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New Zealand's early monetary history and the colonial bank of issue, 1840-1856

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Abstract. This paper explores New Zealand's early monetary history, examining its colonization and the events leading up to the establishment of the Colonial Bank of Issue, an early currency board. It describes the operations of the bank during its six-year stint as the colony's sole note issuer. An accompanying spreadsheet workbook contains the statistics of the Colonial Bank of Issue.

Keywords. New Zealand, Colonial Bank of Issue, Currency board, George Grey. **JEL.** E59, N17.

1. Introduction

Colonial Bank of Issue from 1850 to 1856. Although the bank resembles nothing close to New Zealand's current monetary system, it marks a unique time during New Zealand's early struggles as a British colony. This paper summarizes the evolution of the financial system during the colonization of New Zealand, including the colony's failed attempts at issuing paper money prior to the Bank of Issue. The bank was first proposed in 1847 during a desperate period when the colony had no real local note currency, only government debentures and foreign notes. The Colonial Bank of Issue opened its doors three years later in 1850 and began issuing its own notes in currency equal to the British pound. The six years of the bank's operations were plagued by low public confidence and poor management. However, the institution was the colony's first attempt at a national, government-issued currency and it proved to be an important part of New Zealand's history.

Following the summary of the Colonial Bank of Issue's history, the paper examines the statistics of the bank to document the bank's operations as well as its steady decline. The data come from government gazettes as well as from various New Zealand newspapers and parliamentary documents in the Papers Past Archive, a project of the National Library of New Zealand.

2. Colonization of New Zealand

The first recorded European to discover the archipelago known today as New Zealand was Abel Tasman on December 13, 1642. The Dutch explorer was in search of a southern continent in the hope of expanding trade prospects, but instead had an unpleasant interaction with the local people and quickly sailed away before even setting foot on land. The first inhabitants of New Zealand, the Māori, are believed to have migrated to the islands hundreds of years prior to the Europeans from present-day Hawaii (Swainson, 1859: 3-4). It wasn't until over 100 years after Tasman that Englishman James Cook landed on the shores of New Zealand on October 8, 1769 and became the first recorded European to set foot on the islands.

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The navigator had friendlier interactions with the locals and he, with his crew, was successful in mapping the country as well as cataloging plant and animal species (Wilson, 2005). From then on, the islands were on Britain's map.

Except for Christian missionaries and whalers, the land brought to light by James Cook was left relatively untouched by Europeans until 1839. British colonization was motivated by fear that if the British did not start inhabiting New Zealand, the French would soon get their foot in the door and claim the islands for themselves. In London, a joint stock company was formed, comprised of influential persons of all trades, with the purpose of colonizing New Zealand. The New Zealand Company purchased land from Māori on the southern point of the North Island, without regard to location or natural resources (Swainson, 1859: 74-79).

The creation of the New Zealand Company as well as their initial colonization of the islands prompted the British government to formally establish a colony in New Zealand. William Hobson, a British Navy captain and colonial official, was given the duty of securing a treaty with the Māori, formalizing British sovereignty over the land. Formal British colonization was neither a simple nor a popular undertaking. Negotiating with the zealous and occasionally violent Māori proved to be a difficult task and gaining public approval for British rule over European settlers was another challenge, as many had emigrated to escape formal European government (Swainson, 1859: 79-81).

Hobson gathered Māori chiefs at Waitangi in an attempt to negotiate British suzerainty over of the islands. After heated discussion, a deal was reached between Hobson and many influential chiefs where sovereignty of New Zealand was given to the British monarch as long as Māori lands and customs were preserved. Shortly after the Treaty of Waitangi, signed on February 6, 1840, Captain Hobson claimed both the North Island and South Island to be under the British rule (Swainson, 1859: 81-83).

3. Before banks

The first bankin New Zealand opened in 1840. Before banks started conducting business there were other ways of exchanging commodities. Prior to the arrival of Europeans, Māori tribes would conduct trade with whalers who frequented the waters off of northern New Zealand. As trade increased, merchants would leave representatives to reside in small settlements in New Zealand that served as outlets for exchange. As a result, coin from New South Wales, America, and Spain was introduced into the land, although most trade occurred through bartering and exchange of goods. Tobacco, guns, ammunition, and rum became popular goods of exchange between the two groups. Not only was this a way for Europeans to trade with Māoris, but it was also a common way for Europeans to exchange goods with each other before the establishment of banks, or if a bank was not located nearby (Bedford, 1916: 19-28).

Along with barter and trade, certain notes were used as currency prior to the advent of banking in the colony. Some prominent whalers paid their crew in promissory notes instead of goods. The notes were widely accepted among New Zealand store owners. Crews would use the notes in New Zealand to buy goods and the notes circulated across the land. At the end of the whaling season, the merchants who issued the notes would send ships packed with goods to New Zealand. The bearers of whaler notes in New Zealand would then purchase goods from the merchant ships, using them as a sort of currency in exchange for commodities. Not only merchants but also some well-known storekeepers issued notes of their own. In the New Zealand province of Otago, for instance, it was common for store owners to issue their own notes, since Otago, in the far south, was the last province to see a bank open. The economy of early New Zealand functioned entirely off of promissory notes and trade, with almost no use of metallic coin prior to the opening of the colony's first bank in 1840 (Bedford 1916: 24-28).

4. The Union Bank of Australia

The Union Bank of Australia first opened its doors on March 28, 1840 in Port Nicholson, as Wellington was then called. The bank was a London-based organization created to facilitate trade with Britain as well as local enterprise. The New Zealand Company, located at Port Nicholson, funded the bank as well as the Colony's first newspaper, The New Zealand Gazette. The first issue of the paper, published on September 6, 1839 featured a story on the Union Bank: "Bills on Sydney at 30 days sight will be issued at this office to the settlers... enabling the colonists to transmit their funds without deduction." The opening of New Zealand's first bank marked the beginning of notes being issued by a wellcapitalized financial institution in the colony. The directors of the New Zealand branch of the Union Bank were George Samuel Evans, Edward Betts Hooper, and George Hunter, who all were or would become prominent in New Zealand's colonial history. The deposits in the bank by 1841 were £9,381, while the debts due to the bank amounted to £14,928 (Bedford, 1916: 36-39). (The currency unit was the pound, equal to the British pound and not really distinct from it in law, as if New Zealand were simply a remote English county.)

In early 1848, the Union Bank opened a branch in Auckland (Bedford, 1915: 50). The first directors of the Auckland branch were John Campbell and J. J. Greenwood ("The Union Bank of Australia" n.d.). During the 1840s, Australia faced an economic depression. At a meeting in London, Union Bank officials described the cause of the depression: "prosperity had evidently induced an extension of speculative transactions and of commercial credit, which left the colonial community exposed to injurious operation of a reaction evidently hastened and increased by the effects of a deficient harvest" (Bedford 1916: 51). Although New Zealand did not suffer through a similar depression, the Union Bank shrankoperations at the Port Nicholson and Auckland branches. The New Zealand Spectator published a report from the annual meeting of proprietors of the bank on January 16, 1847: "It has been stated in a previous report that the branches in New Zealand have been almost reduced to small exchange agencies. They have, therefore, yielded scarcely any profits during the past year" ("Union Bank of Australia" 1847). The business of the bank's New Zealand branches wasso limited that the branches published no reports or statements regarding operations from June 1842 until 1857 (Bedford, 1916: 53).

5. The New Zealand banking company

Around the same time as the Union Bank opened at Port Nicholson, another bank in New Zealand was beginning to be formed. On May 2, 1840, The New Zealand Gazette published an article about a local bank set to open in Kororareka, a town located in the Bay of Islands. After a public meeting, it was clear that the need for a banking institution was strong. The New Zealand Banking Company was formed shortly after with a capital of £50,000 broken up into 5000 shares, with 2000 shares set aside for potential investors living in Australia. Henry Thompson, an employee of the bank, was sent to Australia to find investors for the bank. In New South Wales, hewas met with considerable demand for the shares. On September 1, 1840, the New Zealand Banking Company was launched at Kororareka (present-day Russell). The town, about 240 km north of Auckland, was the first permanent European settlement in New Zealand, and at the time was the capital of the colony. Upon opening, the capital and shares of the bank were increased to £100,000 and 10,000 respectively, with residents of New South Wales holding the most shares. The bank named James Clendon, Gilbert Mair, William Mayhew, Philo Perry, Daniel Pollen, John Scott, Henry Thompson, and Edward Williams as directors (Bedford, 1916:40-43).

The opening of the bank was praised by local newspapers, although some feared the directors of the bank would be easily manipulated by the government. The

duties of the bank were simple: offer the colony a paper currency, lend to businesses to improve the well-being of the colony, and allow settlers to store money in its vaults. Promissory notes were commonly circulated all the way to Auckland due to that town's lack of a bank. After the seat of government was moved from Kororareka to Auckland, however, the New Zealand Banking Company opened a small branch in the new capital on August 20, 1841. A petition for the bank to be moved solely to Auckland was discussed but ultimately was not approved since a majority of shareholders in the company lived in Kororareka and Sydney. As Auckland grew and developed into New Zealand's largest city, the New Zealand Banking Company chose to keep its focus on the declining town of Kororareka, ultimately contributing to its failure (Bedford, 1916: 43-50).

Between the Union Bank Branch and the New Zealand Banking Company, the former proved to be the superior institution. Although the New Zealand Banking Company for a time had greater local business, that was only due to its location in the populous town of Kororareka. The Union Bank was far more established, with large branches in Australia and capital of £500,000. Compared to the Union Bank, the New Zealand Banking Company had a customer base with much less confidence in the establishment. The Union Bank's business soon grew larger than the New Zealand Banking Company's. After the New Zealand Banking Company's choice to stay headquartered in Kororareka, the institution began a steady decline. Local newspapers reported that the bank ceased paying interest on current accounts and refused to service customers. Soon it was heard that its notes had been dishonored (gone unpaid) in New South Wales. Newspapers soon advised customers to take their money out of the New Zealand Banking Company. The banking company was plagued by the Australian depression, poor management, and low levels of capital. The final blow to the New Zealand Banking Company occurred in 1845, when a Māori attack destroyedKororareka, forcing the dying institution to cease operations (Bedford, 1916: 46-50).

5. Government debentures

New Zealand's early years as a British colony werefinancially as well as politically turbulent. There were multiple issuers of currency and merchants' IOUs that circulated like currency, but even the two largest issuers, the Union Bank of Australia and the New Zealand Banking Company, proved inadequate. The latter ultimately failed, while the former suffered from an economic depression that was afflicting Australia. In 1843, the colony was in desperate need of a reliable currency and the newly appointed Governor Robert Fitz Roy sought to accomplish just that. FitzRoy took office with the colonial government £15,000 in debt from Captain Hobson's term. After a loan from Sydney came through, FitzRoy issued debentures to raise government funds to settle debts. The debentures acted as a debt instrument that allowed FitzRoy, to raise money by printing promissory notes to lenders. After the debentures caused a run on the New Zealand Banking Company, FitzRoy met with the Legislative Council and officially declared the debentures legal tender officially on May 16, 1844 with an ordinance. The Council approved £15,000 worth of debentures to be issued with 5 percent interest per year secured from a recently approved £15,000 loan from Sydney ("Debentures" 1844). The settlers were in such dire need of a currency that the majority accepted the government debentures at face value, although the notes were speculative at best (Bedford, 1916: 58-65). The debentures seemed to work perfectly; the government needed money, and the colonists were desperate for a currency.

The British government thought differently, however. Under British imperial practice, colonies were not supposed to make significant changes in currency policy without imperial approval. The Secretary of State for War and the Colonies, Lord Stanley, wrote to Governor FitzRoy regarding the debentures: "measures should be taken at the earliest possible period for the redemption of the notes which you have issued the continued circulation of which renders hopeless any attempt to provide a sound circulating medium for the colony" (Bedford, 1916: 71). FitzRoy

disregarded Stanley's imperativeremarks and continued issuing debentures. For a while, the Union Bank refused to accept the debentures as legal currency. FitzRoy found himself in a difficult position: his debenture policy, which was approved by his Legislative Council, suffered from opposition by Britain. FitzRoy had already issued three times the number of debentures stated in his ordinance, with total debentures equaling £45,000. Once news got out of the over-issuance of debentures, his attempt at issuing a "currency" was officially a failure. The debentures were being exchanged at 20 percent below their face value. The colonists were furious and began a petition to remove FitzRoy from Office (Bedford, 1916: 70-76). The colonists were left with an irredeemable currency that was depreciating. Due to these shortcomings, Governor FitzRoy was replaced with Governor George Grey on November 18, 1845 (Bedford, 1916: 82-84). Grey was the governor of South Australia before being sent to New Zealand. The British government sent Grey with £15,000 to redeem the debentures issued by FitzRoy. Unfortunately, £45,000 worth of debentures needed to be redeemed. Grey redeemed one-fourth of the debentures in specie and exchanged the rest for irredeemable debentures (Matthews 2003: 43). From the start of his first term as Governor of New Zealand, Grey fought an uphill battle. After the failure of the New Zealand Company, the suspension of activities of the Union Bank of Australia, and Governor FitzRoy's failed debenture program, Grey and the colonists of New Zealand were in desperate need of a reliable monetary system.

6. Fundamentals of the colonial bank of issue

The New Zealand government's three previous failures at administering or encouraging an adequate form of monetary exchange prompted the British to advise the colony's next course of action. The new Secretary of State for War and the Colonies, Lord Grey (Henry George Grey, later Earl Grey, and no relation to George Grey), suggested the establishment of a government bank of issue early in 1847. After New Zealand's latest blunder (the debenture note crisis) the secretary wanted a stable monetary medium for the colony. Following the Crown's suggestions, Governor Grey signed the Paper Currency Ordinance into New Zealand law on October 16, 1847. The ordinance read, "for the purpose of supplying the Colony of New Zealand with a paper currency, there shall be established therein by the Government thereof a Bank of Issue, to be called the 'Colonial Bank of Issue'" ("Paper Currency" 1847: 1). The ordinance prohibited the issuing of notes by any private institution or individual other than the Union Bank. The bank was allowed to continue issuing its own notes; however, the number of notes issued was to be set by the governor. The ordinance stated that at an undetermined date the Union Bank would be forced to cease the issuance of its notes. This clause allowed a transition period for the Union Bank and the colony to move to the use of notes from the Colonial Bank of Issue ("Paper Currency" 1847: 1-5). The Paper Currency Ordinance was careful to mention that it would not be put into law until approved bythe Imperial government, in order to avoid a controversy similar to that accompanying Governor FitzRoy's issuance of debentures. Although the ordinance was passed in 1847, the Colonial Bank of Issue, which was the direct result of the ordinance, did not open its doors until the middle of 1850. It should be noted that communication between New Zealand and

The ultimate ideological origin of the Colonial Bank of Issue has yet to be traced satisfactorily. In the 1840s, currency policy was a matter of vigorous public debate in Britain. High-level government officials were therefore expected to have knowledge of the subject, and some made contributions to the debate. Both Greys knew Colonel Robert Torrens, who was involved with the colonization of South Australia and was also a noteworthy economist. Torrens was one of the main advocates of the so-called Currency Principle, which held that the issuance of paper currency should be regulated so that the margin, changes in the supply of paper currency reflected changes in its gold banking. The Currency Principle influenced British laws of 1844 and 1845 that imposed a version of it on note issue in Britain. It is likely that the British laws influenced the thinking of colonial administrators on colonial currency questions, and possible that Torrens and other members of what in retrospect came to be called the Currency School had convinced one or both Greys before then.

London was only by sailing ship at the time, so it took months to send ordinances and to receive imperial approval or disapproval for them.

The ordinance established two branches of the Colonial Bank of Issue: one located at Wellington, and the other at Auckland, the two biggest towns in the colony. One manager per branch was appointed by the governor, with no limits to each manager's term. The operations of the bank were restricted to only the issue of notes in exchange for cash, and the return of notes in exchange for cash or specie ("Paper Currency" 1847: 1-2). Cash referred to the British currency. This implies that 1 New Zealand pound was equivalent to 1 pound sterling. With notes only being issued in exchange for cash, the bank backed all of its notes with an equal amount of specie or cash, again, another requirement of the ordinance to prevent a situation similar to FitzRoy's £45,000 worth of debenturesbeing backed by only £15,000. The ordinance stated that no notes issued by the bank wereto be for less than £1 and no notes would be issued in pence or shillings. Notes exchanged for cash at the bank were required to be charged to the bank's revenue account. Certain amounts of cash received in exchange for notes under the ordinance were required to be invested at the discretion of the bank manager and Governor. The interest built up from investments was required to be put towards paying off expenses of the bank. Managers of the Colonial Bank were required to keep records of statistics of the banks, such as notes in circulation and coin held by the branch. From their books, managers of the branches were to send weekly statements to the Colonial Treasurer, publish monthly statements in the Government Gazette, as well as yearly reports on the progress of the Bank of Issue. Failure to publish reports as well as exchange notes for cash or cash for notes would result in a fine of up to £500 to the manager –an amount that, as we will see, exceeded his annual salary ("Paper Currency" 1847: 1-5).

7. Public opinion of the bank of issue

Both branches, at Wellington and Auckland, opened on June 3, 1850. The managers of the Auckland branch and Wellington branch, appointed by the governor, were Colonel Hulme and J.G. Thomas respectively (*Wellington Independent* 1850). Since the establishment of the bank (and even before the bank officially opened its doors), the institution faced criticism from various news sources. New Zealand newspapers questioned the legitimacy of the bank and the willingness of the public to accept another government currency after Governor FitzRoy's debenture debacle. One article in particular titled "Grey's Bubble Banking Company," published by the Auckland *Daily Southern Cross* on Friday May 31, 1850, just days before the bank's opening, stated:

From the universal disapprobation with which the attempt on the part of the Government to interfere with the currency and the commercial operations of private banking companies was regarded, and so strongly expressed at the time when the "Currency Ordinance" was before the Council... we had hoped that its authors and abettors had become fully satisfied of the absurdity of the attempt itself ("Grey's Bubble Banking Company" 1850).

The article further raised specific grievances such as the lack of need for another bank, the Union Bank being satisfactory. The author of the article was a firm believer that banking should be left to private institutions. The article questioned the public's acceptance of a new government note and the possibility of the bank becoming a profitless waste of colonial funds. It was one of many that offered strong criticism of the new institution.

Opinions on the Colonial Bank of Issue were not all negative however, as an article in the *Wellington Independent*, published on July 20, 1850, proves: "A Government paper currency is greatly preferable to the currency of private individuals... There is considerable profit, as is well known, attending the issue of paper money, which is generally agreed should be a national, and not an individual gain." The article did express concern, but as long as managers of the banks were not corrupted by the ease of printing money (and thus accumulating wealth), then

the establishment of a Bank of Issue was warranted. However, there was little faith that a greedy government was capable of investing the profits of issuing paper money in a way benefiting the colonists ("Lieutenant Grey" 1850). Newspapers of the time contained both positive and critical reviews of the Colonial Bank of Issue. Most, though, expressed low confidence in the success of the institution as well as the New Zealand Government itself.

8. Amendment to the paper currency ordinance

On July 31, 1851, an amendment to the Paper Currency Ordinance was passed by Governor Grey's government. The amendment repealed some clauses of the Paper Currency Ordinance, including a statement leaving the amount of cash in the vaults up to the discretion of each branch's manager and the remainder invested. The new act provided a more detailed course of action for dealing with cash received from the exchange of bank notes. After the passage of this most recent ordinance, one-third of the cash received in exchange for government notes was to be held in the banks' vaults while the other two-thirds were to be invested in public securities of Great Britain. The second clause of the amendment ordinance was directed towards the Union Bank of Australia's New Zealand offices. This section required the Union Bank to halt its issuing of notes on October 1, 1852, when the amendment officially became law. This amendment provided further detail to the ordinance of 1847. After over a year in operation, the branches of the Colonial Bank of Issue at Auckland and Wellington found that investing in British securities proved to be the most reliable and constant source of interest, making the banks able to pay off their costs of operation ("Paper Currency Amendment" 1851).

9. Parliamentary report

Following several condemning statements about the Bank of Issue by members of the Auckland Provincial Council, Mr. A. O'Neill and Mr. J. O'Neill, in late 1853, it came to the attention of the legislature that the bank's performance should be looked into ("Auckland Provincial Council" 1853). A committee was created with the purpose of determining "as to whether it be desirable to maintain the present Bank of Issue, or to make any and what alterations therein, or to substitute any and what Government Bank in lieu thereof' ("Report of Select Committee on Bank of Issue" 1854: 1). The group given this duty, the Select Committee on Bank of Issue, reported to the New Zealand House of Representatives on July 28, 1854. Their report stated that the Auckland Bank was much worse off than the Wellington Bank. In Auckland, transactions for the month of June 1853 totaled £6058. Of that number, only £355 of transactions were conducted by the general public, while the remaining £5703 of transactions were completed by the Union Bank and Colonial Treasurer. Wellington, on the other hand, had a much greater public participation and trust in the bank. Notesin circulation at Wellington were nearly five times as much as Auckland ("Report of Select Committee on Bank of Issue" 1854: 2).

Overall, the report termed the Bank a failure. The reasons were the lack of profits, the experimental nature of the bank being unfit for such a young colony, the amount of currency in circulation being limited to the amount of gold in the colony, and the low circulation and unexpansive nature of the Colonial Bank's notes. The committee recommended that the Colonial Bank of Issue be closed. The report was the first formal statement regarding the bank's lackluster performance and serves as a marker for the beginning of the end of the bank. Following the report, the Colonial Bank of Issue began a steady decline until it was ultimately put to rest in July of 1856 ("Report of Select Committee on Bank of Issue" 1854: 2-3).

10. Operationand statistics

10. 1. Expenses and revenue

Public opinion of the bank was poor when the bank first began conducting business, and it remained poor as more and more statistics of the bank's performance became public knowledge. After the bank's first six months in operation, the expenses from the Auckland branch totaled roughly £202, consequently the bank brought no profits to the colony. Similar poor results were predicted for the Wellington Branch (Wellington Independent 1851). Contributing to the criticism was the circumstance that bank managers and the Colonial Treasurer failed to publish a report on the annual statistics of the bank by March 1, 1851 ("A Governor Wanted" 1851). As time progressed, however, the bank did producesome positive numbers. Initially the profits of the Bank of Issue werenil, but in a report published December 2, 1853, the bank surprised its critics. For 1853, the bank brought in £490 of revenue, to produce a profit of £170. The profitswere said to have come only from the Wellington Branch, the more successful of the two. Despite the profit, criticism continued. A story in the Daily Southern Cross dated December 2, 1853 calls the profit a farce, believing that it was the work of the Colonial Treasurer exchanging the government's gold for notes in order for the bank to appear profitable ("Colonial Bank of Issue" 1853).

The Auckland branch of the Colonial Bank of Issue was a millstone. From the start, Auckland underperformed and contributed to negative press of the bank. A perfect example of this is in a report published by the Select Committee on Bank of Issue on July 28, 1854.

| The following | statement shews | the comparative wor | king of the two | branches of the |
|--|-----------------|---------------------|-----------------|-----------------|
| Bank of Issue at | Auckland and V | Vellington from the | r commenceme | ent to the 30th |
| June, 1854. | | | | |
| | Present Issues. | Total Expenses. | Total Profit | |
| Auckland | 7481 | 850 | 105 | Loss £745 |
| Wellington | 32842 | 620 | 860 | Gain £240 |
| The following shews the last year's working— | | | | |
| Annual Expenses Annual Profit. | | | | |
| Auckland, ab | | 30 | Loss | £171 per annum. |
| Wellington, a | bout 200 | 390 | Gain | £190 do. do. |
| | | | | |
| | | 420 | | |
| | | | JAMES | KELHAM, |
| | | | | Chairman. |
| House of Represe | ntatives, | | | |
| Auckland, 28 | th July, 1854. | | | |

Figure 1. Excerpt from a legislative report showing the profits of the two branches of the Colonial Bank of Issue("Report of Select Committee on Bank of Issue" 1854: 3).

From commencement to June 30, 1854, the Auckland branch's net loss was more than three times larger than Wellington's net gain. The poor performance of the Auckland branch erased any profits of the Wellington branch. This is a common trend with all statistics of the Bank of Issue. Wellington had a larger number of notes in circulation, coin in chest, and investments as well. At the time of this publication, in 1854, the population of the Province of Auckland was 11,919 while the Province of Wellingtonhad only 6,231 European inhabitants ("Blue Book of Statistics" 1854). Auckland was also the seat of government in New Zealand during the Colonial Bank's existence. Despite Auckland being the center of government and supporting a much larger population, the Auckland branch of the Colonial Bank of Issue lagged compared to Wellington. The Auckland branch suffered from a customer base with low confidence in the bank: "The public of Auckland never appear to have been favorably disposed towards the circulation of this paper, or inclined to use it generally for their trading purposes, preferring the gold coinage." ("Report of Select Committee on Bank of Issue" 1854: 2). At this point in time, Auckland's two main customers were the Union Bank and the Colonial Treasurer, with almost no transactions from the general public.

² Starting in 1853, New Zealand was divided up into six provinces: New Plymouth, Auckland, and Wellington on the North Island, and Nelson, Canterbury, and Otago on the South Island.

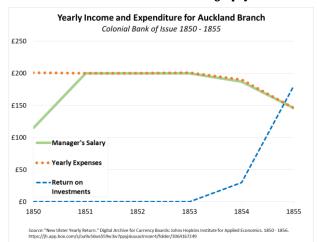


Figure 2. Yearly income and expenditures for the Auckland branch of the Colonial Bank of Issue from 1850 to 1855, from statements in the New Ulster Government Gazette.

In the graph, it is important to see that after the first year of operation, when were certain costs of setting up, the only expenses for the Auckland branch consisted of the manager's salary. In the final years of the bank's existence, expenses declined while return on investments increased. I only found data for the Auckland branch.

10.2. Salaries

Employee Salaries

The salaries of employees of the Colonial Bank of Issue were as follows:

Auckland Manager

1852 Salary: £200

1855 Salary: £150

Wellington Manager

1852 Salary: £300

1855 Salary: £150

Wellington Bank Clerk

1851 Salary: £125 1855 Salary: £170

Figure 3. Salaries for positions at New Zealand's Colonial Bank of Issue. Salaries are reported for two different years to show the change over the course of the bank's operations.

Sources: Papers Past: The National Library of New Zealand 1850 – 1856. Web. 7 July 2017. [Retrieved from].

10.3 Investments

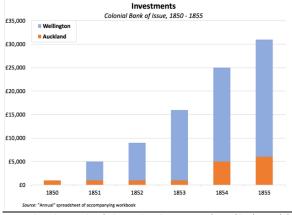


Figure 4. Investments by the Colonial Bank of Issue, primarily in British public securities.

Following the Amendment to the Paper Currency Ordinance in 1851, both branches of the Colonial Bank of Issue invested two-thirds of their cash on hand in British public securities. In the Select Committee on Bank of Issue's report, it was stated that Auckland had invested £1,000 while Wellington had invested £15,000 in British public funds. Wellington was reported to soon increase its investment to £20,000, meaning that the investment by both branches amounted to £21,000 and the annual interest earned was close to £600 per year ("Report of Select Committee on Bank of Issue" 1854: 2). Late in 1854, the Auckland branch increased its investments to £5,000, and to £6,000 in 1855.

Note Circulation and Coin in Chest: General Remarks

During the Colonial Bank of Issue's tenure, the managers of each bank were required to publish monthly statistics in the Government Gazette ("Paper Currency" 1847). I was able to view some issues of the *Government Gazette*, and New Zealand newspapers often published the statistics. The combination of these sources provided data for this paper. The numbers published by the bank on a monthly basis included: the number of government notes in circulation (divided up into notes £5 and up, and under £5) and the amount of coin held in each bank's vault the same day (divided up into gold and silver). The graphs below show the number of notes in circulation and coin held for each branch of the bank, as well as for both branches combined.

Auckland Branch

The Auckland branch of the Bank of Issue started with £1309 worth of notes in circulation and £1309 worth of gold and silver coins in its vault at the end of its first month of operation on June 29, 1850. Notes in circulation generally increased over time, while the growth of coin in chest was not as strong. For the first four of its six years in business, the bank's coin closely followed the number of notes in circulation. According to the Paper Currency Ordinance of 1847, the bank was only allowed to issue notes in exchange for coin or cash and the bank had to surrender specie or cash on demand when presented with a bank note. Following this principle, it makes sense why the notes and coins moved together until late 1854. It should be noted that coin did not exactly equal notes in circulation since paper currency was also accepted for the exchange of bank notes, and a majority of the bank's cash was tied up in British investments. In late 1854 a sharp drop in the amount of coins in Auckland's chest occurred. Around that time the Report by the Select Committee on Bank of Issue was published, and the bank began its decline. The sharp drop in coins could show the increased number of individuals exchanging bank notes for specie, causing the amount of coins in the bank's chest to drop. However, around this time, the Auckland branch increased investments by £4,000, which would explain the almost identical £4,000 drop in coin from the bank's vault.

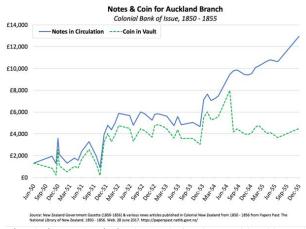


Figure 5. Notes in circulation and coin in the vault for the Auckland branch of the Colonial Bank of Issue from June 29, 1850 to December 31, 1855.

Wellington Branch

The Bank at Wellington had a much higher volume of notes and coin compared to the Auckland branch. With Auckland being the larger town, the increased volume in Wellington signals higher confidence in the Wellington Bank by its customers. Notes in circulation at Wellington ranged from £2,403 after its first month of business and peaked at £40,007 on February 23, 1856. Coin in the bank's chest ranged from £907 to its height of £17,566 on January 6, 1855 as well. Both statistics showed upward trends in growth, with notes in circulation increasing at a higher rate. The Wellington branch had a much smaller proportion of coin to notes than Auckland, although it should be noted that Wellington also had much more invested in British securities. Both notes in circulation and coin saw a sharp increase in early 1854, while coin in the bank slightly decreased shortly after. Both Wellington and Auckland's decreasesin coin started midway through 1854. As previously stated, this could have been caused by a large number of settlers exchanging notes for specie on demand following the Select Committee on Bank of Issue's report recommending the shutdown of the bank around that time. However, it is also likely that the decrease in coin corresponds to an increase in investments by the Wellington branch.

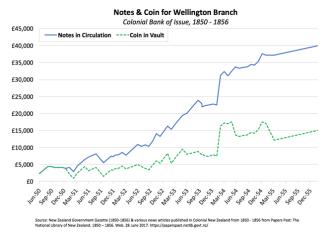


Figure 6. Notes in circulation and coin in the vault for the Wellington branch of the Colonial Bank of Issue from June 29, 1850 to February 23, 1856.

Both Branches Combined

This graph reflects the two previous graphs of each branch of the Colonial Bank of Issue, although statistics for the combined Bank of Issue run a few months longer than the monthly reports for the separate branches of the bank. The notes in circulation from the Bank of Issue ranged from a low of £3,712 after the bank's first month of operations to £54,085 in May of 1856. The banks coin peaked on April 1, 1854 at £22,655, after reaching a low of £1,433 in 1851. Like its two branches, the number of notes in circulation increased over time—much different from the bank's coin reserves. Coin in the bank peaked in April 1854 and growth of the supply stagnated after asmall drop and recovery in mid-1854. The last year of the bank's existence shows a slump in both notes and coin, as the inevitable became clear and notes were promptly exchanged on demand for the bank's coin reserves. The graph on page 16 covers the entire history of the bank from the first published statement in June 1850 to its last in July 1856.

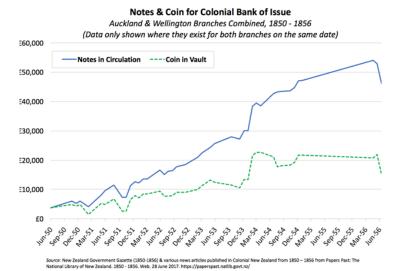


Figure 7. Notes in circulation and coin in the vault for both the Auckland and Wellington branches from June 29, 1850 until the last monthly report on July 12, 1856.

11. Orthodoxy tests for the colonial bank of issue

The Colonial Bank of Issue was intended to be a currency board. Currency boards are anchored to a foreign currency or commodity and have a fixed exchange rate with the anchor currency. Notes and coins issued by a currency board are convertible on demand into the anchor currency. Typical currency boards have foreign reserves equal to or slightly greater than their monetary liabilities. Foreign reserves are commonly held in the form of interest-earning securities from the anchor country. Currency boards essentially allow a country to operate with minimal monetary policy effort, making them a smart choice for developing nations, where institutions of governance are often weak (Hanke & Schuler 1994/2015: 75-76).

Three tests are performed on the Colonial Bank of Issue to determine the orthodoxy of the currency board. Data for the tests came from issues of the *Government Gazette* as well as various newspaper articles from the National Library of New Zealand's Papers Past archive. For some months, I inferred items on the balance sheet from the fact that assets must equal liabilities and a knowledge of the missing items in other months. In particular, the Colonial Bank of Issue only held British securities in multiples of £1,000 for all months that have data, and holdings only increased, neverdecreased so for the missing months I assumed that the holdings remained level or increased in round amounts. It was possible to fill in many months, though some still have no data at all. The accompanying spreadsheet workbook gives the details.

11.1. Test one: Domestic asset and foreign asset ratios

The first test for currency board orthodoxy focuses on domestic and foreign asset ratios –specifically, the ratio of foreign assets to total assets as well as foreign assets to the monetary base. These calculations were also performed on domestic assets. The foreign assets of the Colonial Bank of Issue consisted of all coin held by the bank as well as investments in British securities. The Colonial Bank of Issue held British coins, which are counted as foreign assets since like the British securities the bank held, they were issued by a non-New Zealand body.

Orthodox currency boards typically have net foreign asset (NFA) ratios close to 100 percent, since foreign reserves are needed for convertibility of home currency to anchor currency on demand. The data show that except in 1855, when figures for the larger Wellington branch are not available, net foreign assets as a share of total assets and of the monetary base were close to 100 percent. The comparatively low ratio for the Auckland branch in 1855 is the result of its holdings of notes from the

Wellington branch, which are domestic assets but which on a consolidated basis would cancel out if Wellington data were available.

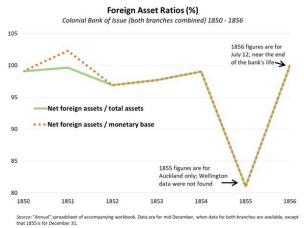


Figure 8. Net foreign assets as a share of total assets and net foreign assets as a share of the monetary base for the combined branches from 1850 – 1856 (except Auckland only for 1855).

11.2. Test two: Reserve pass-through

The reserve pass-through test measures the year-over-year change in the monetary base divided by the year-over-year change in net foreign reserves. The monetary base is notes in circulation in mid-December of each year, the date closest to year end for which I was able to find statements for both branches of the bank. Net foreign reserves are coin held by the bank plus the amount of money invested by the Colonial Bank of Issue in British securities.

Orthodox currency boards in principle should have reserve ratios near 100 percent, although because of various accounting factors, ratiosbetween 80 to 120 percentare good enough to show orthodoxy (Hanke, 2008: 280). The ratio for the Colonial Bank of Issue is close to 100 percent from 1850 to 1854, when data are available for both branches. In 1855, when data are available only for Auckland, the ratio drops sharply. Data for July 1856 are again for both branches combined, but the ratio is even lower and could be related to the liquidation of the bank. It seems reasonable to infer that by this measure the Colonial Bank of Issue was orthodox at least for most of its existence and possibly at the end as well.

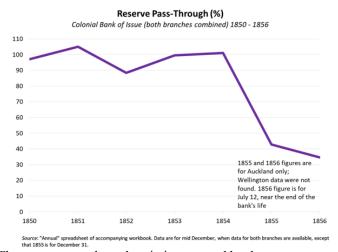


Figure 9. The reserve pass-through ratio is measured by the year over year change in monetary base divided by the year over year change in net foreign reserves. The figure for 1850 is the change from late June, the first data, to mid-December. Figures for 1855 and 1856 are for Auckland only.

11.3. Test three: Changes in monetary base and net foreign assets

The final test measures the absolute change in both the monetary base and net foreign assets by year. Orthodox currency boards have a strong correlation between these two measurements, meaning that when monetary base increases or decreases, net foreign assets also increase or decrease (Hanke, 2008: 280).

The data indicate that the absolute changes in net foreign assets and in the monetary base moved together very closely, with a correlation coefficient of 0.997. The data again indicate that the Colonial Bank of Issue behaved like an orthodox currency board.

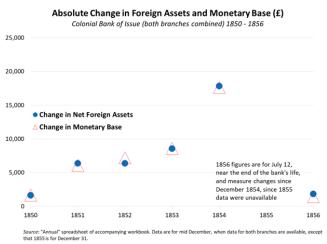


Figure 10. Absolute change in monetary base and net foreign assets for the Auckland branch of the Colonial Bank of Issue 1851 - 1855. Figures for 1850 measure changes from late June, the first data, to mid-December. Figures for 1856 measure changes since 1854.

11.4. The winding-up actand bank paper currency act

After a year of speculation that the New Zealand legislature would close the Bank of Issue and several months of decline in its note circulation, on July 7, 1856, the New Zealand legislaturepassed an ordinance allowing other institutions to begin issuing notes again. The ordinance gave the governor the power to allow any banking institution to issue promissory notes redeemable on demand, thus relieving the Colonial Bank of Issue of its duties as the sole note issuer in the colony. The ordinance specifically stated that "the Joint Stock Company or Corporation now carrying on the business of a banker in New Zealand under the style of 'The Union Bank of Australia,' may lawfully issue and circulate within the Colony the promissory notes of the Company payable to bearer on demand" ("Bank Paper Currency Act" 1856). Weeks later, on July 29, 1856, the legislature passed an act dissolving the Colonial Bank of Issue. The Winding-Up Act called for the redemption of all outstanding notes, taking the notes of the Bank of Issue out of circulation. The stocks and investments of the bank were ordered to be liquidated and put towards paying off expenses of the bank. Any surplus of funds was required to be returned to the government of New Zealand. The act gave the Governor power to contact private banking companies to contract with the government as well as invest surplus funds from the Bank of Issue in colonial and government securities. The Winding-Up Act officially ended the dying Colonial Bank of Issue. After over a year of discussion over the fate of the bank, its life was ended and accounts settled in one declaration ("New Zealand Colonial Bank of Issue Winding-up" 1856).

12. After the colonial bank of issue: Conclusion

After the demise of the Colonial Bank of Issue by means of the Bank Paper Currency Act, private banks took advantage of the open market to set up shop in New Zealand. The Union Bank was given the authority to issue notes, joined by the

London-based Oriental Bank on August 3, 1857 (Bedford, 1915: 121). Until 1861, The Union Bank and Oriental Bank were the only note issuers in the colony. However, following the discovery of gold on both the North Island and the South Island during the 1860s, many more banks began issuing notes. The Bank of New Zealand, the Bank of New South Wales, the National Bank of New Zealand, and the Colonial Bank of New Zealand all joined the note issuing club shortly after the gold discovery (Matthews, 2003: 43-44).

The Colonial Bank of Issue was an institution before its time. The idea of a monetary authority institution did not gain traction in New Zealand until decades later (Matthews 2003: 43). The Colonial Bank of Issue proved to be a poorly timed experiment plagued by harsh criticism fromlocal newspapers. Many settlers believed that bank was only a means by which the government reaped profits, and believed it created little benefit for the common man (Bedford, 1915: 94). In reality, the Bank of Issue was a potentially innovative idea, but it was enacted at the wrong time. Following the colony's debenture crisis, colonists had little faith in the government which transitioned over to little faith in the bank. In addition to this, the banks two offices did little to serve the spread-out population of the colony and thus resulted in its short six-year life. The failure of the Bank of Issue had nothing to do with the fundamental ideas of the bank, but was caused by a colonist population with little confidence in the bank as well as a young, inexperienced government.

Appendix

A. An accompanying spreadsheet contains data from the Colonial Bank of Issue B. *Legislation Mentioned in the Paper*

Treaty of Waitangi
February 6, 1840

Debentures Act of 1844
May 18, 1844

Paper Currency Ordinance
October 16, 1847

Amendment to Paper Currency Ordinance
July 31, 1851

The Bank Paper Currency Act
July 7, 1856

The New Zealand Colonial Bank of Issue Winding-up Act
July 29, 1856

C. Note from the Colonial Bank of Issue



Figure 11. A cancelled one pound note from New Zealand's Colonial Bank of Issue. The note is signed by the bank's manager and was issued on January 25, 1856. The note can be found at the Auckland Museum in Auckland, New Zealand ("Banknote" 1856).

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