volatility of the reserve pass-through ratio suggests that the Board did not adapt its foreign reserves to match the changes in the monetary base. The ratio was somewhat stable between 1965 and 1967, but it still was not close enough to 100 percent for us to declare it orthodox.

We must be careful in drawing conclusions from our calculations. There were several years with missing data, which affected both our tests. All we really know is that the legislation concerning the board was akin to a currency board starting 1936, and that from the data we have, in practice the BCC did not seem to behave in a fully orthodox manner.

The economic indicators we investigated allow us to make some statements regarding common criticisms of currency boards. The growing government budget deficit in Seychelles between 1939 and 1968 provides a case where the presence of a currency board (or what was supposed to be a currency board) did not promote balanced budget. As for the claim that currency boards require trade surpluses for monetary base expansion, Seychelles experienced no long period of

trade deficits in the data that we have, so our data are only a one-sided test, showing trade surpluses and an expanding monetary base.

Postscript: Companion Spreadsheet Workbook

The accompanying spreadsheet workbook contains all the underlying data, calculations, and graphs that were used in this paper. The workbook also contains extra data that was digitized but not used in the paper, such as details of the notes and coinage security funds' investments.

Appendix. Data Availability and Sources for Excel Workbook

The companion spreadsheet workbook contains data from several different sources: the Blue Books, an annual statistical summary; the *Seychelles Government Gazette*, the newspaper where all official announcements were published, including financial statements of the BCC; and the colonial reports issued annually or biannually to provide a narrative summary of British colonial administration. Here we discuss these sources and the data they provided.

- The workbook contains a master sheet, which is a compilation of currency board data from all the different sources into one long time series. We used numbers from all three sources, primarily focusing on the Blue Books and Government Gazettes. For the years when these were unavailable, we used data from the colonial reports to fill the gaps as best as possible. The currency board calculations, statistical tests, and graphs can be found on this sheet.
- The workbook also contains a sheet titled "Economic Indicators," which compiles data from the Blue Books and the colonial reports. There were several years where the imports and exports data were not photographed, so there is some discontinuity in that regard. This sheet also contains the calculations and graphs that were used in our analysis of economic performance under the currency board.
- The Blue Books were the only source that covered the early years of our time period, as they were available between 1914 and 1939. They did not contain much detail on the BCC, but they did have information about the value of currency in circulation and, when relevant, the value of assets to back the circulating currency. Unfortunately, the Blue Book data were not useful when it came to performing statistical tests because they did not contain enough information about foreign assets. The Blue Books did, however, contain data regarding the government budget balances and trade balances, which were used in our analysis of the economic performance under the currency board.
- The spreadsheet titled "Gazette Government" contains data gathered from the monthly government balance sheets available in the *Government Gazettes*. Although the *Gazettes* were available from 1917 to 1975, the government balance sheets were only available from 1930 to 1966. Even then there were several months and years that were missing data. Furthermore, starting in 1957, the data in these balance sheets were extremely bizarre and questionable, as the values of currency in circulation jumped from the millions to the hundreds. Due to the high frequency of missing data and the bizarre pattern of the numbers after 1957, we deemed this source unreliable and did not use its data in our calculations or tests.
- The spreadsheet titled "Gazette Currency" contains data gathered from the annual (and sometimes semi-annual) currency board balance sheets available in the *Government Gazettes*. They differ from the government balance sheets as they focus solely on the currency board. These balance sheets started appearing in the *Gazettes* in 1942, but there were no data available for 1943, 1948-51, and 1971. The *Gazette* figures were the biggest contributor to our master sheet for calculations and tests as they contained detailed information about the currency in circulation and the security funds that were used to back the monetary base.

• The colonial reports were available from 1919 to 1968, but they were not issued from 1938-45 because of World War II and we did not have access to the reports for 1950-51, 1954-55, 1957, and 1959. Currency data only became available in the reports from 1930 onwards, and even those data were sparse, limited to currency in circulation and savings banks deposits. Although we used the data to fill in some gaps in our master sheet, they did not contribute to any statistical tests due to the lack of information regarding foreign assets. The colonial reports did, however, contain data regarding the government budget balances and trade balances, which were used in our analysis of the economic performance under the currency board.

We searched for trade account balance, government budget balance, and other economic indicator data for the years 1914-1975 in Brian Mitchell's *International Historical Statistics*, the International Monetary Fund's *International Financial Statistics* (database and old paper issues), and the British colonial statistical compilations that are in the Digital Archive on Currency Boards, but we were unable to find data to fill in our current data holes.

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