The Cape of Perfect Storms: Colonial Africa's first financial crash, 1788-1793

Roy Havemann and Johan Fourie

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Roy Havemann*and Johan Fourie†

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Abstract

This paper investigates the causes and consequences of colonial Africa's first financial crash, which happened in South Africa's Dutch Cape Colony. The 1788–1793 crisis followed a common sequence of events: trade and fiscal deficits were monetised by printing money, credit extension accelerated, the exchange rate fell sharply and inflation spiked. The domestic conditions were compounded by a deterioration of international conditions and political uncertainty. The final trigger was the collapse of the Cape's own Lehman Brothers – an unregulated merchant house, run by a prominent Cape family, which had been indiscriminately issuing the equivalent of promissory notes. The policy response during the crisis included fiscal austerity, an attempted reorganisation of domestic financial intermediation and continued monetary easing, which depreciated the exchange rate and triggered inflation. A new domestic bank was created. Yet the Cape economy would not recover quickly; the effects of the Cape's first financial crash would be felt deep into the nineteenth century.

Keywords: financial crisis, eighteenth century, institutions, banking, Africa

JEL classification: N27, N17, N20

1 Introduction

The Cape Colony's financial crisis of 1788–1793 followed a common sequence of events: the Colony had been running trade and fiscal deficits, which the administration monetised by (physically) printing money. Credit extension accelerated, partly on the back of these easier monetary conditions and partly as a result of unintended financial liberalisation. The exchange rate fell sharply and inflation spiked, comfortably exceeding double digits. The domestic conditions were compounded by political uncertainty and a deterioration of international conditions (not least the American War of Independence, the impending invasion

*National Treasury, South Africa.

†Department of Economics, Stellenbosch University, South Africa. Corresponding author: johanf@sun.ac.za.

of Holland by Batavia and the slow implosion of the Dutch East India Company). The final straw was the collapse of the Cape's own Lehman Brothers, an unregulated merchant house, run by a prominent Cape family, which had been indiscriminately issuing the equivalent of promissory notes – an early version of uncollateralised debt obligations. The Cape of Storms had experienced a 'perfect storm'.

The policy response during the crisis included fiscal austerity, an attempted reorganisation of domestic financial intermediation and continued monetary easing, which depreciated the exchange rate and created inflation. A new domestic bank was created. Most economic historians regard this bank as a primarily a lending institution, but we show that it also fulfilled central bank functions and had more in common with an emerging group of state-owned banks in Europe and a type of bank created in Amsterdam and Java.

The conventional view of the Cape of that period is that its financial system was substantially underdeveloped in comparison with Europe's. The crisis shows the contrary, as does the response. Indeed, the system was similar to that of Amsterdam and much of Europe, and the crisis experienced in the Cape was similar to a 1763 crisis in Amsterdam. The Cape, it seems, was a prosperous society with an advanced, albeit informal, financial system.

The crisis, of course, had severe implications for economic growth and welfare in the Cape Province: the exchange rate all but collapsed and per capita GDP fell by 22 per cent between 1788 and 1793.[1] By the time of the first British occupation in 1795, the Cape economy was a shadow of its former self. The policy response was arguably ineffectual and the crisis and the weak response appear to have been contributing factors to the economic stagnation of 1790 to 1820.

This paper, then, considers the Cape Colony financial crash of 1788–1793 in greater detail than previous scholars have done. It is particularly interesting to modern scholars, as the financial crisis was precipitated by a deterioration of economic conditions, and the final collapse in financial intermediation was that of a merchant house, which had issued promissory notes – in today's vocabulary, a shadow non-bank financial institution that issued debt obligations. Indeed, as will be highlighted below, the main outcome of the crisis was to formalise banking. In 1793, the government created the first bank in the Colony. However, that bank was similar to others of its time and more closely resembled the quasi-central banks popular in Europe.

The paper is also the first, as far as we are aware, to investigate a financial crisis in colonial Dutch South Africa. The recent global financial crisis has sparked interest in the causes and consequences of earlier episodes of financial sector distress and what they can teach us. Many of the excellent historical analyses of financial crises have been influential in changing views on economic policy (Friedman and Schwartz 1963; Kindleberger 1978; Krugman 1996; Kindleberger and Aliber 2011; Blanchard *et al* 2013; Eichengreen 2012, 2014). This is not least because bank failures impose substantial welfare costs

[1] We calculate this using GDP per capita estimates from Fourie and Van Zanden (2013).

on society (Laeven and Valencia 2012).

Despite this substantial set of international work, however, historical accounts of South African financial failures, particularly in the academic literature, are limited and incomplete. For example, in one of the largest and most influential histories of global crises, *This Time is Different*, Reinhart and Rogoff (2009 pp. 346, 382), draw from existing literature and identify only two South African banking crises prior to the twentieth century, in 1877 and 1890, but do not elaborate on them. In the most extensive database of banking crises, Caprio and Klingebiel (2003) ignore pre-twentieth century South African crises. This is surprising, given the wealth of qualitative and quantitative sources available for South Africa.

More broadly, when the financial relations between European countries and their African colonies have received any attention in the scholarly literature, the aim has often been to understand the experience of the coloniser rather than the colonist (Buelens and Marysse 2009). And although indigenous monetary systems, currencies and credit markets have been the subject of several historical investigations (Stiansen and Guyer 1999; Eagleton *et al.* 2009; Gardner 2014), these often have little policy relevance for modern financial systems. Moreover, African economic history is experiencing a revival (Austin and Broadberry 2014), and one of the aims of the new literature is to document the lessons from Africa's past with global application.

This paper, therefore, has many holes to fill. Our findings show that the Cape financial system was far more developed than previously believed. In fact, in contrast to the views of earlier historians that it was a 'social and economic backwater', recent research has shown that the Colony was wealthy.[2] These historians' assessments of the Cape economy were largely informed by anecdotal accounts of travellers in the rapidly expanding interior, who would inevitably highlight the poverty and deprivation of the frontier farmers. Yet, as Fourie and Uys (2012) and Fourie (2013) have shown, such poverty was not the norm. Founded in 1652 by Dutch East India Company officials who were sent by the Company to establish a refreshment station for the ships sailing between Holland and the East, the small settlement at the foot of Table Mountain had a precarious existence during its first three decades. By the 1670s, however, farmers freed from Company service settled in the fertile territory west of the first mountain ranges, planting wheat and vines. Settler numbers increased, augmented by the arrival of about 150 French Huguenot settlers, and the process of colonisation, and dispossession of the indigenous Khoisan peoples, had begun. One hundred years after the founding of the Cape station, aided by their superior weapons and diseases to which the Khoisan had no resistance, farmers had moved north and east, across the mountains into the drier interior. Here they settled vast lands, practising stock farming and becoming increasingly isolated from Cape Town, the only market in the Colony. By 1795, when the British first took control of the Cape, and the frontiersmen had met the amaXhosa at the Fish River (the eastern border of the Colony), the European population at

[2] See Fourie (2014) for a detailed discussion of the historiography of Cape prosperity.

the Cape totalled close to 15,000 (Fourie and Green 2015).

Much of the eighteenth century saw economic development, but from 1780 onward economic conditions in the Cape Province began to deteriorate. The Dutch East India Company (Vereenigde Oost-Indische Compagnie –VOC, or 'the Company') was in decline, partly because of a severe financial crisis in Amsterdam in 1763, the disruption due to the American War of Independence (1763–1787) and tensions between Batavia, England and Holland. Domestically, the increasingly politicised and increasingly rural population were tiring of the Cape Town based VOC-oriented administration. Tipping the balance further, the Van Reenen Gebroeders, a merchant house with a turnover approaching nearly a quarter of the Cape's money supply, defaulted on its debt obligations in 1793 and disbanded in 1794. This caused substantial difficulties for their counterparties, almost all of them rural farmers.

This article is organised as follows. In the first section we contextualise monetary and financial conditions in the Dutch empire and the Cape Province from 1760 onwards, drawing on primary and secondary sources. We describe the conditions for financial fragility, highlighting the global and domestic conditions that caused intermediation to break down: a succession of international wars, a severe global financial crisis in 1763, a persistent balance of payments deficit, a depreciating currency and the slow collapse of the Dutch empire. The next section discusses the deteriorating monetary and financial conditions in the Cape, with particular focus on the Van Reenens, their business model and their collapse. Then the paper outlines the institutional, regulatory and financial components of the policy response to the crisis, the most important being the creation of the *Bank van Leening.* We compare this bank with other government-backed banks of the era and show that it functioned as a quasi-central bank. The concluding section discusses the way the financial crisis and the new institutional arrangements affected economic development in the Cape Colony. We show that both the crisis and the ineffectual policy response were likely contributory causes of the period of relative stagnation and decline from 1800 to 1830.

2 The world economy, circa 1750

As a possession of the VOC, the Cape Colony was firmly part of the Dutch financial system, with Amsterdam as its centre. By 1750, Amsterdam dominated the global financial system, owing to four innovations of the 1600s (Ferguson 2008 pp. 48): joint stock companies, a stock exchange (the Amsterdam *Beurs),* a government-backed clearing and settlement bank (the Amsterdam *Wisselbank*) and, of course, the huge Dutch East India Company, or VOC. These were all closely related: the VOC was the world's first joint stock company, it was the most liquid and traded share on the *Beurs* and its global transactions were facilitated by the *Wisselbank.*

The role of the *Wisselbank* in the success of both Amsterdam and the VOC should not be underestimated. As the name implies, it was originally created (in 1602) as bank of exchange, primarily to issue bills of exchange and ensure their effective clearing and settlement. Adam Smith (2000 [1776] Bk II, pt 2) dedicates a substantial part of *The Wealth of Nations* to this bank, if only because it was such an important part of the economic system of the time. He identifies the purpose of its creation as both to manage the large inflows of foreign coin and specie from the ends of the Dutch empire and to facilitate Dutch trade.[3] Given the complexity of transactions in remote parts of the Dutch empire, the *Wisselbank* was vital. The problem it tried to solve was two-fold: the global reach of the VOC and the Dutch empire meant that making payment in gold or coin was practically impossible, and even had it been possible, the Dutch coinage system was prone to debasement.[4]

The bank therefore provided a global payment system off the back of 'receipts' or bills of exchange issued against deposits.[5] Over time, these bills of exchange assumed the role of bank notes.[6] Indeed, the Dutch bills of exchange were one of the major innovations in global finance banking and, together with the invention of joint-stock companies, firmly established Amsterdam as the financial capital of the world for much of the seventeenth century. To understand the business model, it is helpful to know that it was an almost fully capitalised bank: by 1760, it had 19 million florins in deposits and 16 million in reserves (Ferguson 2008: 49). At the time, its 'bank guilders' – the bills of exchange it issued – were almost fully backed.

The *Wisselbank* was an important player in the Dutch empire. Indeed, Quinn and Roberds (2014) note that it played a quasi-central banking role. Its most important 'central bank' role was to issue 'receipts' that functioned as fiat money (Quinn and Roberds 2014). In addition, it provided 'lender of last resort' functions. It was also the interface between Dutch colonies and the rest of the world (Schnabel and Shin 2003), providing international payments through its links with the other great banks of the period, most importantly the Hamburg bank, which was the key bank for the Prussian empire and the main intermediary for payments between Berlin and Amsterdam. Of these great banks, the *Wisselbank* was arguably the dominant global player, reflecting Amsterdam's global pre-eminence. Its business model[7] meant both that it controlled a large

[3] Various coins circulated freely across the territories under VOC control, in particular Dutch guilders, Spanish doubloons and British pounds.

[4] During the sixteenth century the Netherlands had competing companies that could strike coins. The effect of the competition was to encourage each to produce coins (known as *rijksdaalers* or rixdollars) of slightly lower quality than the other A 'race to the bottom' developed and the metallic content of coins began to deteriorate (Quinn and Roberds 2012). The Dutch government standardised the system – linking the value of *rijksdaalers* to specified amounts of silver. The *Wisselbank* accepted these coins and issued receipts for them. In its early years, the bank thus was vital for assaying the value of coins in circulation. Indeed, receipts issued by the bank were more trustworthy than coins

[5] Bills of exchange were not particularly new – indeed they formed the backbone of the great Medici banks.

[6] Detailed explanations of the role of bills of exchange drawn on the *Wisselbank* are provided in Adam Smith (2000 [1776], Bk II, pt 2), Macleod (1866) and Schnabel and Shin (2003). In short, a bill drawn on the Amsterdam *Wisselbank* was accepted by merchants in almost all major countries.

[7] The business model had been gradually refined and the bank had become probably the

proportion of global bullion and that bills of exchange drawn on the Amsterdam *Wisselbank* (known as *bank guilders*) were accepted in most European capitals as legal tender.[8] Indeed, Adam Smith (2000 [1776] p. 509]) states that 'A thousand guilders in the bank of Amsterdam, for example, are of more value than a thousand guilders of Amsterdam currency'.

Despite the existence of this dominant global trade and credit bank, both in Amsterdam and Cape Town retail banking as we know it today was underdeveloped.[9] Indeed, Amsterdam, the centre of the VOC, provides a useful benchmark for understanding financial and credit extension. In Amsterdam, loans typically took place between two parties in the form of loan contracts, with merchants (often silk merchants) usually issuing the loan (Van Bochove and Kole 2014). Although many of these merchants focused on the retail market, some developed into significant lenders, providing trade credit to importers and exporters,[10] and by 1750 these 'merchant bankers' were significant players in the global financial system.

3 The financial system in the Cape

By all indications banking in Cape Town was arranged, as in Amsterdam, on an informal, bilateral basis, usually between merchants and colonists, or between two merchants.[11] By 1779, the burghers were complaining about the dominance of two particularly large domestic merchant houses: Cruijwagen & Co and La Fèbre & Co. (Ross and Schrikker 2012 p. 42). Wealthy Capetonians relied on their connections for short-term loans, and from probate inventories it is clear that the informal credit market between burghers was extensive (Swanepoel and Fourie 2015). There is also evidence of direct lending by the government to colonists, and a Widows and Orphans society lent out money, usually on a collateralised basis. Finally, there was a large meat merchant house, the Gebroeders Van Reenen, which facilitated lending between the Cape and the outlying colonies. Table 1 provides a breakdown of the Cape financial system circa 1790.

Of course, during the early years the colony did not have its own currency. The refreshment station was frequented by visitors from around the world and a number of currencies were in circulation, including Dutch currency (bank

most innovative of its time. For extensive discussions of the Wisselbank business model see Smith (1776 Bk IV, pt 1) or Quinn and Roberds (2014). See Macleod (1866) for a comparison of the Dutch, English and Scottish banking models. The Scottish model is the one the modern reader would be more familiar with; Scottish banks were independent joint-stock companies. These only became prominent in the mid-1800s, as London eclipsed Amsterdam.

[8] In most countries, banks were able to issue their own bank notes which functioned as fiat money. Granting a monopoly for legal tender to a 'central bank' was still a few centuries away. The strength of the *Wisselbank* guilder lay in bank's the 'bulletproof' capital structure.

[9] Amsterdam did not get an English-style deposit bank until 1870.

[10] This is in marked contrast, for example, to seventeenth-century England, where banks that facilitated loans were common and helped to fuel English economic growth (see, for example, North and Weingast 1989).

[11] For a discussion of the importance of alcohol merchants, see Groenewald (2012).

guilders issued by the *Wisselbank*, and coin), Spanish doubloons and English currency.[12] In 1770, the Dutch standardised the currencies used in their territories. Until then, the rixdollar had been valued at Rix$3 to the guilder; now it was Rix$2.4 to the guilder at the Cape, the equivalent of a change from Rix$5 to Rix$4 to the British pound.[13] The rixdollar was in a fixed exchange rate with the guilder at 48 stuivers (4s in sterling), implying an exchange rate of 2.4 Rix$/guilder.[14] The guilder was a silver-based currency during this period, defined as 9.61 grammes of silver.

4 The conditions for financial fragility

In 1763, Amsterdam experienced a financial crisis. This crisis bears remarkable similarities to the collapse of both Long Term Capital Management (LTCM) in 2002 (Schnabel and Shin 2003) and Lehman Brothers in 2008 (Quinn and Roberds 2014). The Seven Years War (1756–1763) had brought about substantial and important changes in Europe's economy. In particular, increased economic activity in Prussia caused trade and financial activity to shift eastwards to Hamburg (Schnabel and Shin 2003), and it was expected that after the war Prussia would boom. To facilitate trade between Amsterdam and Hamburg, a number of the merchant banks increased their trading activities, taking on progressively more and more risk. One of these, Gebroeders de Neufville, took a particularly 'broad-minded' approach to lending (De Jong-Keesing 1939). It relied crucially on continuously building its loan book to allow it to roll over its bills of exchange, with new ventures financed from previous ones, and on a continued increase in Prussian economic growth. When this growth did not materialise, defaults on loans accumulated, the debt could not be rolled over and liquidity froze. De Neufville's failure was systemic – and the entire Amsterdam market for bills of exchange froze.

Across the Atlantic, the American War of Independence of 1775–1783 had left the VOC in deep debt, with estimates of up to 49.5 million guilders (Muller 1969 p. 77). Ferguson (2008) details the decline of the Company and notes that its share price declined in line with its fortunes, from a high of 783 guilders in 1733 to 120 by December 1794.

The appointment of C. J. de Graaf as Governor in 1785 precipitated the end of VOC control of the Cape. Under his leadership, the affairs of the Cape would deteriorate further. By the beginning of the 1780s, Cape operations of the

[12] See Arndt (1928) or Muller (1969) for schedules of conversion rates.

[13] For consistency, this paper quotes exchange rates throughout as South African currency versus international, e.g. Rix$ versus sterling, and later rand versus US dollar. Colonial-era sources tend to use the inverse, generally expressing the value of a rixdollar in terms of English pounds shillings and pence (abbreviated *£sd*), i.e. a rixdollar is given as being worth 4*s*. Conversion rates are based on the imperial British arrangements of 12 pence to the shilling, and 20 shillings to the pound.

[14] Different sources give slightly different exchange rates Those quoted here are from Muller (1969 p. 451). Twenty stuivers made a Dutch guilder. After the Dutch decimalised in 1816 and until the introduction of the euro, the term 'stuiver' referred to the five cent coin, or one twentieth of a guilder.

VOC had become essentially bankrupt. In 1782, the rixdollar was converted from a unit of account to a paper currency (Kantor 1971), and inconvertible Cape rixdollars[15] were issued – meaning that the conversion back to coins was not guaranteed. This was ostensibly because the arrival of French soldiers had caused a temporary drain of physical coins from the Cape Treasury (Kantor 1971) or that various overseas wars, particularly the American War of Independence, had disrupted supplies of specie (Arndt 1928). The VOC pledged to convert paper money to coins as soon as coins arrived from Amsterdam. This promise was honoured at least once, in 1784. However, it seems that the Cape gradually discovered Gresham's Law, as hard currency proved increasingly difficult to obtain and paper drove out coins.

Most measures of economic output and development show the Cape experiencing increasing difficulties. Fourie and Van Zanden (2013) show that between 1788 and 1793 GDP per capita declined by 22%. For the same period, Du Plessis and Du Plessis (2012) find prices rising and welfare ratios deteriorating. Many of the gains experienced during a long economic expansion were reversed in these five crisis years.

Not only were there economic difficulties. In 1779, a group of 404 Cape Burghers handed a petition to the *Heeren XVII*, the group that ran the VOC's affairs (Muller 1969, p. 69). The demands included increased political rights and economic liberalisation. The Burghers wanted to begin direct trade with the Netherlands, India, Zanzibar and Madagascar, rather than working through an increasingly Byzantine VOC bureaucracy in Cape Town. The *Heeren XVII* accepted some of these proposals. The effect of this economic liberalisation was some financial liberalisation. Until 1779, with few exceptions, all international financial transactions had to pass through the VOC. Now the financial system opened up somewhat to facilitate international trade, and indeed by 1790 Cape wine could be exported directly on VOC ships, for a fee.[16]

Other political factors contributed too. By 1780, the borders of the Cape had expanded rapidly and such a large territory became increasingly difficult for the VOC to manage. Muller (1969 p. 64) identifies four factors that created 'exceptional disturbances'. First, the eastern border had begun to encroach on the Xhosa kingdoms, leading to periodic clashes between settlers and the amaXhosa. Second, the substantial growth in the settler population was mainly driven by immigration, not by VOC officials. Increasing demands for some form of democratic government made maintaining the VOC as owner and administrator increasingly difficult. Third, the Company itself (as noted above) was in increasingly severe financial difficulties. And finally, the British navy had begun launching attacks on the Cape. These had been successfully repelled, but the defence of the Cape increasingly relied on French marines.

The Cape economy was now entering the eye of the storm. From 1782 until 1788, the VOC continued to promise to guarantee the fixed exchange rate,

[15] Rixdollars were used in other VOC possessions too. It was only with the introduction of Cape paper currency in 1782 that the Cape rixdollar came into its own

[16] Council of Policy (1790), Resolutions of the Council of Policy of Cape of Good Hope, C 185, pp. 41—112.

and it appears it kept this promise during this period. However, from 1788 additional rixdollars were printed. The rixdollar was now a pure fiat currency. Between 1788 and August 1791, the supply of rixdollars increased to 500,000 (Harlow 1963) and the purchasing power of a rixdollar declined substantially. Different sources put the consequent depreciation at between 20 and 30 per cent by the time of the British occupation in 1795.[17] This implies an annual average depreciation of between 2.9 and 4.3 per cent from 1788 to 1791 (see Figure 1).

It is important to understand how the depreciation manifested. Since a formal exchange rate market did not exist, a parallel market developed. While the government in theory guaranteed the value of coins at the original exchange rate, in practice paper money traded at discount to coins.

Estimating how far this depreciation affected inflation is somewhat difficult. Du Plessis and Du Plessis (2012) constructed a cost of living index for the 1652–1795 period – in silver, which ensures that the index is not affected by the rapidly depreciating currency. Their index shows a marked increase in the cost of living after 1788 and a decline in all measures of welfare.[18] Causes of this decline may have been the failure of nominal wages to keep pace with inflation, the 1770 devaluation, the issuance of paper money in 1783 and the depreciation of 1788 onward.

5 The final trigger - a non-bank financial intermediary

But it was an institutional feature of the financial system that perhaps contributed most to the severity of the crisis. By 1780, the Van Reenens had become possibly the wealthiest family in the Cape, thanks to patriarch Jacob van Reenen's vast landholdings and major involvement in the meat and alcohol trade over several decades (Groenewald 2011, 2012). On his death in 1793, Jacob left a number of sons, all of whom rose to prominence in Cape society. The one son, Dirk, built one of the largest and most successful wine businesses. A further two sons, Jacobus Gijsbert and Sebastiaan, went into the lucrative meat merchanting business. Both branches of the family, meat and wine marketers, must have provided merchant credit – however, it was the meat marketers who caused problems.

The brothers (*gebroeders*) were particularly well-connected and were able to obtain a near monopoly on meat supply (Wagenaar 1976). We can get an idea of the sheer size of the Van Reenen business. Their capital was approximately 40,000 rixdollars in 1791 and their operating costs alone were between 90,000 and 100,000 rixdollars (Wagenaar 1976, p. 106), whereas the available estimates of total money supply (Harlow 1963) suggest that about 500,000 rixdollars were

[17] See Denzel (2010), Arndt (1928 p. 7), Muller (1969 p. 77) and Kantor (1971). Arndt (1928) has the biggest estimate.

[18] Du Plessis and Du Plessis (2012) use a 'welfare ratio' to measure welfare. When this ratio exceeds 1, the ratio indicates that the wage is sufficient to cover the expenses associated with the consumption basket.

in circulation. Moreover, the meat business was only one component of the Van Reenen family conglomerate.

By 1792, the meat trading houses were effectively the Colony's merchant bankers, with a function similar to that of merchant bankers in Amsterdam – facilitating trade and providing financial services. The main financial intermediation problem they solved was how to transact business between Cape Town and the far-flung districts, particularly as the Colony was rapidly expanding. The 'unit of account' problem, i.e. the problem of simply having a currency with which to make transactions, was particularly hard to solve. The Cape adopted a system similar to Amsterdam's: merchant's letters of credit began to work as currency (Van Bochove and Kole 2014).

Cape butchers performed this function through *slagtersbriefjes*, which were promissory notes they issued to their clients in outlying districts (Newton-King 1999 p. 147). The large Van Reenen Gebroeder company was particularly well placed to do this – Cape Town and its surrounding districts did not go in much for livestock farming, being mainly devoted to wheat and wine. In outlying districts, farmers would 'sell' livestock to the Van Reenens' agents (*slagtersknechte*), who would issue a promissory note against the sale. This *briefje* could be exchanged for cash in Cape Town.

The farmers accepted these notes because of the increasing shortage of all types of hard currency (Dutch, Spanish and English coin) and the sheer monopoly power that the Van Reenens exercised over the meat market and consequently over the financial system of the inland region. And indeed, much like more recent crises, the collapse of Gebroeders Van Reenen triggered further collapse. That this business collapsed was not particularly surprising: the brothers took many risks, and a perfect storm of circumstances brought about their final collapse.

One of these circumstances was the matter of transport. Moving sheep from far districts to the Cape (Wagenaar 1976 p. 107), the company was exposed to regular raids on travelling parties: 6,000 sheep and 253 cattle were lost in a single raid on 11 June 1792 at the Leeugamka River, about half of the stock being transported. The brothers persuaded the Cape Council of Policy (*Politieke Raad*) that they needed additional money and security. The *Raad* approved a loan of 25,000 rixdollars to the company and assisted by providing commandos.[19] A further complication was that, as part of the agreement, the price of meat in Cape Town was fixed, but inland prices varied considerably and the costs of transport continued to rise (not least because of the security problems).

Another circumstance was uncontrolled loans. The Nederburgh and Frijkenius Commission Report (see below) records that total loans to the colonists from the government had accumulated to 376,360 rixdollars, an extraordinary sum considering the total size of the economy.[20] Indeed, the butchers were often the only financial link to the cattle farmers. The Commissioners therefore

[19] This loan did not cost the Cape government much: by this date, they were printing inconvertible rixdollars.

[20] Council of Policy (1793), Submissions to Nederburgh and Frijkenius, 24/7/1793, p. 339; 18/12/1792 p. 695.

appointed the Gebroeders to collect debts on behalf of the VOC. With this step, the Gebroeders were finally transformed from a merchant house with a finance business into a finance house with a merchant business. They had become South Africa's first major investment bank, specialising in trade and credit finance.[21]

By 1793, the Gebroeders was a substantial business, but in severe distress. The brothers had expanded into imports: when selling meat to passing ships, thus generating foreign currency for their company, they took the opportunity to buy foreign goods to sell at a profit. But the deterioration of international trade as a result of the American War of Independence led to a decline in shipping traffic: Boshoff and Fourie (2010) calculate that the annual number of ship days (the days ships were anchored in Table Bay harbour) declined from 5449 in 1788 to 3003 in 1793 and 216 in 1795. To add to the brothers' difficulties, the Nederburgh and Frijkenius Commission had also decided to enforce the rules regarding trade with ships more strictly. The Gebroeders' response was unfortunate, but not unlike the response of many other bankers both before and after them. By December 1792 they had simply changed the rules regarding their promissory notes, the *slagtersbriefjes.* Whereas previously these could be exchanged for cash on demand in Cape Town, they could now only be redeemed for goods – and only for goods at specified merchants, generally close friends of the brothers (Wagenaar 1976 p. 116).[22] By September 1793 they had begun simply delaying payment on these notes or defaulting outright. Unsurprisingly, cattle farmers stopped selling cattle for *slagtersbriefjes* and the Gebroeders' business began to crumble.

Despite damning evidence from an independent inquiry, the *Raad* did not respond immediately, and even advanced a further 25,000 rixdollars to the Gebroeders. The *Raad's* Resolutions of 16 May 1794 suggest that finally the government had finally begun to address the issue. It said the Gebroeders' agents should disclose the conditions of the *slagtersbriefjes* at the time they were issued. In May 1794 the two brothers parted ways. They divided up the business and, despite some futile attempts by J.G van Reenen to set it up again after the British occupation, it ultimately failed.

6 The policy response

Increasingly concerned about the precarious finances of the Cape, in 1792 the VOC dispatched two Commissioners-General, Nederburgh and Frijkenius, from its head office to correct the situation. Their report outlined steps to rectify what

[21] The term 'investment bank' is commonly used today but technically incorrect. Investment banks are not banks, because they do not take retail deposits. Prior to the global financial crisis, they did not have access to the overnight discount window at the central bank. Investment firms are a common type of non-bank financial institution. They create particular types of risks for the financial system, generally because they assume substantial balance sheet risk, but are not regulated as banks. The risk is typically counterparty credit risk and market risk (i.e. the risk to the business of a large counterparty defaulting or the risk of adverse movement in market prices).

[22] Council of Policy, C 212 Bijlagen tot de Resolutien, 13/12/1793, p. 982.

was essentially a collapse of the Cape economy, and with it the financial system. Their first step was to restore fiscal responsibility. As noted above, the effective monetisation of the fiscal deficits was causing currency depreciation and inflation and disrupting financial intermediation. The report voices the Commissioners' concern with the deterioration of the Cape fiscus – the sheer expense of running the Cape was particularly a concern for the VOC, which was itself experiencing increasing financial difficulties. Fourie *et al.* (2013) quote sources that provide evidence of a marked deterioration of the fiscal accounts, high deficits and a particularly high percentage of military spending – unsurprising considering that the British had made known their wish to land at Cape Town and take the colony.

One serious weaknesses of the Cape economy was the lack of a domestic bank. The Gebroeders Van Reenen crisis showed how dangerous the rise of unregulated, uncollateralised debt obligations could be. Discussions in the Council of Policy suggest that there was a need to ensure that the appropriate soundness of money and its circulation can best to be achieved by the creation of a 'Bank of Lending'.[23] On 15 March 1793, on the recommendation of the Commissioners General, a 'Lombard' bank was created,[24] known as the *Bank van Leening,* whose purpose was to provide credit to the growing settlement, at a rate of 5 per cent per year, against qualifying collateral (mainly property and gold). The Cape Lombard bank appears in some ways to have been structured like many other Lombard banks, i.e. it only lent money against qualifying collateral.[25] Indeed, in a modern banking system, central banks typically provide 'Lombard credit'; that is, cash against securities. The overnight discount window of a modern central bank works on the Lombard credit principle: cash is provided against collateral. Typically these are repo facilities.

The *Bank van Leening* should be seen in the context of other 'national banks' set up in the same era, which fulfilled functions that today are more closely associated with central banks. It appears that the Cape *Bank van Leening* was to some extent modelled on the *Bank van Leening* established in Java in 1746, which was known to the two Commissioners-General.[26] That was a Lombard-type bank. It also issued bank bills against deposits, creating a fully backed currency in Java. However, that part of its business was less successful and was closed down in 1794, but its Lombard bank business continued. Only three

[23] The joint-stock-company limited-liability lending banks that we know today were still some years away, and precipitated the next crisis.

[24] Inventory of the Bank of Lombard is at http://databases.tanap.net/ead/html/CapeTown_1.8/pdf/CapeTown_1.8.pdf

[25] Lombard banking originated in Lombardy, France. The Bank of England is located at the one end of Lombard Street in London where most of the major London financial institutions are found. Amsterdam also introduced a Lombard bank in the mid-1700s.

[26] Ota (2006 p. 176 footnote 62) notes that both Nederburgh and Frijkenius had also been appointed during 1793 to assist with the Java colony's financial difficulties. Although the two Commissioners do not specifically refer to the Java *Bank van Leening* in their recommendations for the Cape, they would have known it when they were in Java. The Java bank was experiencing difficulties at that time with note-issuing. This may be why the Commissioners did not give this function to the *Bank van Leening* and did not recommend any change to note-issuing powers.

years earlier, in 1791, Alexander Hamilton, the first Secretary of the United States Treasury, had created that country's first federal-level bank, the First Bank of the United States. Until then, all banking had been done at a state level, but Hamilton's reforms were aimed at bringing some stability. Hamilton's 1791 description of the proposed First Bank is interesting in the context of the Cape reform (quoted in Ford 1898). He says that

the simplest and most precise idea of a bank is, a deposit of coin, or other property, as a fund for circulating credit upon it, which is to answer the purpose of money. That such an arrangement would be equivalent to the establishment of a bank would become obvious if the place where the fund to be set apart was kept should be made a receptacle for the moneys of all other persons who should incline to deposit them there for safe-keeping; and would become still more so, if the officers charged with the direction of the fund were authorised to make discounts at the usual rate of interest, upon good security. To deny the power of the government to add these ingredients to the plan, would be to refine away all government.

However, there were a number of notable differences between America and the Cape. Most important was that the Bank of Leening's capital was not raised by subscription (as in the case of the First Bank), but rather from inconvertible paper money issued by the Cape administration.

This was a fertile time for the creation of central banks. Francis Baring (quoted in Capie *et al.* 1994) was the first to describe, in 1797, the 'lender of last resort' function of a national bank, although, as noted above, the Amsterdam *Wisselbank* had been fulfilling certain components of this role. The *Bank van Leening* model may also be compared to Napoleon's *Banque de France* of 1800 (Capie *et al.* 1994), which was also a government-sponsored entity that assisted with lending and monetary stability and is generally regarded as a 'central bank'.

Although annual GDP per capita figures are not available for the immediate post-1795 period, Fourie and Van Zanden's (2013) GDP estimates suggest that the economy stagnated between 1793 and 1804. This corresponds to the analyses by Du Plessis and Du Plessis (2012) and De Zwart (2011), which show a marked deterioration in welfare and a decline in real wages. Traveller reports of the mid-eighteenth century reported a wealthy and prosperous settlement; indeed, Ryk Tulbagh, Cape governor in the 1760s, issued sumptuary laws to reduce the displays of affluence amongst the elite. Yet when the British occupied the Cape after the financial crisis they did not see it like that. Bird's description of the Cape (1823) is of a colony that was to some extent struggling.

Domestic problems continued to drain the Colony's finance. A second Xhosa war broke out in 1789 and lasted till 1793, and a third Xhosa war followed in 1799. The global economy, too, was in a process of extraordinary change. Britain occupied the Cape in 1795, the same year that the Dutch Republic became the Batavian Republic. The VOC was nationalised in 1796 and formally dissolved in 1800, having experienced financial difficulties and lost many of its possessions. Europe itself was disrupted not only by the Batavian Republic but also more seriously by the French Revolution of 1789–1799.

7 The longer term effects

The after-effects of the financial crisis were relatively severe for the shadow exchange rate. The Cape rixdollar continued to fall in value against the pound, reaching 2s 6d by 1798. As a result, the Cape continued to be in severe economic trouble. By 1796, the colony was running a trade deficit of nearly £300,000 a year (Muller 1969: 86), and reports from the colony show that a liquidity crisis was manifesting. The new British administrators continued to print currency.

The effects of the crisis would be felt well into the new century. The combination of political uncertainty, an administration that freely printed currency and the spillover effects of the VOC's financial difficulties caused the exchange rate to collapse. Harlow (1963 p. 227) notes that by 1805 a rixdollar was worth $1s6d$ (Rix\$13.3/£), substantially down fro∇m the $2s$ $6d$ (Rix\$8/£) rate quoted in 1798. Credit defaults continued well into the nineteenth century. Probate inventories listed fewer goods in the decades after 1800 than before. The frontier regions would continue to experience several wars, complicated by the arrival of British settlers. In fact, as Fourie and Van Zanden (2013) show, the GDP per capita levels of the 1780s would only again be exceeded in the 1870s, when discoveries of diamonds in the interior made South Africa an attractive investment destination. It seems that the perfect storm that drove the Cape financial crisis of 1788–1793 caused long-lasting devastation.

8 Conclusion

The end of the VOC period at the Cape Colony was complex politically and financially. This paper has focused on one aspect only: the breakdown of financial intermediation. Considering that domestic retail banking was still only slowly developing in England and Scotland at the time, the Cape's system of financial intermediation does not look particularly underdeveloped – indeed it had similarities with intermediation in Amsterdam. But like the Amsterdam financial crisis of 1763 (and indeed the LTCM crisis of 2002 and Lehman Brothers' collapse of 2008), broader economic and financial system distress led to the collapse of a non-bank financial intermediary. This, in turn, worsened economic conditions, particularly in outlying parts of the colony.

Arguably the most important outcome of the crisis was the institutional change. The opening of a *Bank van Leening* to ensure stability is of particular interest in the context of the history of central banking. The bank was created a mere two years after Hamilton's pioneering First Bank of the United States, seven years before Napoleon's Banque de France and nearly sixty years before the first retail bank in Amsterdam. While the *Bank van Leening* did not survive the introduction of commercial Scottish model banks under the British occupation of the Cape, it was certainly an interesting experiment. The final lesson of the Cape's first financial crisis is an enduring one: the combination of large fiscal deficits, loose monetary policy, a large trade deficit and a lightly regulated or unregulated financial sector is a sure path to crisis.

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Table 1. ***The Cape financial system, circa 1790***

	Institution	**How it worked**	**Source**
Payments			
International	*Wisselbank*	'Bank guilders' operated as paper currency.	Adam Smith (2000 [1776] pp. 510 ff.)
	Other governments	Spanish and English currency were accepted for trade.	
Domestic – Cape area	Cape Government	Cape rixdollars were legal tender, no clearing bank existed.	Arndt (1928)
Outlying districts, particularly cattle districts of Graaff-Reinet	Gebroeders Van Reenen merchant house	Gebroeders issued *slagtersbriefjes* (promissory notes), which were convertible to rixdollars on demand in Cape Town. Operated as a parallel currency in certain areas.	Wagenaar (1976); Newton-King (1999)
Credit			
International	VOC through *Wisselbank*	International trade could only take place through the VOC.	
Domestic – Cape area	Cape Government	Colonists borrowed money from government.	
	Merchants	Colonists borrowed from each other informally.	Swanepoel and Fourie (2015)
	Widows and Orphans Society		
Domestic – between Cape Town and districts	Gebroeders Van Reenen merchant house	Credit extended to frontier farmers.	Groenewald (2011)

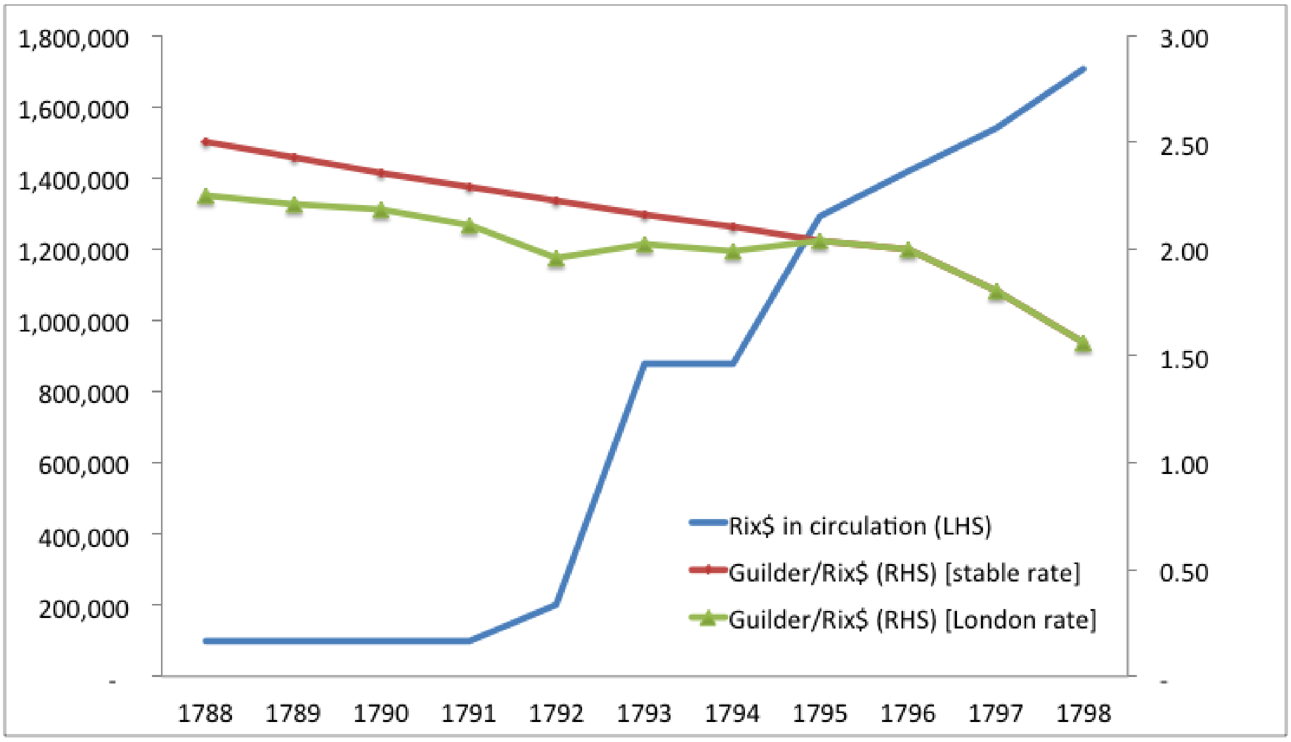
Appendix: Cape monetary and financial statistics

There are numerous sources for Cape exchange rates, with varying estimates. Most estimates use a premium for sterling (i.e. a black market rate), but the estimates vary. Only at certain periods were defined exchange rates implemented. The credit extension numbers include only lending by the *Bank van Leening*. There were numerous other lending channels (e.g. the Widows and Orphans fund and bilateral lending). However these are beyond the scope of this paper, which focuses on the 1788–1795 period.

Date	Currency (Kantor 1971) rixdollar per shilling			Exchange rate	Guilder	Rixdollar/ guilder			Percent change	Money supply (including bank)	Credit extension	Source
	Shillings	Pence	Decimal pounds	RD/pound	Sterling per 1,000 guilder (Denzel 2010: 19)		Grant (1806-1825)	This paper				All
1681–1770	5		0.25	4.00								
1770–1788	4		0.20	5.00					0.25			
1788	3.89	-	0.19	5.15	0.09	0.46		5.15	0.03	99315		Grant 1825, p. 11. Denzel (2010) shows depreciation of guilder/sterling as being small.
1789	3.77		0.19	5.30	0.09	0.47		5.3	0.03	99315		
1790	3.67		0.18	5.45	0.09	0.47		5.45	0.03	99315		
1791	3.56		0.18	5.61	0.09	0.49		5.61	0.03	99315		
1792	3.46		0.17	5.78	0.09	0.53		5.78	0.03	200000		
1793	3.36		0.17	5.95	0.09	0.51		5.95	0.16	880000	680,000	Denzel 2010; Grant 1825, p. 19
1794	3.27		0.16	6.12	0.08	0.52		6.12		880000	680,000	
1795	3.2		0.16	6.25	0.08	0.5		6.25	0.05	1291276	680,000	Denzel 2010; Kantor 1971
1796	3.2		0.16	6.25	0.08	0.5		6.25		1416276	680,000	
1797	2.88		0.14	6.94	0.08	0.56		6.94	0.11	1541276	680,000	Grant 1825, p. 6: General Craig adds R$250,000
1798	2	6	0.13	8.00	0.08	0.64		8	0.15	1706276	847,000	
1799												
1800												
1801												
1802												Harlow (1963), p. 227.
1803	1	6	0.08	13.33				13.33		2086000		

1804	1	6	0.08	13.33				13.33	0%	2086276		
1805	1	6	0.08	13.33				13.33	0%	2083376		Batavian government adds Rds 300,000. Harlow (1963)
1806	3	6	0.18	5.71			6.3		-57%	2169197	810255	Sir David Baird adds Rds 80,000 for the Colonial Granary
1807		48	0.20	5.00			6.5		-13%		960255	Governor Caledon guarantees original value – Grant 1825 p. 8.
1808	3	3.5	0.16	6.08			6		22%		985255	Rix$5.5 to a guinea is maintained
1809	3	4	0.17	6.00			5.9		-1%			
1810	4	2.25	0.21	4.78			6.2		-20%	2669197	1485255	Addition of Rix$500,000 in June 1810, Grant 1825, p. 144
1811	2	9.5	0.14	7.16			7.25		50%	2580000		Grant 1825, p. xiii.
1812	2	8.75	0.14	7.33			8		2%	2780000		
1813	2	6.25	0.13	7.93			8.25		8%	2880000		
1814	2	3.5	0.11	8.73			9		10%	3168580	1985255	Grant 1825 p. xiii.
1815	2	3	0.11	8.89			9.075		2%	3129580	1995000	Money withdrawn, Grant 1825, p. 147.
1816	2	1	0.10	9.60			10.7		8%			
1817	2	9.25	0.14	7.22			11.2		-25%			
1818	1	9	0.09	11.43			10.8		58%			
1819	1	10.25	0.09	10.79					-6%			
1820	1	9	0.09	11.43					6%			
1821	1	8	0.08	12.00					5%			
1822	1	5.25	0.07	13.91					16%			
1823	1	6.75	0.08	12.80					-8%			
1824	1	5.5	0.07	13.71					7%			
1825	1	6	0.08	13.33					-3%	Currency board introduced		Harlow (1963).

Figure 1. ***Exchange rate and money supply, 1788–1798***



Sources: See Appendix, and point-in-time estimates described in the text, and also Grant (1825, pp. 11, 19), Arndt (1928), Harlow (1963), Muller (1969, p. 451), Kantor (1971) and Denzel (2010, pp. 18–19). Most estimates are in sterling, and have been converted at a stable rate £0/1s/8d, which is the rate most widely quoted by sources. However, Denzel (2010, pp. 18–19) provides the exchange rate in London for sterling/guilder. Owing to the decline of Amsterdam and problems there, the exchange rate steadily declined in London. As the figure shows, at least some of the depreciation of rixdollar against sterling can be ascribed to the depreciation of the guilder against sterling.