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**THE CURRENCY BOARD
MONETARY SYSTEM – THE CASE
OF MALTA (1939-1968)**

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



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The Currency Board Monetary System – The Case of Malta (1939-1968)

By Lily Zhu

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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 provide the first spreadsheet data series and legislative history of note issue by the Maltese Treasury, later Commissioners of Currency (1939-1968) and examine to what extent it operated like a currency board, using statistical tests based on its annual balance sheet and the currency note income account. The paper makes the annual balance sheet and currency note income account data available in machine-readable form for the first time, in a companion spreadsheet workbook, and likewise for the first time offers a thorough summary of legislation related to the note issue.

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Keywords: Malta, currency board.

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Introduction

Before its current era of central banking, Malta had a period of monopoly note issue by the Treasury to 1948 and then by Commissioners of Currency of Currency from 1949 to 1967. Some narrative accounts of the period exist, the most detailed being Joseph C. Sammut's book *Currency in Malta* (2001). In contrast, statistics of the period in the machine-readable form necessary for detailed quantitative analysis are not readily available. Here we start to remedy the situation with annual (1944-1949) and semiannual (1950-1968) statistics of the balance sheet of the Treasury note issue (later entrusted to the Commissioners of Currency). An analysis of the legislative history and the balance sheet shows that it worked like a currency board but seems to have been somewhat unorthodox by a certain index. This paper also raises the question whether some statistical measures are more applicable and useful than others in some circumstances.

We focus on determining the extent to which the Treasury/Commissioners of Currency operated like a currency board and do not address broader issues such as whether a different arrangement might have promoted economic growth better. The statistics (in a companion spreadsheet workbook) and perhaps also the legislative history (in Appendix A) that we provide should, however, be useful to any future analysis of the Maltese monetary system of the period.

Origins and Workings of the Government Note Issue

When the British administration took over Malta in 1797 it found a currency issued by the Knights of Malta and based on the "scudo," silver coins that were promptly exported and melted down. The administration declared various foreign coins, mainly Spanish and Sicilian dollars, as the effective currency (Caine, 1948–1949; Sammut, 2001).

The dominant part played in the local economy by the expenditure of naval pay made it particularly convenient to continue the use of U.K. coin and (after 1914) notes; a temporary issue of Maltese Treasury notes was made in 1914 but later withdrawn, and up to the outbreak of the Second World War Malta remained the only important British overseas possession without its own currency (Caine, 1948-1949: 46).

A major development regarding currency in Malta was precipitated by the rapidly deteriorating international political climate in the late 1930s. In June 1938 the Secretary of State for the Colonies advised the Governor that since difficulties might arise in regard to currency if war threatened or broke out, it would be essential that there should be, in all colonies, sufficient supplies of currency to meet the sudden temporary demand which might occur. As a result, an order for the supply of 240,000 two-shilling-sixpence, 300,000 ten-shilling and 500,000 one-pound notes was placed (Sammut, 2001: 165). The Paper Currency Ordinance, 1939 provided that currency notes issued under that Ordinance would be convertible into sterling notes at par.¹ However, the law did not

¹ The Paper Currency Ordinance, 1939 explicitly provided that "notes issued under this Ordinance should be convertible at the Treasury at sterling rates on days to be fixed by the Governor and notified in the Government Gazette." *Malta Government Gazette (Supplement)*, No.4, 13 September 1939. Recall that under the pounds-shilling-pence system of Britain and many of its colonies, £1 was equal to 20 shillings (s.) or 240 pence (d., an abbreviation for *denarius*, a Roman coin that was the ancestor to the penny).

provide explicitly for any particular reserve backing. Such convertibility was embodied in that law on the insistence of Dr. Enrico Mizzi, a Maltese politician and leader of the Maltese Nationalist Party, who wanted to ensure that the government would eventually withdraw those temporary notes and would exchange them for English currency without any loss of value. The Ordinance authorized the issue of £1, 10s., 5s., 2s. 6d. and 2s. denominations some of which had already been printed but had still to be supplemented by a signature and date (Sammut, 2001:167).

After the end of the war these small denomination notes became obsolete and fell into disuse mainly because the notes wore out too quickly, and within a few months were replaced by British coins whose supply was restored to normal levels (Sammut, 2001).

Local currency notes printed up to 1939 were only intended to be temporary issues in order to counteract the scarcity of metallic currency and were an anticipatory measure against difficulties that would eventually arise when coins could not readily be shipped to Malta from the United Kingdom during the war. Accordingly, on 21 January 1949, the Currency Notes Ordinance 1949 (No. I of 1949) was passed, replacing the 1939 ordinance. As a result, the issue of local paper currency was finally put on a permanent basis. The Maltese pound was set (or more accurately, confirmed) at par and became mutually exchangeable with the British sterling on demand.

The 1949 ordinance also provided for the setting up Commissioners of Currency (also known as the Currency Board), composed of the Financial Secretary, the Accountant General and a third person appointed by the Governor. The board became the sole body responsible for the issue of paper currency, and Bank of England as well as British Treasury notes ceased to be legal tender in Malta in 21 September 1949 (Sammut, 2001:171). However, the denominations and designs of notes had to be approved by the Secretary of State for the Colonies. Currency notes issued by the Currency Board were legal tender for the payment of any amount exceeding forty shillings (below that, coins could be used). The board took over the sterling balances and securities of the Note Security Fund (established in 1939) which at the time was invested wholly in United Kingdom or British Commonwealth securities. The board issued Maltese currency notes to the local banks and received an equivalent amount of sterling in exchange whenever the banks needed more local currency. Conversely, when the local banks had an excess of Maltese notes on hand, they transferred them to the Currency Board and received sterling in return. Thus whenever Maltese currency was supplied or withdrawn, the Currency Board's sterling balances in London (in its account with the Crown Agents for the Colonies, a body that performed financial and other services for colonial governments) rose or fell accordingly (Sammut, 2001: 171).

The Treasury only published brief summaries of the note issue in some of its annual reports on the finances of Malta, and Commissioners of Currency did not publish an annual report, giving only periodic summaries of its balance sheet. Official narrative detail about the note issue is therefore scarce.

The year 1968 marked another major development aiming to bridge the conspicuous institutional gaps within the local industrial sector and monetary system, namely the setting up of the Malta Development Corporation and the Central Bank of Malta (Sammut, 2001: 243). This originated from

a recommendation to establish a central bank submitted by United Nations mission in January 1964. It felt that there were serious gaps in Malta's financial infrastructure, particularly concerning advice to Government on financial and monetary matters ("History of Central Bank of Malta," n.d.). During 1960s, the low proportion of gold and external reserves held by the UK authorities in relation to the sterling balances held by Sterling Area members was severely undermining confidence in the pound sterling. Against this background of intense uncertainty in the international monetary system and the suggestion by United Nations missions, following independence in September 1964, the Maltese Government sought technical assistance from the Bank of England and from the International Monetary Fund to establish a central bank. Legislation was enacted on 11 November 1967 and five months later, on 17 April 1968, the Central Bank of Malta was formally established, with Dr. Philip Hogg, a Bank of England official, appointed as the first governor ("History of Central Bank of Malta," n.d.).

To What Extent Was the Treasury (later Commissioners of Currency) a Currency Board? A First Cut

The key characteristics of a currency board are a fixed exchange rate with an anchor currency; 100 percent net foreign reserves, at least at the margin, against the whole monetary base (by definition, net foreign assets + net domestic assets = monetary base); and full convertibility (no exchange controls) with the anchor currency (Hanke, 2002). To what extent did the Maltese monetary system actually have those characteristics from 1939 to 1967 before establishing the Central Bank?

The Maltese currency notes issued under the Paper Currency Ordinance of 1939 were fully backed by sterling deposits and securities held in the Note Security Fund in London. These funds were managed by the Crown Agents on behalf of the Treasury.

The arrangement was put on a sounder basis in January 1949 with the passing of the Currency Notes Ordinance, 1949 (Ordinance No. 1 of 1949). The ordinance specified that the Note Security Fund "should be invested in securities or guaranteed by the Government of any part of His Majesty's dominions or of any territory under His Majesty's protection which are quoted or dealt with on the London Stock Exchange or such securities as the Crown Agents, with the approval of the Secretary of State, may in their discretion select." By the same ordinance, the maximum ratio of external reserves to Maltese currency notes was fixed at 110%. This provision for a surplus of assets beyond the 100% level was intended as a safeguard against any sharp fall in the market value of securities (Sammut, 2001: 231).

The 1949 ordinance also provided for the mechanism for wholesale conversion of Maltese currency notes into sterling or vice versa on demand. Such conversion was established at the rate of one Maltese pound for one pound sterling, subject to such commission, not exceeding 0.5%, as might be prescribed. This statutory guarantee of convertibility at par was instrumental in instilling the public's confidence in the local currency.

Unlike the case of currency notes, no backing was required for UK coins in local circulation. Indeed, when such UK coins were in the hands of the Treasury as the local issuing authority, they qualified as part of the country's external reserves (Sammut, 2001: 232). Malta used British coins and issued

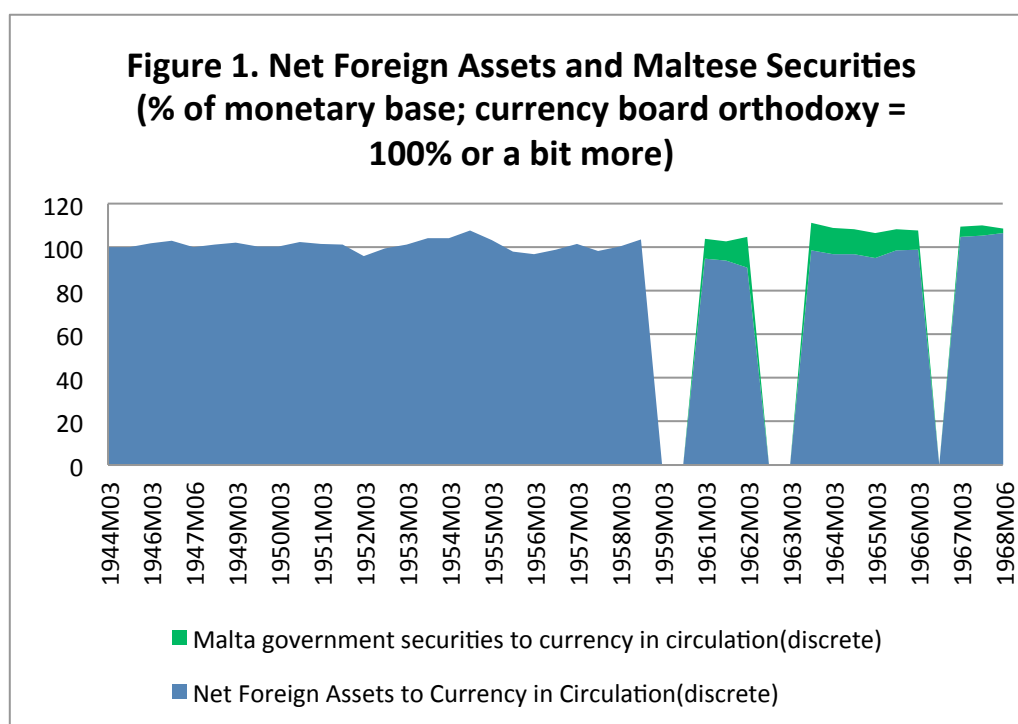
no local coins throughout the period studied here.

The Data and Our Tests

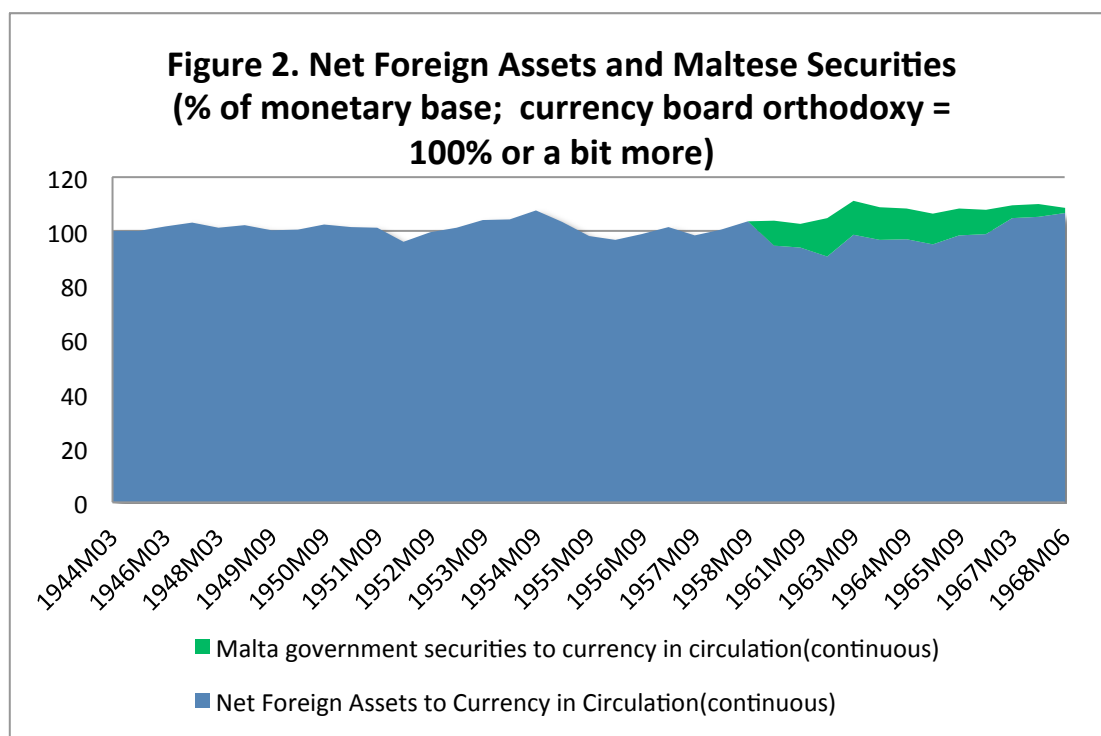
We transcribed annual or semiannual balance sheet data on the Treasury (later Commissioners of Currency) from 1944 to 1968. The main source was the *Malta Government Gazette*, including the supplements. The balance sheets are not available from 1939 to 1944 in the *Malta Government Gazette*, though they may be available in archival records that we lacked the ability to consult. It also seems that the *Gazette* did not publish data during certain later periods that appear as gaps in our data, or that the Library of Congress, our source of publications, is missing the relevant issues. We performed tests on the balance sheet items of the Treasury and Commissioners of Currency.

Test # 1: Domestic Assets, Foreign Assets, and the Monetary Base

We first measured total assets as a share of the monetary base, in Figure 1 and Figure 2. Figure 1 is a discrete version showing missing data in March and September 1959, March and September 1960, September 1962, March 1963 and September 1966. Figure 2 is a continuous version showing only the available data. As indicated before, by Ordinance No. 1 of 1949, the maximum ratio of external reserves to Maltese currency notes was fixed at 110%. From March 1944 to June 1968 (including March 1961 to June 1968, when Maltese securities were held by the currency board), net foreign assets ranged from approximately 90 to nearly 107 percent of currency in circulation, and total assets ranged from approximately 90 to nearly 112 percent of currency in circulation, remaining at or very near to the legal maximum, suggesting that during the period the Treasury (later Commissioners of currency) acted in a highly rule-like manner.

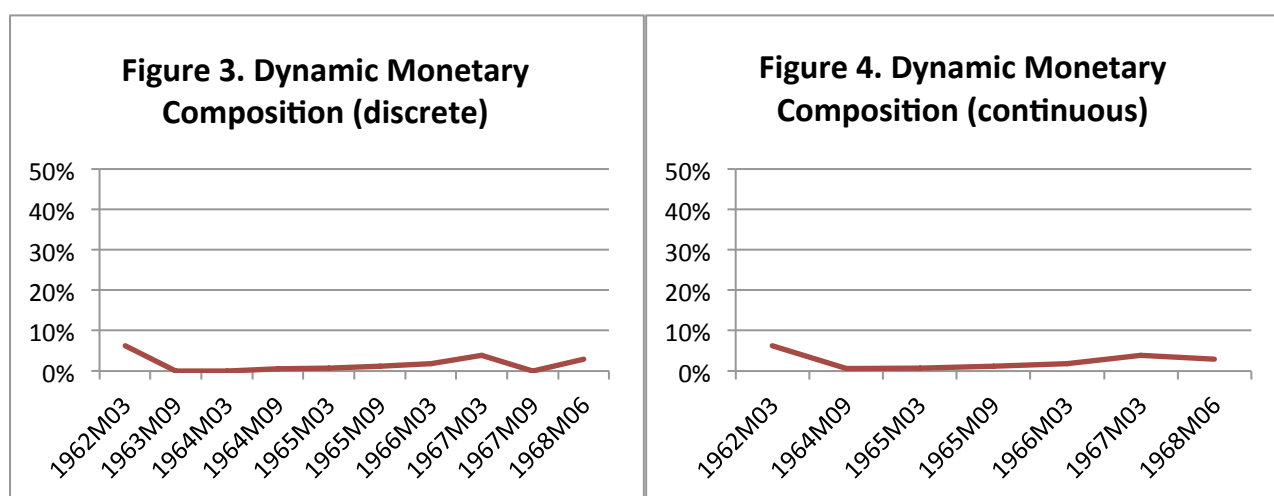


Main sources: *Malta Government Gazette*; calculations.



Main sources: Malta Government Gazette; calculations.

Figure 3 and Figure 4 give an idea of how big the absolute changes in net domestic assets (namely Malta government securities) were by comparing them to total liabilities (equal in this case to notes in circulation) a year earlier. Before 1960s, no Maltese securities were issued. Hence the graphs only show the net domestic assets to note in circulation beginning in March 1962, when the first year-over-year change of Malta Government Securities is available. Again, we have both figures providing discrete data showing missing data (Figure 3) and a continuous version (Figure 4). The graphs likewise bring out the placidity of the policy followed by Commissioners of Currency.

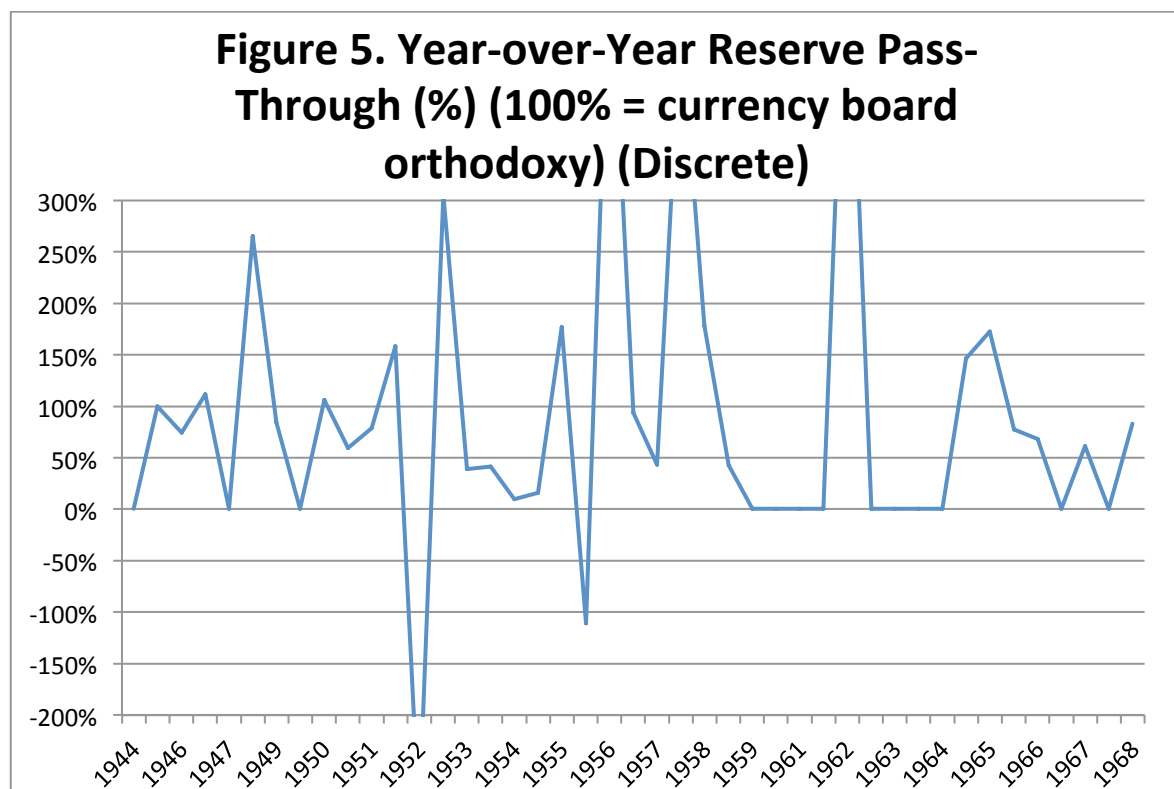


Main sources: Malta Government Gazette; calculations.

Test # 2: Reserve Pass-Through

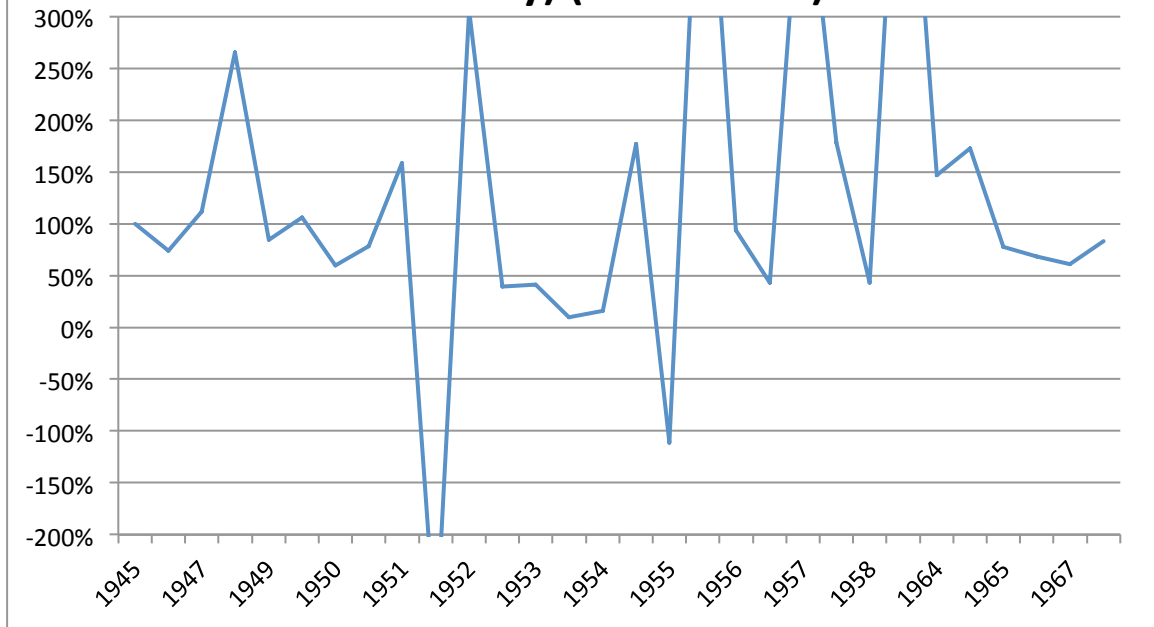
The historical facts and the data so far suggest that the Treasury and Commissioners of Currency may have been following currency board orthodoxy for the periods March 1944 to June 1968. Now we proceed to the most important single test, “reserve pass-through,” which measures year over-year change in the monetary base divided by year-over-year change in net foreign reserves. Measuring on a year-over-year basis tends to eliminate any seasonal effects and diminish the importance of one-time events such as extraordinary distributions or retentions of profit. For an orthodox currency board, reserve pass-through should typically be “close” to 100 percent—in practice, within the 80-100 percent range (Hanke, 2008). Again, we have both figures providing discrete data showing missing data (Figure 5) and a continuous version (Figure 6).

Reserve pass-through was volatile from March 1944 to June 1967, indicating that the currency board of Malta is somehow unorthodox. In order to test it further, we used adjusted reserve pass-through, by valuing securities at cost instead of its market value. The securities include both foreign securities and, in the last few years of the currency board's existence, Maltese securities. The balance sheet values securities at market price, which can differ from the cost at which the currency board purchased them. We used Maltese securities at cost to re-calculate the reserve pass-through for 1961-1968 when Maltese securities were issued, as is shown in Figure 7(discrete) and Figure 8(continuous). For 1961-1968, there is less fluctuation. The Malta monetary system looks more like currency board orthodoxy after this adjustment. However, the large fluctuation still suggests unorthodoxy.



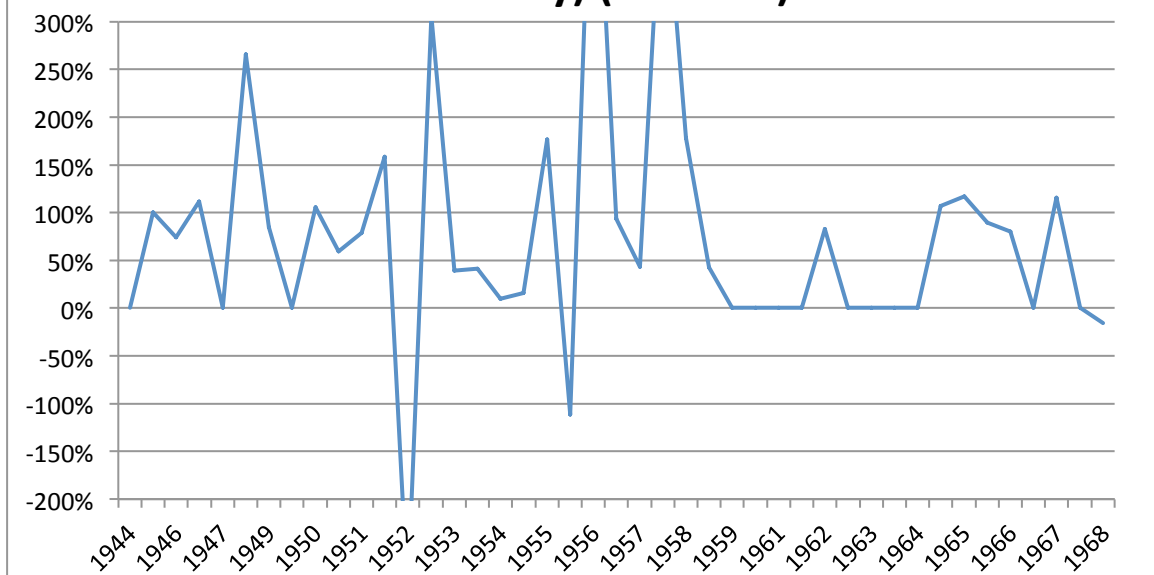
Main sources: Malta Government Gazette; calculations.

Figure 6. Year-over-Year Reserve Pass-Through (%) (100% = currency board orthodoxy) (Continuous)

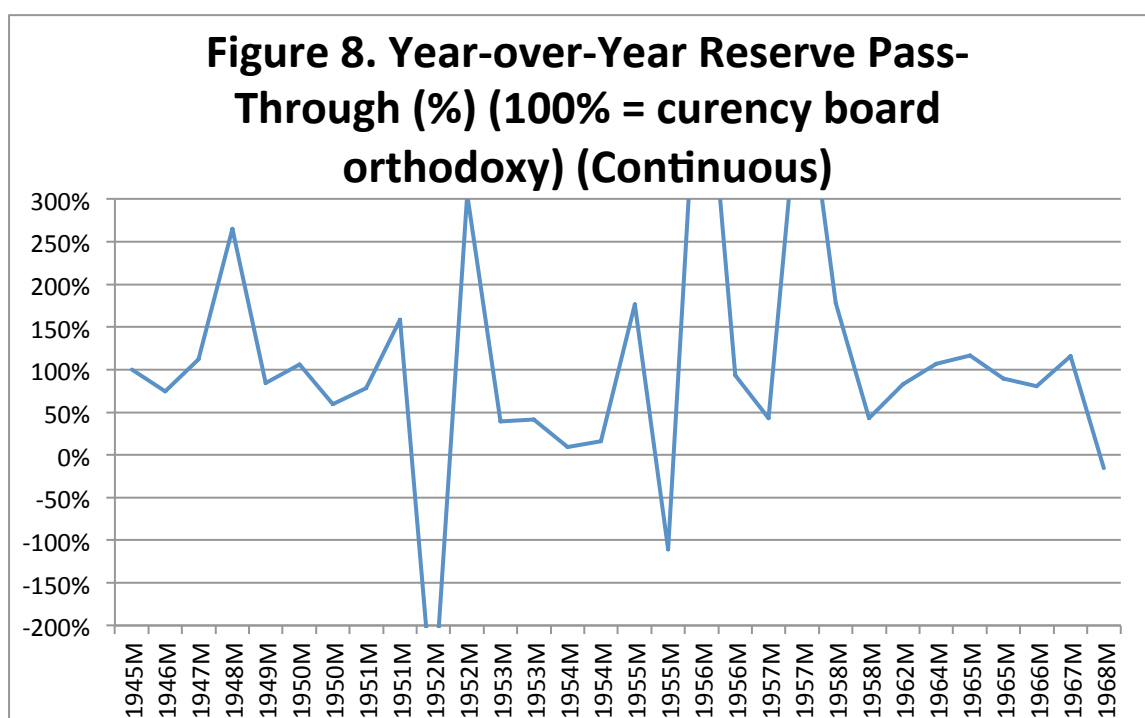


Main sources: Malta Government Gazette; calculations.

Figure 7. Year-over-Year Reserve Pass-Through (%) (100% = currency board orthodoxy) (Discrete)



Main sources: Malta Government Gazette; calculations.



Main sources: Malta Government Gazette; calculations.

Conclusion

Results seem to be mixed. First, the legal framework and some of the data tests make it seem orthodox. The Paper Currency Ordinance, 1939 provided that notes issued under this Ordinance should be convertible at the Treasury at sterling rates on days to be fixed by the Governor and notified in the Government Gazette. However the law did not provide explicitly for any particular reserve backing. By Currency Notes Ordinance, 1949, the maximum ratio of external reserves to Maltese currency notes was fixed at 110%. The 1949 ordinance also provided for the mechanism for wholesale conversion of Maltese currency notes into sterling or vice versa on demand. These legislations are consistent with the currency board orthodoxy.

Second, by statistical analysis, some indices suggest orthodoxy. Net foreign assets ranged from approximately 90 to nearly 107 percent of currency in circulation, and total assets ranged from approximately 90 to nearly 112 percent of currency in circulation between 1944 and 1968, remaining at or very near to the legal maximum, suggesting that during the period the Treasury (later Commissioners of currency) acted in a highly rule-like manner. Moreover, the flat dynamic monetary composition index also suggests orthodoxy.

However, the volatile reserve-pass through seem to indicate unorthodoxy, even after adjusted by using cost instead of market value of the Maltese government securities. Hence this is a question that remains to be fully resolved by further study of the data and the development of other ways to try to measure currency board orthodoxy statistically. On the one hand, it is possible that the Treasury/Commissioners of Currency were somewhat unorthodox. On the other hand, there might be circumstances in which reserve pass-through is not as good an indicator, though often it

works well.

Although this study gathered and digitized mass data from 1939 to 1968, there are several years when data are incomplete.² This might barely affect the significance of the statistical test, but possible future studies might be to gather the missing data and hence confirm the reliability of the current study.

Postscript: Companion Spreadsheet Workbook and Source Documents

The companion spreadsheet workbook to this paper contains the underlying data, calculations, and the original versions of the graphs. The workbook also contains some data not used in the paper, notably annual data of the income and expenditures of the Treasury (later Commissioners of Currency) and balance sheet data for the financial year ending 1968.

² For the year 1945, the interest earned on Note Security Fund is missing. Other missing years include 1959, 1960, 1962 and 1963. The International Monetary Fund's International Financial Statistics database has balance sheet data for part of Malta's currency board period, which we did not use because it is rounded to the nearest million pounds rather than giving exact amounts; it has no income-expenditure data.

Appendix A. Summary Legislative History of Maltese Note Issue, 1939-1968

(acts relating to the Treasury/Commissioners of Currency and selected other measures)

- Here is a brief discussion of Malta's World War I note issue. Malta had been using British currency. The war both interrupted shipments of currency and increased demand for currency. Malta, Ordinance No. 8, 12 August 1914, permitted the Maltese government to issued notes as an emergency measure. Sammut (2001: 161) offers a quotation suggestion that the notes were backed 100% by external assets. The government issued notes in denominations from 5 shillings to £10, equal to their sterling counterparts. Notes up to 10 shillings were redeemable in silver, while notes of higher denominations were redeemable in gold (Malta, Government Notice No. 149, 15 August 1914; No. 162, 25 August 1914; No. 183, 8 September 1914; No. 194, 17 September 1914; No. 209, 29 September 1914; No. 229, 19 October 1914). British notes continued to circulate. Malta, Ordinance No. 5, 10 June 1915, allowed notes of 10 shillings and £1 issued by the British Treasury to be legal tender; previously, only Bank of England notes, whose smallest denominations was £5, had been legal tender. The notes were made legal tender by a governor's proclamation of 16 June 1914. Ordinance No. 5 also permitted the governor to call in Maltese government notes for cancellation and redemption. Malta, Government Notice No. 110, 6 May 1915, stripped Maltese £1 notes of legal tender effective the following day. Malta, Government Notice No. 204, 23 September 1915, stripped other Maltese notes of legal tender effective 30 September 1915. Notes could continue to be redeemed at the government treasury (Malta, Government Notice No. 270, 25 November 1915). The total amount of Maltese notes in circulation never rose as high as £100,000, and by 22 June 1915 it had fallen to £1,533, according to the government treasurer (Malta, "Report of the Treasurer for 1915-15," *Malta Government Gazette*, Supplement No. 19, 17 September 1915: 121).
- Malta, Paper Currency Ordinance, No. 48, 13 September 1939: The government issued notes up to £1 as an emergency measure during the Second World War. The British government did not want to expand the circulation of British notes in Malta lest the island be captured by Axis forces. British notes already in Malta remained in circulation, though. It's provided that notes issued under this Ordinance should be convertible at the Treasury at sterling rates on days to be fixed by the Governor and notified in the Government Gazette. However the law did not provide explicitly for any particular reserve backing.
- Malta by a multitude of government notices authorized further issues of notes. Insofar as we have them, the notices and their dates are: No. 13, 12 January 1940; No. 215, 18 May 1940; No. 318, 24 June 1940; No. 353, 13 July 1940; No. 401, 2 August 1940; No. 137, 1 April 1941; No. 236, 16 May 1941; No. 250, 30 May 1941; No. 324, 4 July 1941; No. 399, 22 August 1941; No. 468, 17 October 1941; No. 563, 10 December 1941; No. 91, 20 February 1942; No. 146, 26 March 1942; No. 246, 27 May 1942; No. 319, 30 June 1942; No. 365, 16 July 1942; No. 412, 11 August 1942; No. 477, 12 September 1942; No. 526, 12 October 1942; No. 587, 9 November 1942; No. 615, 17 November 1942; No. 698, 24 December 1942; No. 69, 2 February 1943; No. 184, 13 April 1943; No. 272, 1 June 1943; No. 307, 18 June 1943; No. 352, 20 July 1943; No. 452, 2 October 1943; No. 496, 2 November 1943; No. 212, 30 May 1944; No. 308, 26 July 1944; No. 419, 3 October 1944; No. 451, 31 October 1944; No.

173, 13 April 1945; No. 283, 19 June 1945; No. 435, 11 September 1945; No. 461, 27 September 1945; No. 608, 11 December 1945; No. 630, 21 December 1945. The notices, in the *Malta Government Gazette*, authorize the additional issue or the exchange of notes of various denominations.

- Malta, Paper Currency (Amendment) Ordinance, No. 15, passed 22 September 1942, assented 25 September 1942: Reduced the lowest denomination of note from 2 shillings to 1 shilling.
- Malta, Currency Notes Ordinance, No. 1, 21 January 1949, brought into force by Governor's Proclamation No. 2, 8 March 1949: Established a currency board.
- Malta, Currency Notes Regulations, Government Notice No. 226, 12 April 1949: Regulations governing aspects of the currency board's operation.
- Malta, Currency Notes (Amendment) Regulations, Government Notice No. 780, 9 December 1949: Made a change regarding note serial numbers.
- Malta, Currency Notes (Amendment) Ordinance, No. 15, passed 7 August 1960, enacted 8 August 1960: Substituted the Financial Secretary and the Accountant General for the Legal Secretary and the Treasurer as the members of the board.
- Malta, Central Bank of Malta Act, No. 31, 11 November 1967; Notice No. 32, 17 April 1968; Notice No. 47, 7 June 1968: Established the Central Bank of Malta on 17 April 1968 to replace the currency board. The transfer of the Note Security Fund, making the central bank a monetary policy institution, became effective on 7 June 1968.

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