Studies in Applied Economics

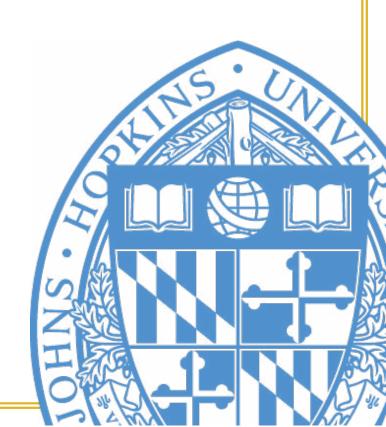
BRITISH IMPERIALISM AND PORTFOLIO CHOICE IN THE CURRENCY BOARDS OF PALESTINE, EAST AFRICA, AND WEST AFRICA

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



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British Imperialism and Portfolio Choice in the Currency Boards of Palestine, East Africa, and West Africa

By Tal Boger

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About the Series

The Studies in Applied Economics series is under the direction of Prof. Steve H. Hanke, codirector of the Johns Hopkins Institute for Applied Economics, Global Health, and the 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 research assistants at the Institute.

About the Author

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Abstract

Did British colonial policy primarily benefit Britain, or its colonies? Wadan Narsey, in *British Imperialism and the Makings of Colonial Currency Systems* (2016), claims that Britain established currency boards to help itself at the expense of the colonies. Examining the history of several currency boards and their assets for select years, Narsey finds that under British influence, they held lower-yielding, shorter-maturity British assets than they need have done, costing colonial governments revenue. We explore this idea by analyzing full annual data on the securities and assets of the currency boards of Palestine, East Africa, and West Africa. An accompanying spreadsheet workbook shows the details of the analysis.

Acknowledgements

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Keywords: British colonialism, British imperialism, Palestine Currency Board, East African Currency Board, West African Currency Board

JEL numbers: N15, N17

Introduction

As part of its imperial expansion in the 19th and 20th centuries, Great Britain set up currency board systems in many of its colonies. Establishing boards in colonies such as Palestine, East Africa, and West Africa, Britain sought monetary control over its colonies. Observers have questioned whether Britain organized the boards for its own good or for the development of its colonies. In his book British Imperialism and the Makings of Colonial Currency Systems (2016), Wadan Narsey cites changes in asset and security composition as proof that the boards benefited Britain at the expense of the colonies. Narsey categorizes the idea that the boards held securities in London "in order to maximize the income from... currency reserves, with complete safety" as a general misconception (Narsey 2016: 17). Rather, in his view, the securities served to ease Britain's balance of payments, finance British investment, and give Britain great authority over colonial finances. He describes a pattern whereby British colonial currency boards shifted their assets from higher-yielding, longer-maturity securities, often issued by other British colonies, into lower-yielding, shorter-maturity British government securities (Narsey 2016: 18). As a result, colonial governments received less revenue from the currency boards than they could have with a portfolio composition that could still preserve the fixed exchange rates of colonial currencies to the pound sterling.

Narsey points out that the London money market underwent several crises between 1890 and 1912, the period during which British officials established the template for colonial currency boards. The crises "had a central bearing on colonial currency policies... (in terms of) their holdings of undesirable British Government securities" (Narsey 2016: 158). In his discussion of academic writings on currency boards, Narsey concludes that "the evidence of our study supports that... while mercantilism was concealed or disguised in the nineteenth century, it had continued well into the twentieth century" (Narsey 2016: 209).

Narsey offers documentary evidence from unpublished government correspondence in Britain's Public Record Office (now the National Archives). He also shows the asset composition of several currency boards for select years. To make a more thorough test of the figures he calculates, this paper examines full annual data on the assets of the Palestine Currency Board, East African Currency Board, and West African Currency Board. They were among the largest British colonial currency boards, so their asset holdings were of particular importance for British policy regarding the "sterling area" — the colonies and independent countries that tied their currencies to the pound sterling, and that for most of the period from 1914 to 1972 had a common set of exchange controls against third currencies.

Methods

To test Narsey's claim, we first digitized the securities data from each currency board's annual report. Then, we classified each security into one of four categories: British Empire (other British colonies, mandates, and dominions), British national (British war loans, treasury bonds, etc.), British subnational (counties or cities in England, British government-owned or

government-guaranteed companies, etc.), and domestic (securities issued in colonies belonging to the currency board — for example, the East African Currency Board holding a Ugandan government or private security). The East and West African boards held domestic securities, while the Palestine Currency Board did not.

We copied the assets for each currency board from the digitized balance sheets published by Krus and Schuler (2014). Krus and Schuler digitized other balance sheet data, but not the details of securities holdings. We then analyzed the security and asset composition. For security composition, we used the four aforementioned categories. For overall asset composition, we used those four categories along with four other categories: deposits at banks, the Crown Agents, ¹ etc.; British treasury bills; coin; ² and other assets. ³

We then assessed the maturity and interest rate of the portfolio using two different methods. First, we calculated the average unweighted interest and maturity for different securities and classifications every year. Note that in some years, boards may not have held any securities of a certain security classification, so not all lines in our "by classification" charts span all years. Next, we calculated averages weighted by the amount of each security or asset held. The two methods show broadly similar results, so the graphs below show only the unweighted figures.⁴ Some securities were callable, meaning that the issuer promised redemption at a specified date but had the option redeeming them at an earlier date. We calculated the portfolio using both the earlier and later redemption dates. The graphs below show only the calculations using the later dates, which do not appreciably change our conclusions.

Because the overall portfolio of the currency boards determined the risk and return of their assets, the graphs focus on total assets, not just holdings of securities. We looked at assets both in terms of percentage of total assets and in terms of pounds, so as to contextualize the asset values (for example, British Empire securities made up most of the East African Currency Board's portfolio in some years, but in those years the overall portfolio value was small).

An accompanying spreadsheet workbook contains calculations of the securities portfolios alone, other calculations omitted from the graphs, and further data that will be of interest to readers who wish to explore the details behind our conclusions.

The charts included in the accompanying spreadsheets, but not in this paper are: weighted average interest and maturity, security composition (%), security composition (pounds), and average maturity by classification (unweighted).

¹ The Crown Agents for the Colonies were a British government agency that offered fee-based financial management and other services to the colonies. Colonial governments were free to use private providers instead.

² We did not include every type of coin; we looked at coin in store at cost price and market value of coin in stock.

³ For East Africa and West Africa, we added a domestic assets category in addition to the domestic securities category.

⁴ Asset maturity for assets of zero or near-zero maturity, such as demand deposits, was weighted at 0.01 years. Securities with no explicit maturity, notably British consols, were assigned a maturity of 100.5 years – the .5 indicates that an assumption was made.

Palestine Currency Board: Background⁵

Let us now consider each currency board in turn, starting with Palestine. During World War I, British forces conquered Palestine from the Ottoman Empire. In 1922 the League of Nations granted Britain a mandate over Palestine (now Israel and the Gaza Strip) and neighboring Transjordan (now Jordan). Under the League's rules, the country which was granted a mandate promised to develop it for the benefit of its inhabitants and not to annex the territory.

The conquering British forces had come from Egypt — which at the time was a British protectorate — and had brought Egyptian currency with them to use in payments. Egyptian currency displaced Ottoman currency.⁶ The seigniorage (profit from issuing the currency) accrued to the note-issuing National Bank of Egypt — a privately owned commercial and central bank whose shareholders were British, French, and Egyptian — and to the Egyptian government, which issued the coins used in Palestine and Transjordan.

To enable the seigniorage to accrue to the governments of Palestine and Transjordan, the British government founded the Palestine Currency Board on 15 June 1926. The board began issuing currency on 1 November 1927. Its currency was the Palestine pound, equal to the pound sterling, although subdivided into 1,000 mils instead of into 20 shillings or 240 pence like sterling. The board issued both notes and coins.

The initial members of the currency board were three Britons: P.H. Ezechiel, a Crown Agent for the Colonies; Leslie Couper, General Manager of the Bank of British West Africa; and A.J. Harding of the Colonial Office. The board was based in London.

The Palestine Currency Board's first annual report described its investment policy in these terms: "The Board may invest its funds in securities of the Government of any part of His Majesty's Dominions or in such other manner as the Secretary of State may approve. The extent to which investments may be made will be left to the discretion of the Board, whose duty it will be to hold, subject to any discretions which may be received from the Secretary of State, a proportion of its reserve in a liquid form" (Palestine Currency Board annual report 1928: 7). Observe that the board was not required by law to hold only external assets; the Secretary of State for the Colonies allowed it to hold domestic assets. However, in practice the board had no such holdings other than for petty cash for transitory purposes.

The Palestine Currency Board functioned without incident until 1947. In that year the proposed United Nations partition of Palestine into Arab and Israeli states led to a civil war when Arab leaders refused to accept the partition. Both the partition plan and the war raised the possibility that the new state(s) might not want to continue to be subject to a currency board controlled by the British government.

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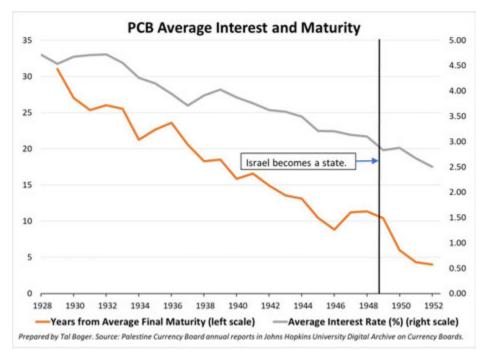
⁵ Background information for all three currency boards is from either the Johns Hopkins University Digital Archive on Currency Boards or Krus and Schuler (2014).

⁶ The Ottomans ruled Palestine from 1517 to 1917.

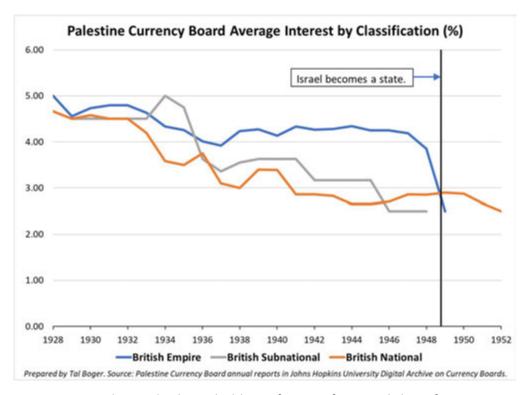
Israel declared its independence on 14 May 1948 and began issuing its own currency on 17 August 1948 through the Anglo Palestine Bank, its largest local financial institution. The Palestine Currency Board continued to serve the West Bank, which had been absorbed by Jordan after the 1948 Arab-Israeli War, and the Gaza Strip, which was administered by Egypt. Jordan began issuing a separate currency to replace the Palestine pound under its own currency board on 1 July 1950. Egyptian currency replaced the Palestine pound in the Gaza Strip beginning in April 1951. Currency redemption ended on 9 June 1951, when the Palestine pound was declared no longer legal tender there. It ceased to be legal tender in Jordan on 30 June 1951. The board was liquidated on 17 June 1952.

Palestine Currency Board: Portfolio Analysis

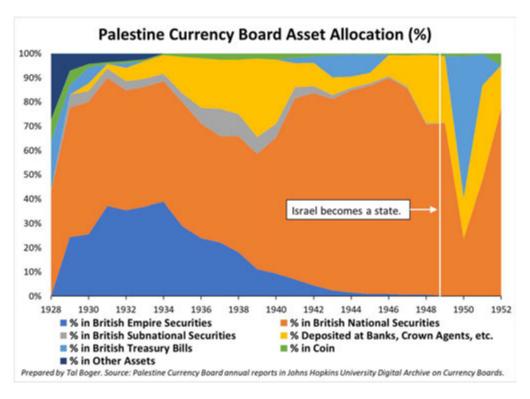
For Palestine, our results prove Narsey's claim correct. Over time, the currency board moved its portfolio into lower-yielding, shorter-maturity securities, which aligned with British interests. The graph below shows the unweighted average interest and years to average maturity each year. Aside from the years around 1936, the average interest decreased almost each year.



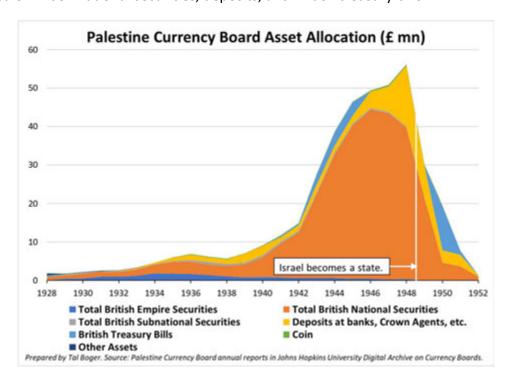
In the graph on the next page, notice that the interest rate of British national securities (orange line) decreased consistently. British subnational securities' average interest rate (grey line) fluctuated; this is the result of using an unweighted average. The board did not hold many subnational securities, so each new subnational security affected the classification's average interest significantly. Overall, the portfolio held many British national securities compared to Empire and subnational securities, giving the British national securities' average interest rate more statistical significance. The graph below shows the interest rates for each security class.



The asset composition shows the large holding of assets for British benefit. Deposits at banks, Crown Agents, etc. made up most of the assets until the liquidation phase; at that point, the board held a large portion of its assets in British treasury bills. In terms of securities, British national securities composed most of the portfolio each year. The graph below shows the board's assets as a percentage of total assets.



The graph below plots the same data in pounds to contextualize the assets in terms of total value. Notice that each year that the board maintained a large portfolio, it was overwhelmingly composed of British national securities, deposits, and British treasury bills.



Our interest and maturity data support Narsey's hypothesis. The board increasingly held lower-interest, shorter-maturity securities over time. With its securities almost completely made up of British national securities, and its assets mostly composed of deposits and British treasury bills — both short-term securities for Britain — we conclude that the board's portfolio benefited Britain at some cost to Palestine and Transjordan.

East African Currency Board: Background

During World War I, British forces conquered Tanganyika from the Germans. At the time, Kenya and Uganda were British colonies, and Zanzibar was a British protectorate. Kenya and Zanzibar had local currency boards, which only issued notes, not coins. Kenyan notes circulated to some extent in Uganda. Britain established a currency board to unify currency in its East African colonies and to enable Uganda and Tanganyika to share in the profits of issue.

The British government established the East African Currency Board as a legal body in December 1919. There is some question over when the board began issuing currency. Although it may have done so by about 22 May 1920, it is certain that it did so by 31 July 1920, when it took over the assets and liabilities of the Kenyan currency board. The official currency, the East African shilling, was equal to the British shilling at a 1:1 rate. However, there was also an informal yet widely used unit, the East African pound – 20 East African shillings equaled 1 East African pound, making the East African pound equal to the pound sterling. The East African shilling was a decimal currency divided into 100 cents.

Up until 1961, the board was headquartered in London. So, the securities data in the balance sheet were expressed in British pounds, shillings (20 per pound), and pence (240 per pound). However, on 22 August 1960, the board moved its headquarters to Nairobi, Kenya. Starting in 1962, the securities data were reported in East African currency, so the securities data were divided into cents.

The member countries of the board on the date of its establishment were Kenya, Uganda, and Tanganyika. In 1936, Zanzibar joined, ending its separate currency board. After World War II, the board further expanded, with Aden (later part of Southern Yemen, and now part of Yemen) and British Somaliland (now northern Somalia) joining.⁷

The initial governing members of the currency board were all Britons: W.H. Mercer, Senior Crown Agent for the Colonies; W.C. Bottomley, of the Colonial Office; and P.H. Ezechiel, Secretary to the Crown Agents).

The first annual report for the currency board uses the same terms later used for the Palestine Currency Board to outline its investment policy: "Subject to the provisions of paragraph 20 of these Regulations, the Board may invest their funds in securities of the Government of any part of His Majesty's dominions or in such other manner as the Secretary of State may approve" (East African Currency Board annual report 1920-1921: 8). No law required the board to hold only British assets. Although the board did end up holding domestic securities and assets, their value was negligible compared to that of the British assets.

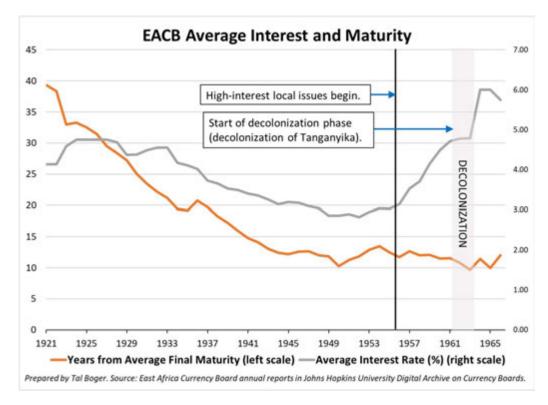
On 10 April 1969, the board ceased issuing currency. It was liquidated and its notes were demonetized on 31 December 1972. The board had ceased being the monetary authority of its member countries earlier, as the member countries had established their own central banks and become independent. British Somaliland gained independence on 26 June 1960 as part of Somalia; Tanganyika became independent on 9 December 1961; Uganda became independent in 1962; Kenya attained independence on 12 December 1963; Zanzibar gained independence in 1963; and Aden attained independence on 30 November.

East African Currency Board: Portfolio Analysis

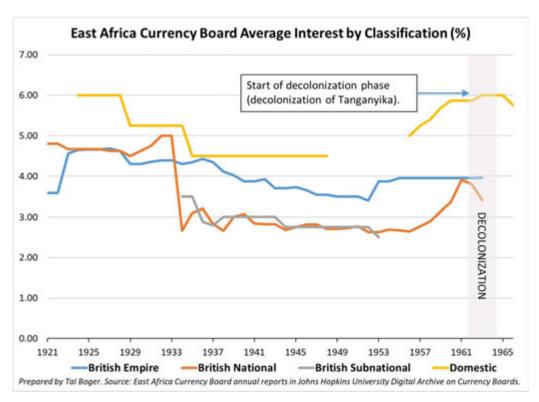
For East Africa, we reached similar conclusions as those for Palestine. The maturity and interest of the portfolio declined over time, and the board's assets and securities were invested such that they would benefit Britain. The first chart on the following page shows the average interest and years from average maturity for East Africa. Although the interest rose in the final years of the board, this was caused by holding more domestic issues (not British securities) and very short-term, high-interest British national securities.

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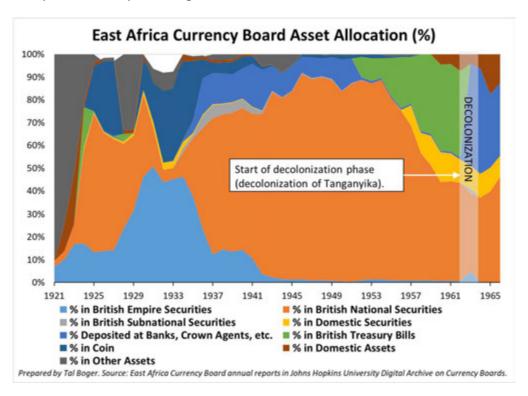
⁷ The East African Currency Board held securities issued by both Aden and Zanzibar after they became members of the board, so these securities are defined under our "domestic" classification. During World War II and for some time after the board also issued currency in Italian colonies in the region that were conquered by British forces.



The average interest rates on British Empire securities increased over time, while rates on British subnational and domestic securities remained relatively stable. The average interest of British national securities decreased until the board began holding high-interest conversion loans and treasury bonds. The chart below shows average interest rates by classification.



In the first years of the board, most of the board's overall assets were in coin and other assets.⁸ However, once the portfolio normalized, British national securities took over as the largest security class, and there was a large increase in deposits at banks, Crown Agents, etc. Near the decolonization dates of Tanganyika, Kenya, and Uganda, there was a sizable increase in British treasury bills. After the decolonization (essentially meaning that the board entered a liquidation phase)⁹ the board maintained a large portion of its assets in deposits. The graph below shows the asset composition as a percentage of total assets.¹⁰



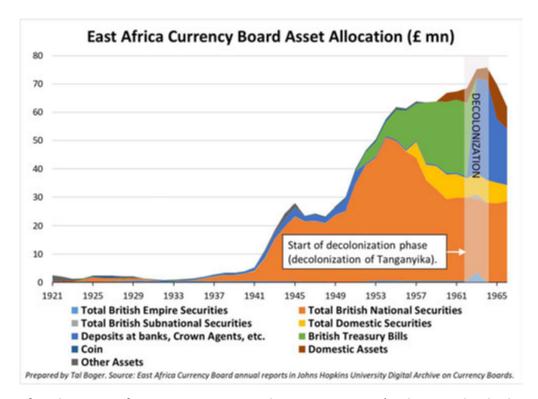
Like Palestine, during the period when the board managed a large portfolio, the portfolio was mostly composed of assets and securities for British benefit. Most notably, there were large holdings of British national securities, British treasury bills, and deposits. Both deposits and British treasury bills are short-term, low-interest assets.

Narsey further tests this claim; per his calculations, investments in the United Kingdom (excluding deposits and treasury bills) composed only 23 percent of securities in 1921. However, from 1946 on, they composed 99 percent of the portfolio (Narsey 2016: 277). The first graph on the following page shows the asset composition in shillings.

⁸ Other assets in this period are mostly Indian coin and the balance of silver coinage profit and loss account.

⁹ We describe this period after decolonization as the liquidation phase because after decolonization, most member countries established central banks. Also, the final year of securities data was 1966 (5 years after the first decolonization date).

¹⁰ The white space at the top between 1931 and 1933 is due to the fact that the percentage of other assets was negative. During those years, the board held a large portion of its assets in coin; the coin and the total securities alone equaled more than the total assets, giving us a negative value for other assets.



Our data for the East African Currency Board support Narsey's claim. Indeed, the average maturity and interest of the portfolio decreased over time (although, as discussed, the interest rate did rise after 1956 because of high-interest, short-term securities). Our portfolio analysis shows that British national securities, deposits, and treasury bills made up most of the portfolio almost every year. Therefore, we view the East African Currency Board as having benefited Britain at some expense to East Africa.

West African Currency Board: Background

Unlike the Palestine and East African currency boards, the West African Currency Board was not established because of territorial gain in World War I. The British established a currency board so that they could provide a local currency for their colonies in West Africa. They worried that British silver coins, which were then used in West Africa but whose legal tender was limited to £2 in the United Kingdom, could cause financial embarrassment for the British government if a large, sudden demand for their redemption arose in Africa. Separating West African currency from British currency was a way of quarantining demands for redemption so that they did not undermine the credibility of the pound sterling.

The board was founded before World War I began. Members were appointed on 21 November 1912, and weeks later, on 6 December 1912, the board was established. It began issuing currency on 26 June 1913. Its currency, the British West African pound, was equal to the pound sterling at a 1:1 rate. Like sterling, it was divided into shillings (20 per pound) and pence (240 per pound).

Initially, the board covered Gambia, the Gold Coast (now Ghana), Nigeria, and Sierra Leone. After World War I, Cameroons (now divided between Nigeria and Cameroon) and Togoland (now part of Ghana) became British mandates supervised by the League of Nations. Cameroons was administered as part of Nigeria, and Togoland as part of Ghana, so both used West African currency. Liberia also used West African currency, but it was not a member of the board and did not receive a share of the profits.

The West African Currency Board was also headed by three Britons: G.V. Fiddes, from the Colonial Office; W.H. Mercer, Senior Crown Agent for the Colonies; and L. Couper, General Manager of the Bank of British West Africa. Further, the board was headquartered in London, and Mercer and Couper were later members of the East African Currency Board.

The provisions governing investment were very general: "The Board will maintain in London against the silver coinage a reserve of gold and securities, hereafter referred to as the 'gold standard reserve'" (West Africa Currency Board annual report 1914: 7). There were no guidelines stating that the board could not hold a certain type of security, or that it must hold British securities.

In his exploration of the history of the West African Currency Board, Narsey also finds two other characteristics defining its investments: the local currency would be backed 110 percent by gold and sterling reserves in London, and 10 percent of the currency reserves would be kept as a Depreciation Fund to guard against the depreciation of the sterling securities (Narsey 2016: 146). These terms seem overly strict to him, especially the requirement of keeping 10 percent of currency reserves in a depreciation fund. He adduces these condition as evidence that Britain leveraged the colonial currency to help the sterling and British securities.

Because of the independence of the West African colonies, the board ceased issuing currency on 31 May 1968, and was fully liquidated on 31 October 1973. The Gold Coast became independent on 6 March 1957; Nigeria became independent on 1 October 1960; Sierra Leone gained independence on 27 April 1961; Gambia obtained independence on 18 February 1965. Each country established a national currency authority around the time of its independence.

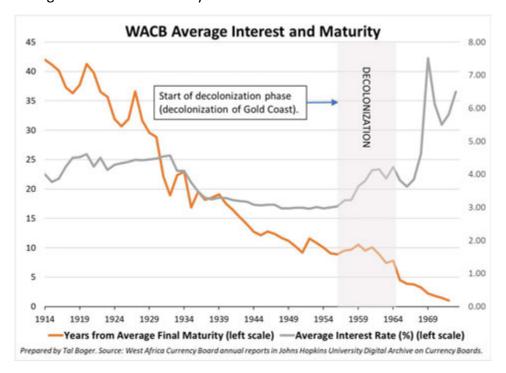
West African Currency Board: Portfolio Analysis

For our third and final currency board, our results were similar to the other two. The board over time shifted its portfolio to shorter-maturity, lower-interest securities for British benefit. Like East Africa, West Africa's average interest and maturity steadily declined until the final years of the board, at which point the interest rose dramatically.

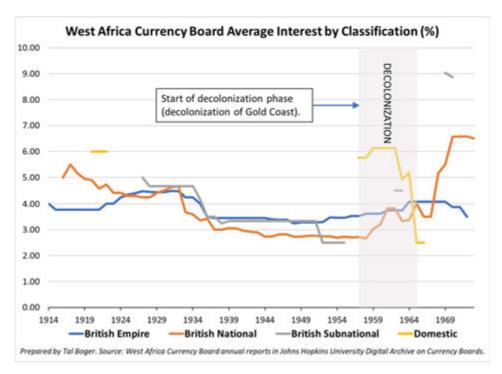
For West Africa, this rise in interest was mostly caused by high-interest Exchequer loans¹¹ and treasury stock (all of which had over 6 percent interest), and British subnational securities. In 1969 there was a group of loans called the "local authority bonds," composed of 11 subnational

¹¹ The Exchequer was the department of the British Treasury responsible for taxes and accounting.

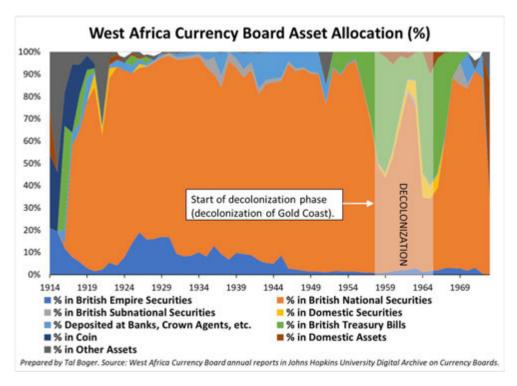
securities, with the lowest interest rate among them being 8.375 percent. The graph below shows the average interest and maturity.



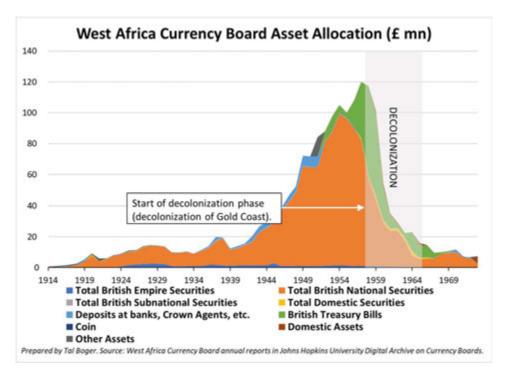
Examining the interest by classification helps explain the large rise in interest. Notice how after 1968, the average interest for British subnational securities is about 9 percent because of higher inflation. Also, in the middle of the decolonization phase, the average interest of British national securities begins to rise. The graph below shows the average interest by classification.



After the first years of the board, during which other assets made up most of the portfolio, the highest-valued assets were British treasury bills and deposits at banks, Crown Agents, etc. Along with the British assets, most of the portfolio's securities were British national. The graph below shows the asset composition as a percentage of total assets.



The asset composition in pounds further shows the large holding of these short-term assets, especially British treasury bills. The graph below shows the asset composition in pounds.

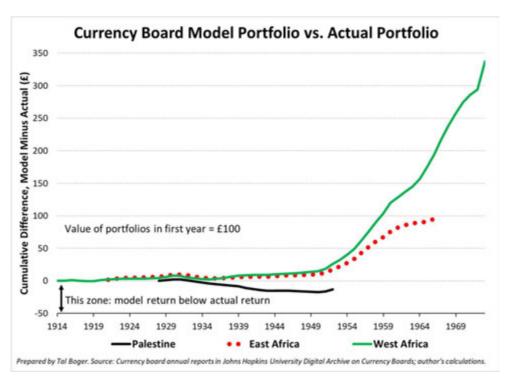


Our analysis of West Africa's currency board proves Narsey's claim correct. Furthermore, West Africa's currency board was a model to other British currency boards, so its shift of securities and assets for British benefit might well be seen in other boards too.

Conclusion

The results from our statistical analysis of three different British colonial currency boards (Palestine, East Africa, and West Africa) prove Wadan Narsey's (2016) claim correct. Each board shifted its assets to lower-yielding, shorter-maturity securities over time, which benefited Britain at some expense to the colonies. Even when the boards could invest in other securities, they continued to compose their portfolios and assets of British national securities and assets. Furthermore, initially no representatives from British colonies had a seat on the governing board; all three members on each board at its inception were in the British government. As such, we conclude that the policies of the currency boards enabled Britain to manipulate its colonies' monetary systems for its own benefit.

To examine the extent to which the portfolios benefitted Britain, we created a model portfolio. The model portfolio held 75 percent of its assets in Empire securities (we used Australian bonds for this), 15 percent national securities (10 year British Treasury bills), and 10 percent deposits. We compared this to the weighted interest of the actual portfolio. Even with deposits weighing down on the model portfolio – while they were not included in the real one – both East and West Africa's model portfolios outperformed their real portfolios. The graph below shows the difference in value of the model and real portfolios (with the initial year equal to £100 for both portfolios).



The portfolio policies of the currency boards this paper has examined were more concentrated in low-yielding British assets than they needed to be, benefiting Britain and reducing income for the currency boards and the colonial governments that belonged to them. As for the broader question of whether the monetary policy of the currency boards themselves was disadvantageous to the colonies, this is not the place to address it, but both a study by Schuler (1994) using simple statistical techniques, and a more sophisticated study by Wolf et al. (2008) indicate that currency board systems have tended to have less currency depreciation and lower average inflation rates than central banking system in emerging market countries. For instance, of the countries that belonged to the currency boards analyzed here, only one, Jordan, has a currency that has kept its value against the pound sterling; the Jordanian dinar is currently worth about £1.10. All the other currencies have depreciated against sterling by a factor of at least 10. In Nigeria, for instance, the factor of depreciation is about 230. In Israel it is more than 40,000, adjusting for the changes of currency since independence.

Great Britain set up currency boards in colonies aside from Palestine, East Africa, and West Africa. These included major colonies such as Malaya, Iraq, Burma, and the British Caribbean, and many smaller colonies, such as British Honduras, Malta, and Zanzibar. These currency boards could also be tested using our methods to see if they, too, show a pattern of asset holdings that benefited Britain at the expense of the colonies.

References

- Bank of England. "A Millennium of Macroeconomic data for the UK." Version 3, 30 April 2017. http://www.bankofengland.co.uk/research/Pages/datasets/default.aspx. Accessed 29 August 2017.
- Berlin, Howard M. *The Coins and Banknotes of Palestine Under the British Mandate, 1929-1947.*Jefferson, North Carolina: McFarland & Company, 2001.
- Butlin, M., Dixon, R., & Lloyd, P. (2014). Statistical Appendix: Selected data series, 1800–2010. In S. Ville & G. Withers (Eds.), *The Cambridge Economic History of Australia*. Cambridge: Cambridge University Press. doi:10.1017/CHO9781107445222.033
- Cain, P. J. "Gentlemanly Imperialism at Work: The Bank of England, Canada, and the Sterling Area, 1932-1936." *Economic History Review*, vol. 49, no. 2, 1996, pp. 336–357. *JSTOR*, www.jstor.org/stable/2597919.
- Clauson, G. L. M. "The British Colonial Currency System." *The Economic Journal*, vol. 54, no. 213, 1944, pp. 1–25. *JSTOR*, www.jstor.org/stable/2959827.
- Digital Archive on Currency Boards. Johns Hopkins University Institute for Applied Economics, Global Health, and the Study of Business Enterprise. http://sites.krieger.jhu.edu/iae/working-papers/studies-in-applied-economics/digital-archive-on-currency-boards/
- Drummond, Ian M. *Imperial Economic Policy 1917-1939.* Toronto: University of Toronto Press, 1974.
- East African Currency Board. 1920/1921-1971/1972. Report of the East African Currency Board for the Period Ending the 30th June, 1921 (1920/1921); Report of the East African Currency Board for the Year Ending [the] 30th June, ... (1921/1922-1960/1961); Report for the Year Ended 30th June ... (1961/1962-1970/1971); The Final Report of the East African Currency Board (1971/1972). London: Waterlow and Sons (1920/1921-1958/1959; from appearances also 1959/1960-1960/1961, although no place or publisher is listed); Nairobi: Government Printer, Kenya (1959/1960-1964/1965); Printing and Packaging Corporation (1965/1966-1970/1971); East African Currency Board (1971/1972). The text lists financial years under the calendar years they end.
- Hopkins, Anthony G. *An Economic History of West Africa.* New York: Columbia University Press, 1973.
- Hopkins, A. G. "The Creation of a Colonial Monetary System: The Origins of the West African Currency Board." *African Historical Studies*, vol. 3, no. 1, 1970, pp. 101–132. *JSTOR*, www.jstor.org/stable/216483.
- Katz, Samuel I. "Development and Stability in Central and West Africa: A Study in Colonial Monetary Institutions." *Social and Economic Studies*, vol. 5, no. 3, 1956, pp. 281–294. *JSTOR*, www.jstor.org/stable/27851072.
- Kratz, Joachim W. "The East African Currency Board." *Staff Papers (International Monetary Fund)*, vol. 13, no. 2, 1966, pp. 229–255. *JSTOR*, www.jstor.org/stable/3866425.
- Krozewski, Gerold. "Sterling, the 'Minor' Territories, and the End of Formal Empire, 1939-1958." *Economic History Review*, vol. 46, no. 2, 1993, pp. 239–265. *JSTOR*, www.jstor.org/stable/2598016.

- Krus, Nicholas, and Kurt Schuler. "Currency Board Financial Statements." Johns Hopkins University Institute for Applied Economics, Global Health, and the Study of Business Enterprise, Studies in Applied Economics No. 22 / Center for Financial Stability Paper in Financial History, December 2014. http://sites.krieger.jhu.edu/iae/files/2017/04/Krus-Schuler_Currency_Board_Financial_Statements_2014.12.21.pdf ; spreadsheets at krieger2.jhu.edu/iae/Nick-Krus Kurt-Schuler Worksheets.zip
- McPhee, Allan. *The Economic Revolution in British West Africa.* New York: Negro Universities Press, 1970. (Originally published London: G. Routledge & Sons, 1926.)
- Mwangi, Wambui. "Of Coins and Conquest: The East African Currency Board, the Rupee Crisis, and the Problem of Colonialism in the East African Protectorate." *Comparative Studies in Society and History*, vol. 43, no. 4, 2001, pp. 763–787. *JSTOR*, www.jstor.org/stable/2696669.
- Narsey, Wadan. *British Imperialism and the Making of Colonial Currency Systems*. Basingstoke, England: Palgrave Macmillan, 2016.
- Nathan, Robert R., et al. Palestine: Problem & Promise. New York: Public Affairs Press, 1946.
- Newlyn, W. T. "Separate Currencies in East Africa." *Transition*, no. 24, 1966, pp. 23–25. *JSTOR*, www.jstor.org/stable/2934506.
- Ofonagoro, Walter I. "From Traditional to British Currency in Southern Nigeria: Analysis of a Currency Revolution, 1880-1948." *Journal of Economic History*, vol. 39, no. 3, 1979, pp. 623–654. *JSTOR*, www.jstor.org/stable/2119685.
- Ottensooser, Robert David. *The Palestine Pound and the Israeli Pound*. Geneva: Librairie E. Droz, 1955.
- Palestine Currency Board. 1928-1952. Report of the Palestine Currency Board for the Period Ended 31st March, London: Waterlow and Sons. The text lists financial years under the calendar years they end.
- Reuveny, Jacob. "The Financial Liquidation of the Palestine Mandate." *Middle Eastern Studies*, vol. 27, no. 1, 1991, pp. 112–130. *JSTOR*, www.jstor.org/stable/4283418.
- Rowan, D.C. "The Origins of the West African Currency Board." *South African Journal of Economics*, vol. 22, no. 4, 01 January 1954, pp. 421-438. EBSCOhost, search.ebscohost.com/login.aspx?direct=true&db=awn&AN=259474&site=ehost-live&scope=site.
- Schuler, Kurt. *Should Developing Countries Have Central Banks?* London: Institute of Economic Affairs, 1996.
- West African Currency Board. 1913/1914-1972/1973. Report of the West African Currency Board for the Period Ended 30th June 1914 (1913/1914); Report of the West African Currency Board for the Year Ended 30th June ... (1914/1915-1971/1972); Final Report of the West African Currency Board for the Period 1st July, 1972 to 31st October, 1973 (1972/1973). London: Darling and Sons for His Majesty's Stationery Office (1913/1914-1917/1918); His Majesty's Stationery Office (1918/1919-1919/1920); Waterlow and Sons (1920/1921-1972/1973?; from 1965 onward, no publisher is listed, but the typography remains the same until 1970, suggesting that the publisher was also the same at least until then). The text lists financial years under the calendar years they end.
- Wolf, Holger C., Atish R. Ghosh, Helge Berger, and Anne-Marie Gulde. *Currency Boards in Retrospect and Prospect.* Cambridge, Massachusetts: MIT Press, 2008.