SAE./No.152/March 2020

Studies in Applied Economics

A BALANCE SHEET ANALYSIS OF THE BANQUE DE MADAGASCAR ET DES COMORES

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

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By John Marshall Flood

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The *Studies in Applied Economics* series is under the general direction of Professor Steve H. Hanke, Founder and Co-Director of the Institute for Applied Economics, Global Health, and the Study of Business Enterprise (hanke@jhu.edu). 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

John Marshall "Jack" Flood is a sophomore at Davidson College in North Carolina majoring in Economics. He is a fluent French speaker and a French-American dual citizen. He chose to write about the Banque de Madagascar et des Comores because of his desire to put his French skills to use in an economic context. He wrote this paper while working as a researcher at the Institute for Applied Economics, Global Health, and the Study of Business Enterprise. John Marshall will graduate in May 2022.

Abstract

This paper presents a rendition of Madagascar's history as seen through the eyes of the balance sheets of the Banque de Madagascar (later the Banque de Madagascar et des Comores). The banque was formed with a dual charter that gave it the ability to function as both a bank of issue (central bank) and a commercial bank. Like other French Colonial banks, the Banque initially functioned primarily as a bank of issue, helping to monetize Madagascar's fledgling economy. As the Malagasy economy grew, the Banque issued increasing amounts of credit to the Malagasy private sector. At the end of the Banque's lifespan, a separate central bank was formed, removing the Banque's note-issuing privilege. From that point until its closure in 1977, the Banque solely functioned as a commercial enterprise. The evolution of the Banque is traced via an analysis of its balance sheets.

Acknowledgements

I thank Christian Potter for procuring the annual reports of the Banque from the Princeton University Library. I thank Prof. Steve H. Hanke and Dr. Kurt Schuler for their help and guidance in the writing of this paper. I also thank Spencer Ryan for his edits and comments.

Link to primary currency board data digitized by the author: tinyurl.com/rxr4oko
Keywords: Comoros, Madagascar, central bank, balance sheet
JEL codes: E58, N27

Introduction

After French military forces took advantage of discontent with the native government to invade and conquer the island, France annexed Madagascar on September 30, 1895. Madagascar was one of the many African colonies established by France during the late 1800s. By 1895, France controlled much of North, West, and Central Africa, plus Djibouti, and, obviously, Madagascar.

Initially, the Comptoir National d'Escompte, a large bank in Paris, served as a foreign banker to Madagascar, lending money to companies establishing themselves there.[1] However, because the Comptoir National operated entirely from Paris, it was difficult to effectively conduct business in a colony thousands of miles away. Consequently, the bank was not very successful in Madagascar.

In 1920, a private bank was established on the island. The Crédit Foncier de Madagascar lent and accepted deposits for Malagasy and French customers.[2] It was significantly more successful than the Comptoir National because, although it was based in Paris, all operations of the bank were conducted from Antananarivo (Tananarive).

For years, there was debate about whether there should be a note-issuing bank on the island. Before the Banque de Madagascar was established, French banknotes were used as the local currency—though they were not officially backed by any establishment in Madagascar.[3] While the general consensus was that a local bank was a good idea, the French could not decide whether to expand an existing bank, such as the Banque de l'Afrique Occidentale (BAO), or create a brand-new, autonomous bank.[4] In 1925, it was decided that the Banque de Madagascar would be established as a brand-new, monopoly note-issuing bank in Madagascar.

The Banque would take the mixed form that all French colonial banks took: a private bank operating simultaneously as a bank of issue and a commercial bank. Although the Banque guaranteed convertibility between the Madagascar and French Francs at a fixed rate, it did not back 100% of its issued banknotes with French Franc reserves—unlike orthodox currency boards typical of British Colonial banks of the time.[5]

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[1] Louis-Bernard Rakotomanga, ed., *Madagascar, cent ans d'dxperiences bancaires: 1886 à 1986* (Antananarivo, Madagascar: Bankin'ny Tantsaha Mpamokatra, 1987), 20.
[2] *Ibid., 28.*
[3] *Ibid., 29.*
[4] *Ibid., 28*. On BAO, see Siwei Bian, "A Balance Sheet Analysis of the Banque de l'Afrique Occidentale," 2018, in the same working paper series as this paper.
[5] Eric Helleiner, The Making of National Money: Territorial Currencies in Historical Perspective (Ithaca: Cornell University Press, 2003), 165.

The Legal Framework of the Banque

The Banque de Madagascar was a private entity modeled after the Banque de l'Afrique Occidentale, a Paris-based bank that served French colonies in West Africa and Central Africa. To raise capital, shares were issued, mostly to Malagasy and French investors. According to an agreement with the French government, 20 percent of the shares were required to be sold in Madagascar. The Banque's official purpose was to eliminate exchange spreads between Paris and Madagascar, to round up unofficial banknotes, to reduce the rate of discount, and to encourage economic development.[6]

The Banque de Madagascar would operate as a mix of a central bank and a commercial bank. The Banque's board could make decisions about monetary policy; however, Madagascar was part of the franc zone, the area in Africa in which French francs were legal tender. So, all of the currencies in the zone had a fixed exchange rate with the French franc.

The bank's legal framework consisted of four main documents.[7] An agreement of July 1, 1925 between the bank's sponsor, the Banque de Paris et des Pays-Bas, and the French Minister of Colonies established ground rules for a bank in Madagascar. A second, simultaneous agreement between the same parties provided that the bank would cover any deficiency in converting its notes into French francs or the reverse. The bank was required to hold French franc reserves equal to one-third of the banknotes issued, however it often held significantly more.

The third main document was a French law passed on December 22, 1925. The law officially created the bank. The bank was originally set to have a 20-year lifespan and 40,000 shares of 500 francs each were to be issued. The bank's assembly was to hold annual meetings in Paris to discuss policy changes and the financial results of the past year.

The bank initially had the following powers.

1. To buy and sell gold, silver, leather, and nickel
2. To have gold, silver, leather, and nickel purchased in France or overseas
3. To grant advances on ingots, monies, gold and silver, and jewels
4. To receive the voluntary deposit of all sums without interest/charge in Madagascar of all titles, ingots, money, gold and silver, jewels
5. To collect bills of exchange and pay money orders
6. To receive, with the authorization of the French Minister of the Colonies, the proceeds of public subscription opened in the colonies
7. To issue promissory notes, drafts, or money orders
8. To issue, against guarantee, letters of credit
9. To pass on behalf of its customers, with prior coverage, all stock market transactions by the usual official intermediaries

[6] "Banque de Madagascar et des Comores: les débats parlementaire," *Les annales coloniales*, 1924-1925.
[7] See the *Journal officiel de la République française,* 26-27 December 1926: 12438-12444.

10. To discount promissory notes or several signatures of persons known to be creditworthy, for periods not exceeding 120 days, and current-account loans for periods not exceeding six months
11. To create, negotiate, discount or purchase drafts, money orders, or checks having maturities of 90-120 days, depending on the type of operations concerned
12. To discount negotiable and non-negotiable guaranteed bonds
13. To have discounted in France and abroad, on its behalf, drafts or warrants to two commercial signatures or guaranteed by knowledge to order, duly endorsed and accompanied the documents of insurance of use
14. To grant loans on crops, either to individuals or to farming communities, as civil persons, in accordance with the law of March 21, 1919, on colonial banks
15. To make advances on negotiable and non-negotiable obligations issued to erect public works or purchase government supplies within the bank's territory
16. To act as surety for bidders and holders of public contracts in the bank's territory

The fourth main document, providing the legal framework of the bank, was its bylaws (*statuts*).

Each year, generally in April or May, the board of directors would have a meeting at the bank's headquarters, located at 88 rue de Courcelles, to discuss the bank's operations over the course of the previous year (essentially a stockholders' meeting). The meetings were summarized each year in a report that included the bank's balance sheets.

All the data in this paper comes from these yearly *Assemblée Générale Ordinaire* reports, published from 1927 to 1977 and obtained from the Princeton University Library. Much of the information about the history of the bank is taken from a history of banking in Madagascar, *Cent ans d'experiences bancaires,* as well as from the bank's own annual reports.[8]

A Brief Overview of Madagascar's Economy

The main industry in Madagascar during colonial times was farming. Husbandry never took off because property rights were insecure and cattle rustling was prevalent.[9] Farming techniques were quite advanced, however, and rice growing was very popular throughout colonial times. Farmers used a slash-and-burn system called *tavy*. The farmers would burn down a section of forest and sow their seeds in the ashes. Unfortunately, the system rapidly depleted the nutrients in the soil. So, farmers were forced to move every few years.[10]

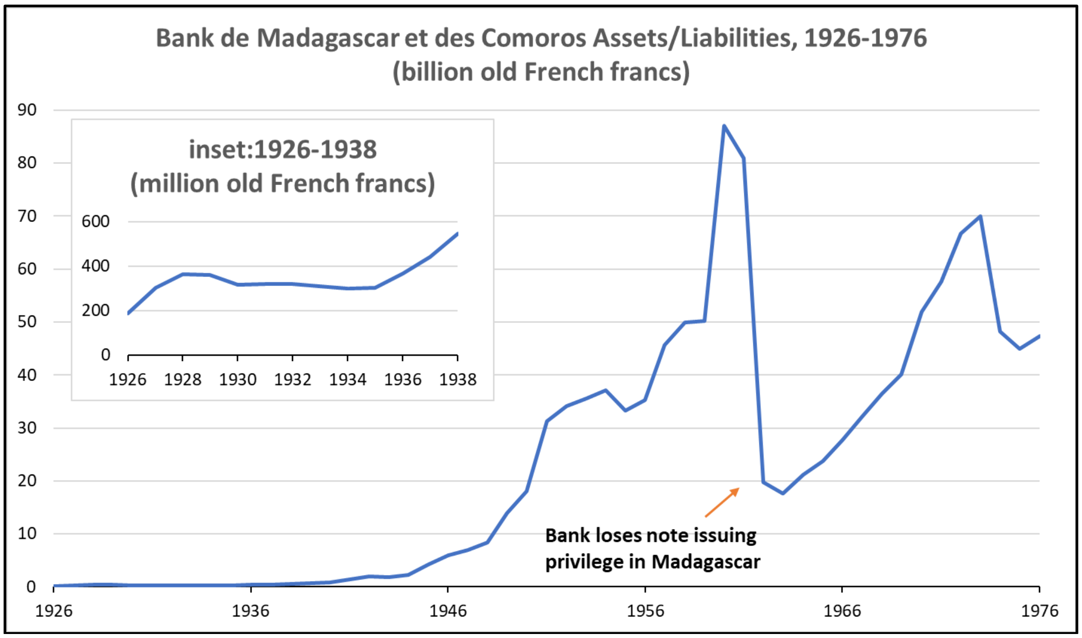
Madagascar's main source of revenue was exporting unprocessed materials. Madagascar originally exported mainly rice and beans, but as the French colonials introduced new crops, the colony exported a host of new goods such as coffee, leathers, tobacco, vanilla, meat, perfume

[8] Rakotomanga, 1987
[9] Solofo Randrianja and Stephen Ellis, *Madagascar: A Short History* (Chicago: University of Chicago Press [u.a.], 2009) 167.
[10] *Ibid.*

plants, graphite, cassava, girofle, legumes, mica, oleaginous grains, and fruits for soap, rice, and sugar—according to the yearly reports. At the peak of its vanilla production, Madagascar exported 80 percent of the world's vanilla.[11]

A History of the Banque via a Balance Sheet Analysis

The following is a history of the Banque drawn from its annual reports, especially the balance sheets therein.[12] The analysis is divided into four sections which are based on phases in the Banque's development. Below is a graph showing the overall value of the Banque's assets and liabilities over the Banque's entire lifespan.



With regard to the Banque's evolution from a bank of issue to a commercial bank, the following graph shows note-issue business as a percentage of total business (in this case, total liabilities). When notes issued make up more than 50% of liabilities, the Banque is primarily operating as a bank of issue, which it did for most of its life. In the first phase, from 1926-1938, it operated predominantly as a bank of issue. In the second phase, from 1939-1947, it remained—with the exception of World War II—a note issuer. In the third phase (1948-1962) it operated as a bank of issue for all but the transitional years after the Bank lost its note issuing privilege. During the fourth phase, after 1962, the Banque operated solely as a commercial bank in Madagascar because a separate central bank had been established, and, subsequently, the note issuing privilege was removed from the Banque.

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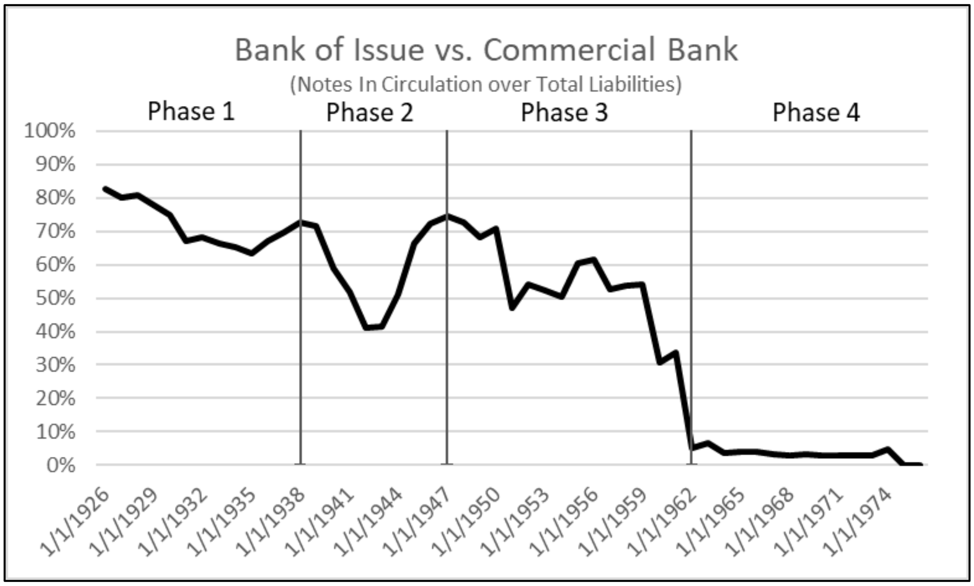
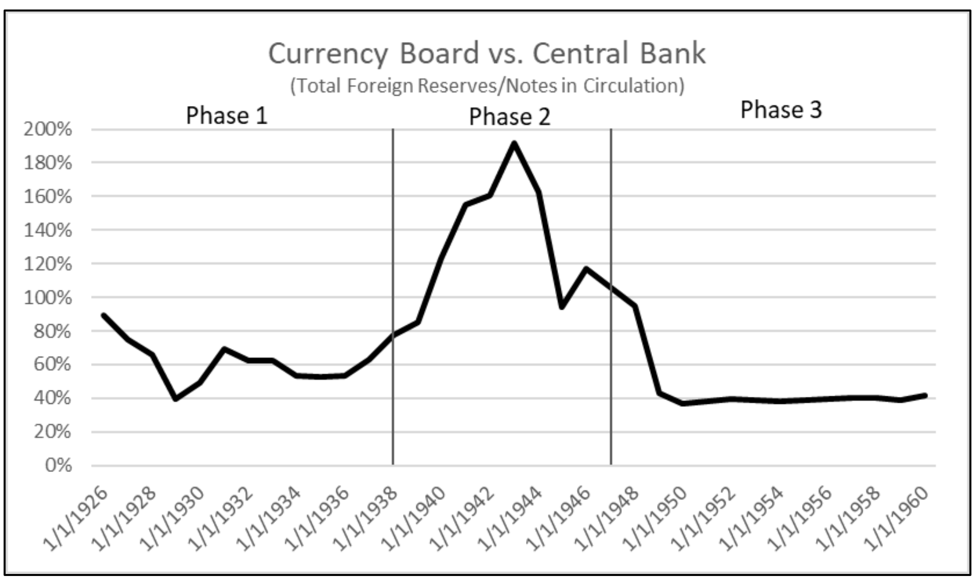
[11] *Ibid.,* 170.

[12] All information in these sections comes from the bank's annual reports or laws cited in the legal appendix, except as noted.



Did the Banque's issue department operate like a currency board? If it was an orthodox currency board its reserves would have remained at 100-110% of notes in circulation at all times.[13] As the graph below shows, the Banque never operated as an orthodox currency board. Backing reserve percentage fluctuated wildly over the course of the Banque's lifespan. Reserves as a percentage of notes issued averaged around 60% during the 1926-1938 phase. During the World War II period, which fell into the middle phase (1939-1947), the reserve percentage soared by roughly 120 percentage points, reaching a peak of 191%. The reserve cover settled down at a very constant 40% of the notes issued during the third phase (1948-1960). The graph ends in 1960, when the Banque began to transfer its note issuing privilege to a separate central bank.



[13] Steve H. Hanke and Kurt Schuler, Currency Boards for Developing Countries: A Handbook, Sector Studies, no. 9 (San Francisco, Calif: ICS Press, 1994).

The Origins and Early Years: 1926-1938

The Banque opened on February 5, 1926. The initial branches of the Banque were located in Tananarive (Antanarivo), Diego-Suarez, Fianarantsoa, Majunga, Mananjary, Nossi-Bé, and Tamatave—all major cities scattered around the island. Given the state of development of the economy, this was a fairly extensive branch network.

The Banque issued its first notes in May 1926. It initially issued bills in exchange for French francs, as one of the initial purposes of the Banque was to retrieve all French francs circulating in Madagascar. The Banque never issued coins; Madagascar and the Comoros used French coins. The French silver 5-franc piece, approximately equivalent to the earlier Spanish silver dollar, was popular. Indeed, it was common to calculate in multiples of 5 francs, known as ariary. Interestingly, the present currency of Madagascar is called the ariary and it replaced the Malagasy franc in 2005 at 1 ariary = 5 francs.

In 1928, the Banque purchased a building at 88 rue de Courcelles in Paris to serve as its headquarters. The Banque also substituted 250 million francs of Banque de Madagascar banknotes for Banque de France notes.

In December 1928 the Banque built a new agency in Fort-Dauphin (now Tolagnaro), the southernmost sizeable town in Madagascar. In 1929, the construction of the Tuléar branch was completed.

In 1930, the Great Depression hit Madagascar. It caused the prices of raw materials to plummet. Because the Banque's toolkit was limited, it did not engage in countercyclical economic monetary policies.

However, the reports emphasize that Madagascar was able to escape the worst of the Depression because of its diversity of commodities, especially coffee, raffia, cape peas, clove, skins, and cassava. The 1931 report concluded that the bad times had passed and Madagascar was moving forward again.

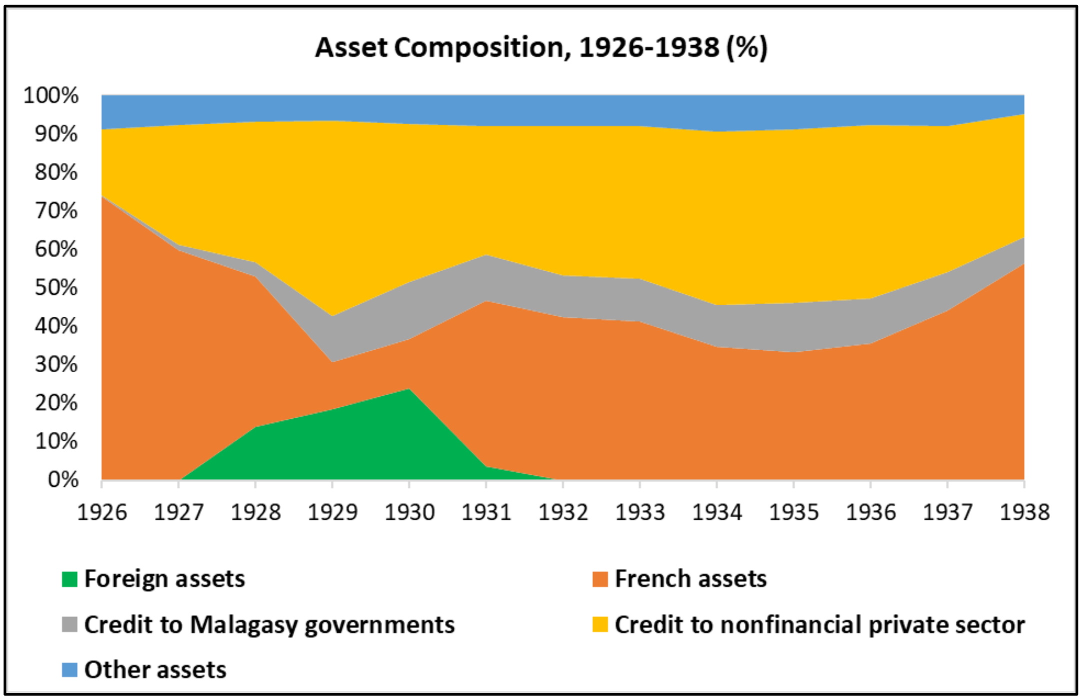
The 1933 report notes that the Crédit Agricole, which had been established on April 18, 1930, began to have a major impact on the economy. The Crédit Agricole had been established to loan money to farmers for agricultural development and was backed by the Banque de Madagascar. It was distinct from but similar in purpose to the French organization of the same name.

The Fort-Dauphin branch of the Banque was closed in 1934, as Its commercial activities had been hit particularly hard by the depression, and the board of directors no longer thought the branch was necessary. Instead, a local private bank, the Crédit Foncier de Madagascar, would pick up the issuing bank's slack.

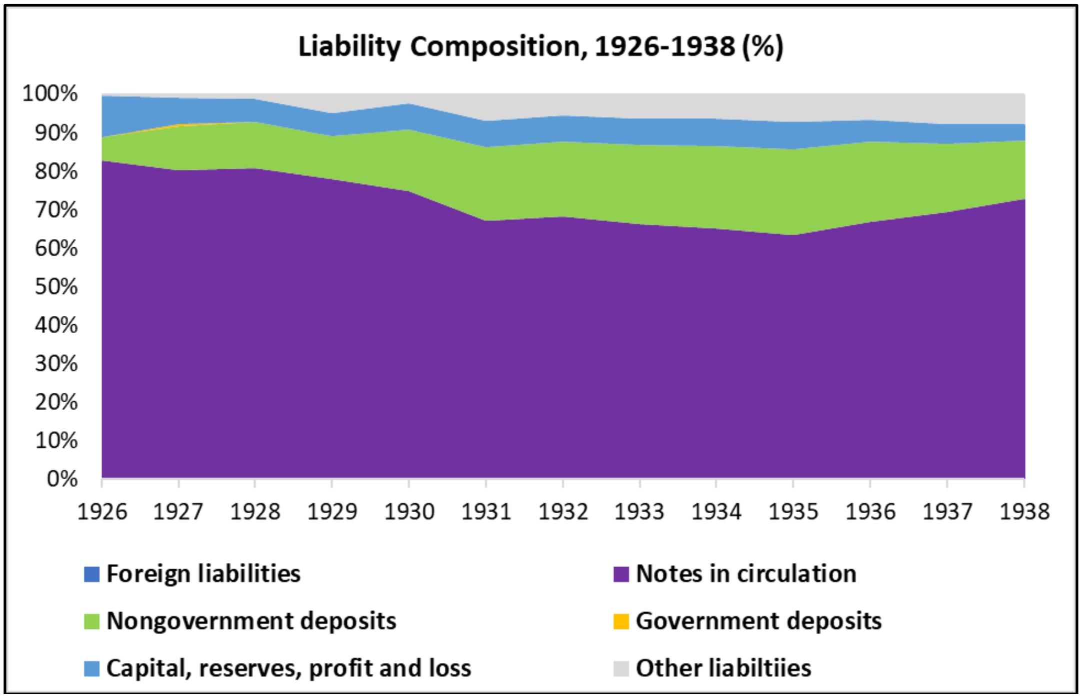
1936 was a successful economic year for Madagascar. Notes in circulation started to pick back up as the colony recovered from the Depression.

Turning to the Banque's balance sheet, it is evident that many of the Banque's assets were French. The Banque's practice resembles that of other French colonial banks, which held extensive assets in the metropolitan capital, namely Paris. This was done so that the reserves of the colonial banks were safe and available to meet demands for liquidity readily. The increase in the share of French assets in the late 1930s is perhaps related to increasing world political tensions and a resulting higher demand for liquidity.

Note that the Banque's lending to the government of Madagascar was fairly low, roughly 10 percent of total assets. The Banque's commercial business on the asset side during this period was mostly made up of small loans to private customers.



On the liability side, the Banque operated primarily as a bank of issue. Indeed, as the chart below shows, the bulk of the liabilities were notes in circulation. Banknotes made up 72% of business on average, with a high of 83% and a low of 63% (as a proportion of total liabilities). The ratio of deposits to banknotes in circulation was particularly low during this period because most of the population was unbanked.



During this period, the Banque's assets earned interest, while its main liability, banknotes, paid no interest. As a result of this spread, the Banque was profitable.

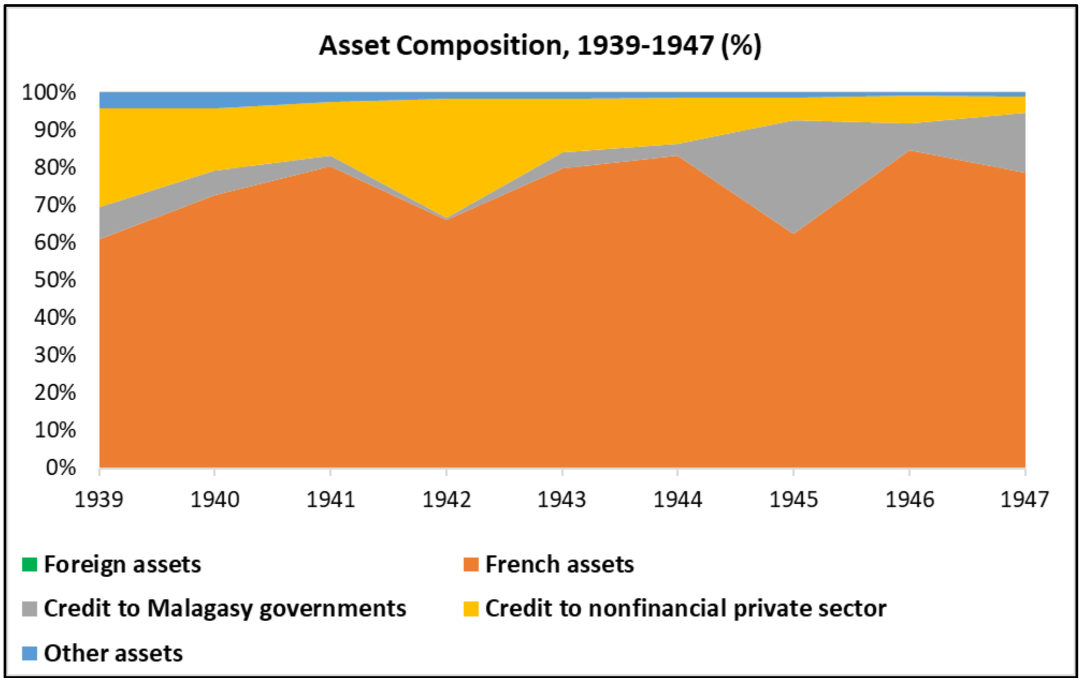
The Second World War: 1939-1947

World War II began in 1939. The war substantially affected the Banque by prompting the immediate purchase of French issued bonds designed to cover the costs of war. This allocation can be seen through the increase in French assets on the Banque's balance sheet.

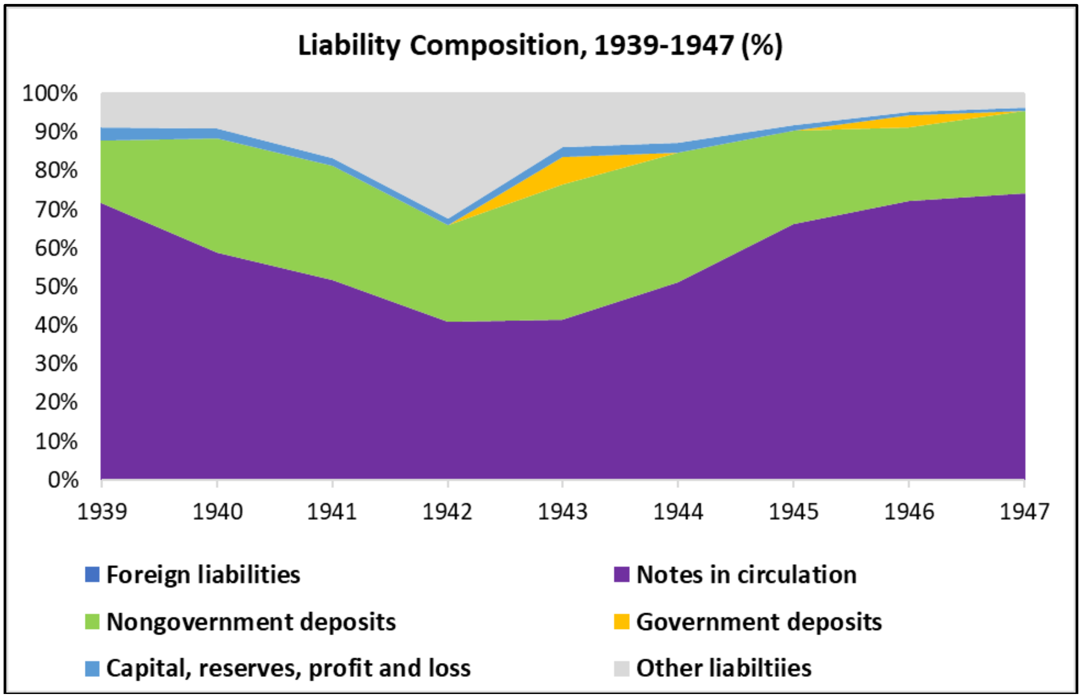
On December 25, 1945, France broke the longstanding 1-to-1 exchange rate between the French franc and colonial franc. France had suffered so much more destruction than the colonies during World War II that it devalued the metropolitan franc to 1.70 per CFA franc, the new colonial unit. CFA initially stood for *Colonies Françaises d'Afrique* (French African colonies) but was later revised to *Communauté Française d'Afrique* (French African community). The franc issued by the Banque de Madagascar was made part of the CFA franc zone. A further devaluation of the French franc occurred on October 17, 1948, when the exchange rate was changed to 2 French francs per CFA franc.

In 1945, The Caisse Centrale de la France d'Outre-Mer was created as a financial regulator for the Banque de Madagascar and other colonial banks. Its primary monetary purpose was to ensure a fixed exchange rate.

French assets remained very high during the war, never falling below 60 percent of total assets from 1939 to 1947. Credit to the nonfinancial private sector shrank in relative terms. This was in part due to the fact that other French banks that operated on the island, primarily the Crédit Foncier de Madagascar, were capturing market share.



During this period, the Banque briefly operated primarily as a commercial bank because of a large increase in deposits. This increase was perhaps due to the repatriation of French Francs, which would be safer in Madagascar. However, by the end of the war, the note issuing business as a percentage of total liabilities had returned to prewar levels at over 70%.



During this second period, the Banque had a particularly high reserve coverage. The reserves as a percentage of notes issued averaged 133%. Of course, most of these reserves took the form of loans to the Vichy French government, increasing immensely in 1942.

Madagascar on the Road to Independence: 1948-1962

In 1948, the Banque began to serve the Comoros. It built new branches and invested a significant sum there as part of a ten-year plan to modernize the islands. In September, the Banque opened the Bureau Minier de la France d'Outre-mer, an establishment that loaned money to groups in Madagascar and the Comoros with the goal of supporting, finding, and expanding mines and quarries.

The French law of March 29, 1950 and an accompanying agreement between the French government and the Banque on August 31, 1950 made extensive changes to the Banque. Its capital was massively increased from 37 to 111 million francs, and the French government became the majority shareholder. The board grew to 14 members, with eight representing the state and the remaining six representing private shareholders. The increased French control led to an extremely steady backing percentage of reserves to notes in circulation from 1949 to 1960. During this period, the percentage stayed between 38% and 42%.

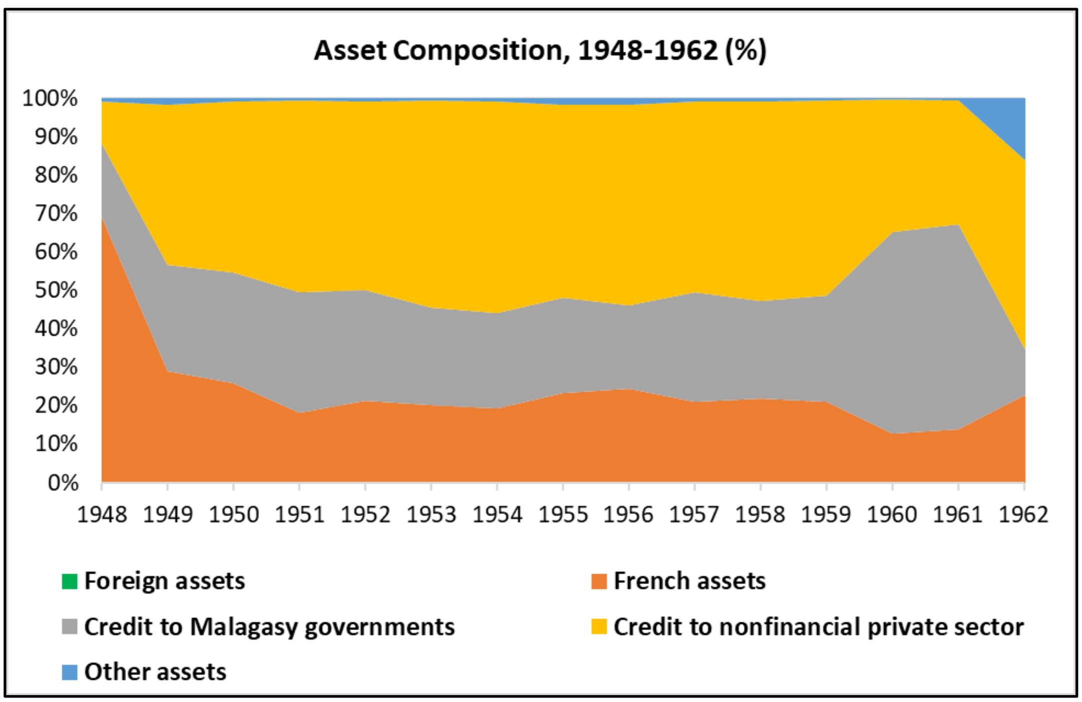
These changes were similar to agreements the government had made or would make with other French colonial banks. The Banque also gained a new responsibility. It became the bank of issue for the nearby Comoros islands.

The Banque changed its name to reflect its important new function as the note issuer in the Comoros. In 1951, it became the Banque de Madagascar et des Comores. Notes issued for use in the Comoros had special markings to distinguish them from notes issued for use in Madagascar.

The 1957 report begins with a discussion of a “framework” law which gave French colonies the responsibility of electing their own local governments. This law foreshadowed the independence of Madagascar.

In 1958, Madagascar became the Malagasy Republic, an autonomous state within the French Community. When Madagascar achieved full independence in 1960, the French government gave the Malagasy Republic the responsibility of creating and distributing a new national currency. But, because the Republic did not have the resources to fund the new Institut d’Émission immediately, there was a two-year transition period before the Institut opened in April 1962—although the Banque de Madagascar continued to manage the note issue business until the end of 1963.[14]

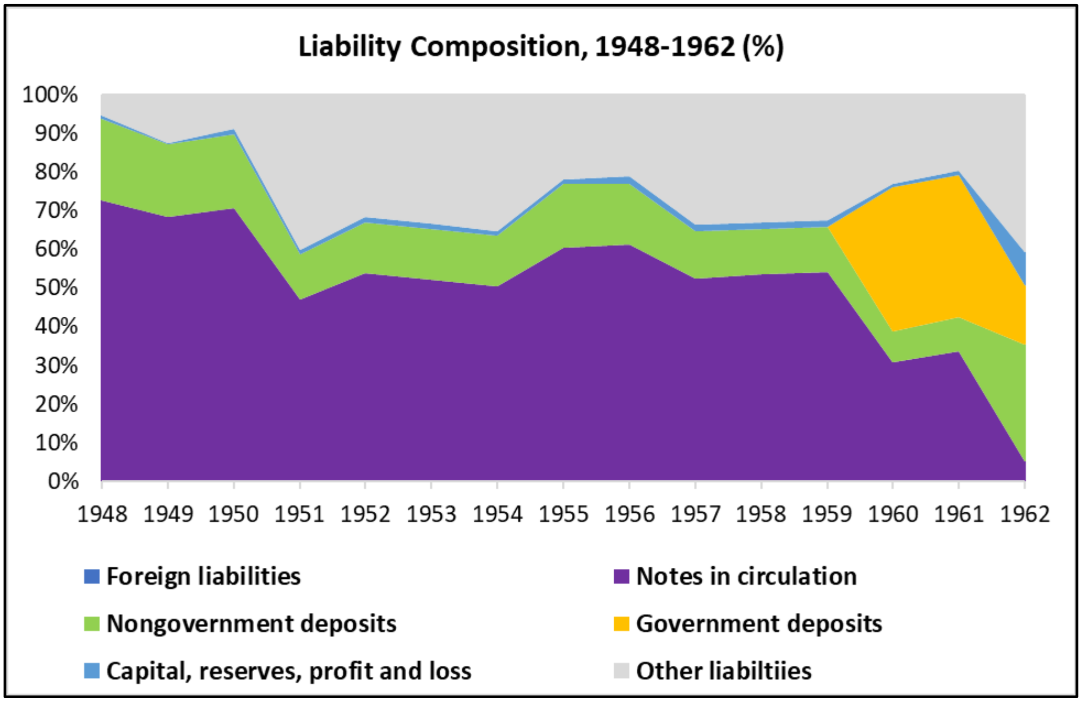
The most important feature of this period on the balance sheet is the steady increase in credit to the nonfinancial private sector. This punctuates the Banque’s transition from primarily a bank of issue to a purely commercial bank. Much of this credit comes from new bureaus established by the Banque in the 1950s (like the Bureau Minier).



[14] Rakotomanga, 61-62.

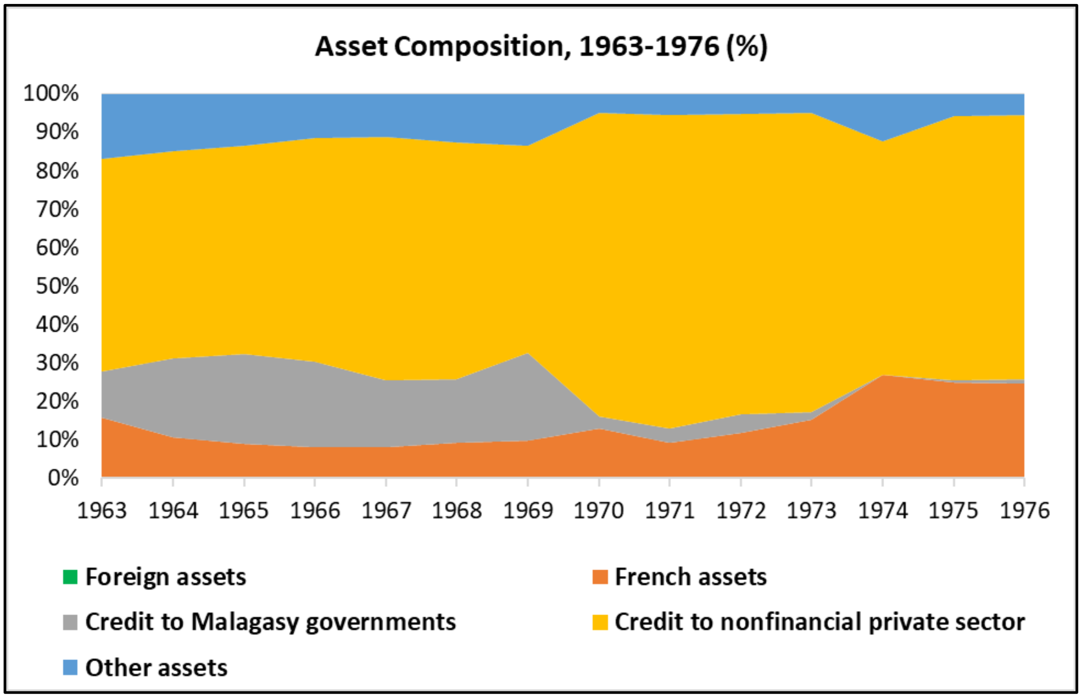
Consequently, the note issue business as a percentage of total business decreased throughout the period, beginning at 73% of total liabilities in 1948, falling to 50% in 1954, and plummeting to around 5% in 1962 when the Banque's privilege of note issue in Madagascar was withdrawn, leaving the bank, after 1962, only with note issuing privileges in the Comoros.

The major increase in government deposits from 1960 to 1962 is likely an accounting "trick" used to separate the Institut d'Émission from the Banque.

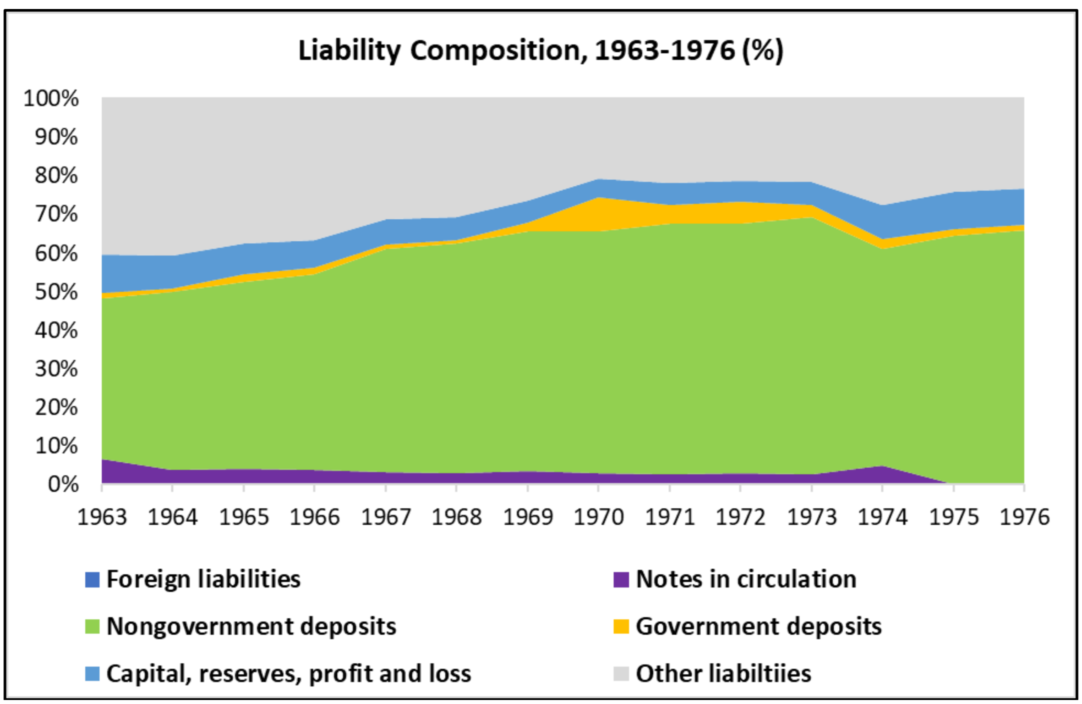


The Banque as a Fully Commercial Bank: 1963-1977

The Banque's new role as a commercial bank was reflected in its asset and liability compositions as depicted below. Like any other commercial bank, nonfinancial private sector loans made up most of its assets. Credit to the Malagasy government all but disappeared in 1973 under the new socialist government.



Deposits from private customers made up most of the Banque's business on the liabilities side, reflecting the country's transition to a more modern, monetized economy. The Banque remained a note issuer in the Comoros through 1974, which accounts for the small percentage of notes in circulation reflected in the balance sheet.[15]



[15] *Ibid.*, 69; see also Banque Centrale des Comores Web site, "Histoire."

Effective September 30th, 1977, the Banque, by then a subsidiary of the French holding company Groupe Drouot, was merged into another of the group's subsidiaries and became the Compagnie Générale de Banque Soficam.[16]

Concluding Observations

The Banque was established as a mixed bank that had the capacity to issue both notes and credit. Its dual-purpose charter allowed it to adapt to and serve the Malagasy economy as the colony grew and modernized. During the first half of the Banque's lifespan, it mainly functioned as a "central bank" by issuing notes. This shifted the Malagasy economy from a barter system to a modern, more monetized system. As the economy became more monetized, the Banque began to issue larger amounts of credit to the nonfinancial private sector through organizations like the Bureau Minier. Once Madagascar gained its independence, the Banque transferred its note issuing responsibilities to a newly formed, separate central bank. Upon that transfer, the Banque functioned solely as a commercial bank until it was shuttered in 1977. The Banque's dual structure and its evolution are typical of pre-World War II French Colonial banks.

[16] Les entreprises coloniales Web site, "Banque de Madagascar et des Comores," 63.

Legal Appendix

This list is not exhaustive. Often there were implementing decrees in the French colonies corresponding to metropolitan legislation plus local decrees on a multitude of minor matters such as appointments of personnel.

In the French legal system, a law is a statute issued by the Parliament; an ordinance (*ordonnance*) is a statutory instrument issued by the cabinet to help implement a law; and a decree (*décret*) is an executive order issued by the cabinet. The most important laws are in **bold**.

France, law of 13 December 1901 – A general law on the organization of colonial banks.

France, decree of 17 December 1919 – Made changes to the Commission de Surveillance des Banques Coloniales, a body that regulated colonial banks.

France, Minister of Colonies and Banque de Paris et des Pays-Bas, two agreements of 1 July 1925 – Agreement that established ground rules for an issuing bank in Madagascar.

France, law of 22 December 1925 – Law creating the Banque de Madagascar (*Journal officiel de la République française,* 26-27 December 1926: 12438-12444, including the agreements of 1 July 1925 and bylaws).

France, law of 1 October 1936 – Allowed colonial banks to include French francs (meaning franc notes and coins) as part of their reserves (article 7).

France (Vichy), law of 9 December 1940 – Changed various provisions for large colonial note-issuing banks about government appointees on their boards of directors (*Journal officiel de la République française,* 12 December 1940: 6075-6077).

Anglo-Free French financial agreement of 19 March 1941 – This agreement preserved the prewar exchange rate of the French franc with the pound sterling (and later with the U.S. dollar, when the United States entered World War II). French West Africa remained aligned with the Vichy regime. The agreement applied to Madagascar after the British invasion and conquest of the island in 1942.

Free France, ordinance of 2 December 1941 – Created the Caisse Centrale de la France Libre (CCFL) as the financial arm of the Free French government. The ordinance was not effective in Madagascar until after the British invasion and conquest of the island in 1942.

Free France, Ordinance No. 40, 29 January 1943 — Brought the Banque de Madagascar under the financial control of the Caisse Centrale de la France Libre and set a limit to the Banque's note circulation. (*Journal officiel de la France combattate,* 24 February 1943: 6).

Anglo-Free French agreement of 2 February 1943 — By this agreement, in many of the areas under its control, the Free French government devalued local francs from pre-World War II rates based on 176.625 French francs = UK£1, or 43.80 French francs = US$1, to new rates of 200 local francs = UK£1, or 50 local francs = US$1.

Free France, ordinance of 2 February 1944 and France, Ordinance No. 45-1356, 20 June 1945 – Created the Caisse Centrale de la France d'Outre-Mer (CCFOM) as the successor to the Caisse Centrale de la France Libre.

Anglo-Free French agreement of 8 February 1944 — Following the liberation of most of France by the Allies during the Second World War some months after this agreement, the metropolitan French franc was devalued to the level of the overseas francs under Free French control (200 local francs = UK£1, or 50 local francs = US$1). Doing so in effect restored the French franc as the anchor currency.

France, Ordinance No. 45-2120, 15 September 1945 — Repealed limit on Banque de Madagascar's note issue set in 1943 (*Journal officiel de la République française,* 16 September 1945: 5816).

France, Decree No. 45-0136, 25 December 1945 — France created the CFA franc at a premium from the former 1-to-1 rate of local francs with the French franc. The rate was 1 CFA franc = 1.70 French francs. The premium offset most of the French franc's devaluation from 50 to 119.10699 French francs = US$1 on 25 December 1945. The revaluation reflected lower wartime economic destruction in the colonies than in France. The new cross rate with the pound sterling was 300 CFA francs = UK£1. (This applied to Madagascar).

France, Decree No. 46-151, 4 February 1946 — Temporarily extended Banque de Madagascar's expiring charter to 31 March 1946 (to allow a law to be passed) (*Journal officiel de la République française,* 8 February 1946: 1075).

France, Law No. 46-439, 16 March 1946 — Extended Banque de Madagascar's expiring charter.

France, Ministry of Finance and Economic Affairs, Avis No. 352 de l'Office des Changes, 17 October 1948— The CFA franc had followed the French franc's devaluation on 26 January 1948, but this time it was in effect revalued against French franc to offset almost all of the French franc's devaluation from 214.392 to 264 French francs = US$1 on 17 October 1948. The new exchange rate was 1 CFA franc = 2 French francs.

France, Law No. 50-375, 29 March 1950 — The Banque de Madagascar was authorized by the French government to be the monopoly note issuer to not only Madagascar, but also the Comoros for 20 years starting retrospectively from 1 January 1948. The Banque was also required to build new branches in Fort-Dauphin, Manakara, Morondava (all Madagascar), and Moroni (Comoros) within three years. The law also provided to increase the Banque's capital to assure majority government ownership and to reorganize the structure of the board of governors accordingly (*Journal officiel de la République française,* 30 March 1950: 3448-3449).

French Republic-Malagasy Republic Agreement of Cooperation in Monetary, Economic, and Financial Affairs of 27 June 1960 – Permitted Madagascar to create its own note-issuing bank.

Madagascar, law of 10 March 1962 – Created the Institut d'Emission Malgache to replace the note-issuing functions of the Banque de Madagascar.

Madagascar, Decree No. 63-397, 30 June 1963 – Renamed the local version of the CFA franc the Malagasy franc (franc malgache, symbol FMG) effective 1 July 1963.

France, Law 73-1128, Article 17, 21 December 1973 – Provided that the Banque de Madagascar et des Comores would cease to be the note issuer for the Comoros on a date to be established by decree (*Journal officiel de la République française,* 23 December 1973: 13737).

Sources: France, Commission de surveillance des Banques Coloniales; France (1950: 4, 61); *Journal Officiel de la France Libre; Journal officiel de la République française* (including its annual *Tables du Journal officiel de la République française*); Mazard (1953); France (Vichy), Ministère de l'intérieur, *Informations Générales;* Web site of the Banque Centrale des Comores, "Histoire*."* Almost all of the French legislation cited is available through Gallica or Legifrance. Some entries here are copied from Bian (2018: 22-31).

Appendix on Balance Sheet Standardization

Because the asset and liability categories change over time, I standardized the assets and liabilities into 10 categories each, which can be seen below. The original balance sheet categories that appeared in each asset and liability category of the standardized balance sheet are shown in the bullet point list below.

A. Mapping of standardized asset categories to original asset categories

Foreign Assets: Gold/Silver Reserves; Gold Bullion; Silver and Alloy Coins; Foreign Currency Sight Deposits

French assets (French governments securities and deposits): Demand Deposit at [French] Treasury; [French] Treasury, Automatic Debit Account; Treasury, National Defense Bonds, Backing for Note Issue; Treasury, Treasury Bills, National Defense Bonds, Weapons Bonds, Backing for Note Issue; Treasury, Treasury Bonds, Backing for Note Issue; Public Treasury, Current Account; Correspondants (Bank of France, Bankers, Postal Checks); Caisse Centrale de Cooperation Economique, Demand Deposit; Caisse Centrale de la France Libre; Caisse Centrale de Cooperation Economique, Demand Deposit; Caisse Centrale de Cooperation Economique; Loans to the Territories for Agriculture (Agreement of August 31, 1950, Article 7); Claim on the French State (law and decree of 26 December, 1945)

French assets (other, including "cash"): Treasury Bonds and Securities Received under Repurchase Agreements; Securities Transaction Accounts; Banks and Correspondents; Correspondent Accounts

Malagasy assets (credit to governments): Colony of Madagascar, Demand Deposit; Debt of the Issue Department in the Banking Department (for balance); Government Funds, Warrants, and Bonds (Investment Securities); Public Treasury, Bank of Issue; Guaranteed Advances; Advances and other receivables; Advances to the Colony; Loans to the Colony for Agriculture (Agreement of July 1, 1925); Advances and Demand Deposits; Advances and Cash Credit Demand Deposits; Paymaster General of Madagascar's Demand Deposit

Malagasy assets (credit to financial sector): Securities

Malagasy assets (credit to non financial private sector): Cash, Issuing Institutes, Treasury, Current Postal Accounts; Banks and Nonfinancial Enterprises Admitted to the Money Market: Sight accounts; Accounts and Loans at Maturity (Banks and Non-financial entreprises admitted to the Money Market); Short Term Credit (Credit to Clients—Portfolio); Medium Term Credit (Credit to Clients--Portfolio); Long Term Credit (Credit to Clients—Portfolio); Credit to Clients (Debtor Accounts); Accruals and Miscellaneous Accounts; Sundry Debtors; Accounts Receivable; Other investment securities (Investment Securities); Securities of Subsidiaries; Portfolio: Securities; Portfolio: Bills; Portfolio: Bills Discounted; Portfolio; Bills Cashed; Portfolio: Bills: Treasury Securities; Municipal Loans; Current Accounts

Buildings, furniture, note printing, office expenses: Buildings; Furniture and Safes; Buildings and Furniture; Initial Establishment Costs; Initial Transport Costs for Staff

Uncalled Capital: Capital Subscriptions not called up; Shareholders, Subscriptions not called up

B. Mapping of standardized asset categories to original asset categories

Liabilities in France: French Treasury, Current Accounts; Caisse Centrale de Cooperation Economique, Demand Deposit; French Treasury Demand Deposit; Banks and Correspondents; Caisse Centrale de la France d'Outre-mer, Demand Deposit

Notes in Circulation: Bank of Madagascar and the Comoros, Notes in Circulation; Banknotes in Circulation

Deposits other than of government: Sight Deposits (Business and Miscellaneous Accounts); Term Deposits (Business and Miscellaneous Accounts); Sight Deposits (of Individuals); Term Deposits (of Individuals); Special Savings Accounts (of Individuals); Zero Coupon Bonds; Checking accounts and special accounts; Checking Accounts nad Passbook Savings Accounts; Demand Deposits; Bonds and Fixed-Term Accounts; Suspense Accounts, etc.; Demand and Deposit Accounts; Collection Accounts

Government Deposits (Malagasy Governments): Sight Accounts (Issuing Institutions, Banks and Nonbank companies admitted to the Money Market); Term Accounts and Loans (Issuing Institutions, Banks and Nonbank companies admitted to the Money Market); Debt of the Department of Issue on the Banking Department (for balance); Advance to the Malagasy Institute of Emission - Issue Transfer; Colony of Madagascar, Demand Deposit; Treasurer of Madagascar, Demand Deposit; Claim of the Issue Department on the Banking Department (For Balance)

Dividends and other payments owed to shareholders: Dividends Outstanding; Dividends to be Distributed; Dividends to be Paid

Capital: Capital

Statutory and other reserves: Legal Reserve; Shareholders' Special Reserve; Additional Reserve Fund; Shareholder Reserve; Shareholders' Extraordinary Reserve; General Reserve; Real Estate Reserve; Security REserve; Unit Trust Holders' Special Reserve; Reserves

Other or unclassified liabilities: Miscellaneous Accruals and Provisions; Sundry Creditors; Bankers' Acceptances Payable; Securities Transaction Accounts; Accounts Payable after Collection; Commercial Notes Payable; Rediscounts

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