London Merchant Banks, the Central European Panic and the Sterling Crisis of 1931

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October 2010

Abstract

The Central European panic of the spring 1931 is often presented as a cause of the sterling crisis of September. But what was the precise transmission channel? This paper proposes to explore how financial troubles on the continent affected Britain’s financial system and currency. The freezing of Central European assets was at the origin of a liquidity shock for London merchant banks because of their activity as acceptors/guarantors of commercial bills on account of German merchants. New balance sheet data are used to quantify the shock on various institutions. I then explore 1) how the different financial institutions reacted to the shock and 2) how the liquidity crisis transformed into a sterling crisis. The paper provides evidence that international contagion was crucial in transmitting the 1931 global financial crisis.

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1 Introduction

Among the numerous speculative attacks that punctuated the decade of the Great Depression, the sterling crisis of September 1931 occupies a central place. The pound’s collapse was an important milestone in the progress of interwar financial instability because it hit the heart of the international monetary system. Sterling was at that time a major international currency and its devaluation had far-reaching consequences. The crisis in Britain was followed by speculative attacks in other European countries and eventually led to the collapse of the gold exchange standard. In the United States, the Federal Reserve reacted to spreading exchange troubles by tightening its monetary policy, a move which contributed to banking instability and a deepening of the depression.

The sterling attack also remains of particular interest to economists because it took place in the midst of a more widespread, international financial crisis. The spring and summer of 1931 were marked by a wave of banking panics and exchange difficulties in Central Europe. Austria was the first victim, soon followed by Hungary and Germany. Contemporary observers of the year 1931 were depicting a global crash which was spreading contagiously from country to country.\(^1\) The episode therefore appears as a case study for international crisis transmission.

Explanations for the sterling crisis have alternatively emphasized the pound’s overvaluation (Moggridge, 1972),\(^2\) fiscal imbalances (Williamson, 1984, 1992) or the dramatic unemployment rate (Eichengreen and Jeanne, 2000).\(^3\) Although they all certainly contributed, these factors cannot really account for the timing of the speculative attack. Whether overvalued or not, the pound’s parity was maintained for more than six years after Britain returned to gold in 1925. The budget deficit had been deteriorating,\(^4\) and the unemployment rate rising since as early as 1929. This is two years before the pound’s final collapse.

Given the sequence of events, international transmission appears as a much better suspect for un-

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\(^1\)Such a view appears clearly in Gates W. Mc Garrah’s account of the year 1931: “The tidal wave of uncertainty and fear which endangered several national currencies and some banking systems, originated in Austria, swept quickly on to Hungary and Germany, and, after devastation these areas, flowed onward to Great Britain and the Scandinavian countries, sweeping down their currencies, and then, backwashing into the United States, carried with its unusual demands upon the American gold supply and credit system.” Bank for International Settlement, 1932, Second Annual Report, p. 10.

\(^2\)In a famous pamphlet, Keynes (1925) already criticized Britain’s stabilization, arguing that the parity retained would necessitate painful adjustments in terms of deflation and unemployment. However, Matthews (1986) and James (2001) have challenged the view that the pound was much overvalued.

\(^3\)Eichengreen and Jeanne (2000) argue that a second-generation model of balance-of-payment crisis does well in explaining the sterling attack.

\(^4\)According to The League of Nations, the budget registered a surplus of 7.9 million pounds for 1928/1929, and deficits of 25 million and 34.5 million for the years 1929/1930 and 1930/1931 (Statistical Year-Book of the League of Nations, 1930/1931 and 1931/1932)
derstanding the dynamics of the crisis. Indeed, the run on the pound began just after the peak of the financial crisis in Germany. On 15 July 1931, after a two-day Bank Holiday, the German government imposed capital controls so as to prevent a depreciation of the currency. As daily data indicate, this decision was immediately followed by gold withdrawals from Britain (figure 1). In the next two weeks, the Bank of England lost approximately twenty percent of its gold reserves.

Why was there a run on the pound just after the German crisis? Although most scholars recognize the existence of a link between the two events, the question of the contagion mechanism is still debated. On the one hand, several authors have argued that the British banking system was a channel of crisis propagation (Einzig, 1932, Morton, 1943, Williams, 1963, Sayers, 1976, Temin, 1993, James, 2001, 2009). On this account, the German panic would have directly affected British banks, and therefore, impaired the pound’s position. Yet, little quantitative evidence has been advanced so far for supporting this claim. The extent of the British banks’ losses in Germany are mostly undocumented, and the link between the banks’ troubles and the currency problems has never been formally specified. On the other hand, there also exists a view that international banking interdependencies were limited in the interwar system.5 For example, Capie et al. (1986) and Billings and Capie (2008) have proposed to assess the stability of the British banking system during the Depression, based on data for the large commercial banks. They find that this stability was not altered in the 1930s and therefore cast doubt on the hypothesis that the London City was impacted by global factors. The authors oppose Harold James’ thesis that the crisis in Central Europe had left London banks under fire. According to them, “no ‘real financial crisis’ ” hit Britain in 1931. They conclude that “the routes for contagion were limited, and that the system was not at risk.”6

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5This tradition goes back to Friedman and Schwartz (1963), who have argued that the banking panics of the 1930s in the United States were the consequences of the Federal Reserve’s failures rather than the result of international transmission. Recently, Richardson and Van Horn (2009) have argued that the peak in banking failures observed in New York City in July and August 1931 was caused by intensified regulation and not by the German crisis. However, using a FAVAR model, Ritschl and Sarfaraz (2010) find evidence of crisis transmission from Germany to the United States through the banking sector between 1925 and 1932.

6Billings and Capie (2008, p.10). Capie et al. (1986, p. 144) argue that the run on the pound was not due to banking weaknesses but to a general scramble for gold, which took place after the Central European crisis. Britain would have been the first hit, due to the low level of the Bank of England’s gold reserves. Other authors have also depicted the contagion problem in 1931 as an issue of confidence. Eichengreen and Jeanne (2000, p. 15) portray the Central European panic as the event which made the economy shift from one equilibrium to another. The crises on the continent altered expectations and “reminded investors that gold convertibility was not sacrosanct”. Temin (1993, p. 96) considers that the sterling crisis of 1931 can be well accounted for by a “a conventional model of panics in which Britain and Germany are thought of as members of a common economy.”
In this paper, I adopt an opposite viewpoint and argue that international transmission through the banking system was a direct cause of the sterling crisis of 1931. Relying on archival material never exploited so far and on new data documenting the British banks’ balance sheets, I report evidence that financial troubles in Central Europe translated into a liquidity crisis in the British banking system. The approach in this paper differs from previous works on several dimensions. First, while previous authors have mostly concentrated on the British joint-stock clearing banks, I primarily focus here on another type of financial institutions: the London merchant banks. These houses, indeed, were the most affected by the Central European events, but their position had never been documented so far. Second, based on information on the institutional organization of international banking relations, I specify the precise transmission channel through which the Central European panic endangered the British banks’ liquidity. Last, I keep track of various indicators of the liquidity crisis in the balance sheets and in money market rates, identify the Bank of England’s reaction to this situation and relate this information to the collapse of the pound sterling.

The City’s illiquidity, I argue, was the by-product of the merchant banks’ activity as guarantors of short-term commercial debts on account of German merchants through a specific credit instrument: the bankers’ acceptance. During the credit boom of the late 1920s, the weakly capitalized merchant banks had guaranteed bills for foreign merchants on an extensive basis because this activity did not necessitate them to immobilize resources, and therefore allowed them to earn substantial income. At the end of the 1920s, the amounts of the bills they had insured largely exceeded the value of their capital. This was not a problem in normal times because defaults on the merchants’ side remained limited. However, just as the burst of the housing bubble affected the liquidity of AIG or monoline insurers during the 2008 crisis, a shock provoking substantial defaults among foreign merchants could at any time endanger the position of the merchant banks. In the summer of 1931, exchange controls in Central Europe and the Standstill agreements, by imposing a freezing on all assets, resulted in the effective default of all borrowers from this region. Since merchants could not honor their sterling debts anymore, the liability for these debts fell upon their guarantors in London. The result was a huge liquidity shock on exposed financial institutions. 

Billings and Capie recognize that the merchant banks were more seriously hit but they minimize the impact of their troubles on overall banking stability because these were smaller institutions that could benefit from loans from the joint-stock banks. James (2001, p. 71) already noticed the concentration of the banking troubles among the merchant banks: “The position in this regard of the large joint-stock clearing banks was much safer than that of the private bankers, Schroeders, Lazards or Kleinworts, who had committed themselves heavily to Central Europe.” Schnabel and Shin (2004) have emphasized the role of acceptances in transmitting the financial crisis of 1763 from Amsterdam to Hamburg and Berlin. Note, however, that the transmission channel they identify is the reverse from that at play in 1931. During this episode indeed, acceptance houses in Amsterdam went bankrupt in the first place and their...
In this paper, I first document the extent of the shock on British banks. I show that the Central European crisis resulted in a run on a whole segment of the London market which was exposed to the instrument. I then describe the banks’ reaction to the shock. The crisis was followed by a drastic shrinkage of balance sheets. London merchant banks were forced to liquidate their assets in order to meet their liabilities. They also severely restrained commercial credit over subsequent years. Finally, I explore how these troubles in the banking sector altered investors’ expectations over the future of the pound. I argue that the Bank of England’s commitment to support the merchant banks and its reaction to the Central European shock gave a fatal blow to Britain’s adherence to the gold standard.

The remainder of the paper is structured as follows. Section 2 presents the mechanism through which the Central European crisis transformed into a liquidity crisis in London. Section 4 presents new data on London banks’ balance sheets and exposure to Central Europe. Section 5 quantifies the liquidity shock on British banks in 1931. Section 6 analyzes subsequent movements in their balance sheets. Section 7 explores the link between the banks’ troubles and the sterling collapse. Section 8 concludes.

2 The Transmission Channel

In only a few months, the 1931 financial crisis brought the whole international monetary system down and led to a global economic collapse remembered as the heyday of the Great Depression. The dramatic concentration of financial crises in the year 1931 has puzzled many economists (Temin, 1993). The global crash was initiated by the failure of the Creditanstalt, the largest Austrian bank, in May. The following two months were then marked by a wave of financial instability in Austria, Hungary and Germany. In all three countries, the crisis took a similar pattern, banking panics coming hand-in-hand with external pressure on the currency (Schubert, 1991, James, 2001, Ferguson and Temin, 2003, Schnabel, 2003, 2009). Governments also reacted similarly in the three neighbor states: they introduced capital controls in order to avoid a depreciation of their currency. Since this implied a ban on all payments abroad, Central European debtors had to find an arrangement with their foreign creditors for the reimbursement of their debts. In fact, all major banking creditors in New York and London agreed to maintain existing short-failure affected all subsequent discounters of their bills as well as the ultimate borrowers in Berlin. A more relevant analogy is with the 2008 financial crisis, where troubles in the US housing market transmitted to institutions having sold Credit Default Swaps on Collateralized Debt (or Mortgage) Obligations.

Capital controls were introduced as early as July 1931 in Germany and Hungary. Austria imposed exchange controls in October only, the National Bank running short of international reserves after five months of speculative attack. See Harris (1935) and Wandschneider (2009).
term credit lines to their customers from the region as soon as the crisis declared. The rescheduling of all private debts was later formalized through the Standstill agreements, which were renewed regularly until the end of the 1930s.

How did these Central European events affect British banks? According to many accounts, the banks in London had large amounts of claims on the crisis region (Williams, 1963, p. 524, Forbes, 1987, James, 2001, p. 71). However, looking at the balance sheets suggests that the banks’ exposure to Central Europe was different from mere portfolio exposure. In order to see this, one needs to enter into the details of these houses’ activity. In fact, direct portfolio holdings of Central European debts only accounted for one sixth of the British financial system’s exposure to this region in 1931. But the banks were exposed through a specific credit instrument: the bankers’ acceptance.

The bankers’ acceptance was a standard instrument of trade finance, which had been used since centuries by international merchants in order to finance their activities (Chapman, 1984, Schnabel and Shin, 2004). The principle was very simple: through an acceptance, a bank in London could guarantee a firm’s debt, in exchange for a commission, so as to allow this firm to borrow on the market. Figure 2 illustrates how the operation worked in practice. Suppose an exporter from country A had sold goods to an importer from country B and was to be paid after some delay. For example, payment might have occurred at the goods’ delivery. Now, suppose country A’s merchant wanted to benefit from the proceeds of her sale before receiving payment. A possibility for her was to borrow from a large capital market like, for example, the London market. However, potential lenders in London would not have lent directly to a merchant, on which they had no information: they required a guarantee. The bankers’ acceptance was designed to solve this information asymmetry problem. Practically, the exporter could draw a bill on a

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10 See Archives, Bank of England, C48/379. In London, a Joint Committee of Clearing Banks and Accepting Houses was set up to discuss these issues. Cooperation from London banks was also highly recommended by the London Conference, which took place from 20 to 23 July 1931.

11 The first German and Austrian Standstill agreements were signed by the British and US creditors, respectively on 19 August and 28 August 1931. The first Hungarian Standstill agreement was signed by British creditors on 14 March 1932. A distinct agreement was concluded with US creditors on 21 June. Through these agreements, international creditors agreed to prolong short-term credit lines to Central European debtors, while a progressive decline in the total of short-term credits outstanding was also foreseen. The first agreements were concluded for a six-month period. They were then renewed several times over the 1930s. See Sayers (1976, pp. 503-512) and Archives, Bank of England, ADM33/21.

12 At the end of July 1931, British banks’ German Standstill claims amounted to 64.7 million pounds, of which 53.5 million were acceptances (Archives, Bank of England, OV34/132, but see also Forbes, 1987, as well as Richard Sayers’ own estimates kept in Archives, Bank of England, ADM33/21). In the latter file, Sayers also estimated the total value of London’s Austrian Standstill claims (acceptances and other forms of indebtedness) at 1 million pounds in August 1931. This amount was reduced to 0.479 million pounds in March 1933, of which 0.363 million were acceptances (Archives, Bank of England, OV28/51 and ADM33/21). I was not able to find an estimate of the total amount of Hungarian Standstill claims before September 1933, at which date the remaining amount held was of 4.6 million pounds, of which 3.8 million were acceptances (Archives, Bank of England, OV33/84 and ADM33/21.)
corresponding bank in London (an accepting bank). In that case, she needed to provide evidence that she had shipped the goods to the importer and was to be paid soon.\textsuperscript{13} Upon successful examination of these documents, the bank “accepted” the bill, which means that it put its signature on it, in exchange for a fee (figure 2. I.). By doing this, the accepting bank committed to pay the bill’s holder at maturity. With the signature of a reputable London house on it, the bill was turned into a salable security. The exporter could then easily discount it on the London market at the prevailing interest rate. Once arrived at maturity, the bill’s holder directly asked for payment at the accepting bank, which, in turn, received payment from the importer (figure 2.II.).\textsuperscript{14} If the importer failed to pay - for example, if she had gone bankrupt in the meantime- the accepting bank could seize the goods shipped from A to B, which served as collateral.

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Like modern Credit Default Swaps, acceptances only represented contingent liabilities (or debt guarantees) for the British banks. Indeed, when accepting a bill, a bank became liable to the bill’s holder, but this liability was always exactly matched by a corresponding claim on an importer. Banks reported the amounts of bills they had accepted on both sides of their balance sheets (figure 3). Liabilities and claims were maturing at the same date and were secured by a commercial transaction: they were “self-liquidating” (Greengrass, 1930, Vigneux, 1932). The acceptance business therefore did not require banks to immobilize resources and they could potentially accept bills to a very large extent, relative to their capital.

This specific nature of the acceptance activity made it particularly attractive to the London merchant banks. These houses, indeed, were characterized by their low level of capital and deposits and their extensive network of foreign correspondents. In the nineteenth century, merchant bankers had an almost monopoly on the activity. In the interwar years however, they had to face two adverse trends: first, the competition with the New York market (Baster, 1937, Federer, 2003), and second the competition with the commercial banks (the joint-stock clearing banks), which were increasingly occupying

\textsuperscript{13} The exporter was required to send shipping documents to the accepting bank. These documents usually included a bill of lading, an insurance certificate and a freight receipt. See Greengrass (1930, pp. 49-53) for a full description.

\textsuperscript{14} This is a simplified presentation of acceptance credits. In practice, the process was often intermediated through banks in both merchants’ countries. Acceptances were used to finance British exports and imports as well as domestic trade and commercial transactions between foreign countries.
this field (Roberts, 1992, p. 171). Yet, while the New York market was developing, London seems to have resisted quite well. In the evidence he gave to the Macmillian Committee, Mr. Frederik Hyde (of the Midland Bank) described the City as “a magnet for money” and he declared that “New York had a long way to go before she [caught] up to London.” 15 Similarly, the director of Lazard (and director of the Bank of England) Sir Robert Kindersley, considered New York as not “so conveniently situated”, and he declared: “its discount market is nothing approaching ours.” 16 Acceptance houses were also able to face the competition with the clearing banks. Although bigger, the joint-stock banks had fewer correspondents abroad and the bulk of their activities remained domestic. When accepting bills for foreign merchants, the clearing banks usually relied on foreign banks as intermediaries: they provided credit lines on which these banks’ customers could draw. The customers’ debts, in these cases, were guaranteed by the intermediaries. 17 By contrast, merchant bankers, because of the large connections they had maintained abroad since they settled in London in the nineteenth century, were also able to deal directly with the foreign merchants. In the interwar period therefore, the London market remained very much specialized: the clearing banks’ main activity was to make direct loans to the domestic industry. The merchant banks were accepting bills, in which other institutions (in particular, the so-called discount houses or bill brokers) invested (Hawtrey, 1930, p.128-129). Moreover, in the reconstruction years, the demand for commercial credit from Central European countries, particularly Germany, was huge. The acceptance business therefore remained a substantial source of revenues for the merchant banks.

But as recalled by the recent financial crisis, insuring credit also carries risks, and banks have to manage them carefully. In case of an importer’s default at the bill’s maturity (a failure to proceed to operation 6a on figure 2), the accepting bank remained liable to the bill’s holder. Usually, acceptance houses affected part of their commission revenues to the coverage of such losses. The Central European panic however, was a major shock to the general scheme because it resulted in the effective default of all borrowers from the region. Capital controls and the Standstill Agreements had rescheduled the reimbursement of Central European merchants’ debts and the houses which had guaranteed these debts had to assume them in the meantime. An immediate consequence was therefore to turn all British banks’

15 Committee on Finance and Industry, 1931b, Minutes of Evidence, vol. 1., p. 62, par. 961-964. According to Hyde, “London is the bank for the Continent and the East; New York is tending to become the bank for America and the West.” 16 Committee on Finance and Industry, 1931b, Minutes of Evidence, vol. 1., p. 72, par. 1167. 17 According to Mr. Frederik Hyde for example, Midland was more “a bankers’ bank” (Committee on Finance and Industry, 1931b, Minutes of Evidence, vol. 1., p.62, par. 955-956). Sir Robert Kindersley also stated that “the joint stock banks confine themselves very largely as far as foreign business is concerned to reimbursement for foreign banks” (Committee on Finance and Industry, 1931b, Minutes of Evidence, vol. 1., p.72, par.1161).
contingent liabilities with respect to Central European credit into real ones (Truptil, 1936). The banks had to find cash in order to meet these liabilities and bridge the gap until they would be in turn reimbursed. Institutions having accepted Central European bills to a large extent relative to their capital could have found themselves suddenly illiquid.

3 Data and Sources

In order to assess the extent to which British banks were affected by this problem, I rely on new data documenting their balance sheets and acceptance claims/liabilities in Central Europe. Data were collected for the two main types of financial institutions accepting bills on the London market: the ten (as of 1936, eleven) publicly traded clearing banks, and the private banks, known as “merchant banks” or “acceptance houses”. Balance sheet data for the clearing banks are relatively easily obtainable. As of 1921, further to the publication of the Cunliffe Committee’s recommendations, these banks started disclosing statements showing monthly averages of weekly balance sheets’ items (Balogh, 1947, pp. 28-29). The published balance sheets did not show the breakdown by country of the clearing banks’ investments but the amounts of outstanding German bills accepted by them can be found in the archival records of the Committee of London Clearing Bankers as of December 1931 at an aggregate level.

As opposed to the joint-stock banks, private banks were not required to publish their balance sheets. However, material on their position can be found in archival records. The Bank of England was indeed collecting detailed information on these houses during the interwar years. All institutions willing to “maintain the status of their acceptance as Prime Bank Paper” were required to report periodically at the Bank’s Discount Office (Balogh, 1947, p. 309). These statements have been kept in the archives; they consist of reports made on the various merchant banks and disclosing their balance sheets at the end of each year. As of December 1931, the documents also indicate the amounts of the various banks’ acceptance claims frozen in Germany, Austria and Hungary. The Bank of England’s archives contain such reports for a number of twenty merchant banks. Since these files are submitted to the Bank’s rules as to the disclosure of customers’ information, there are several banks whose names I was not allowed to disclose in this paper and to which I refer anonymously.

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18 These statements were published in The Economist.
19 These files are kept at the Guildhall Library.
are also lacunary or unusable and I had to complete them with different other sources. First, although they were not all required to do so, six accepting houses were publishing their balance sheets at the end of each year.\textsuperscript{21} Second, several institutions have their own archival records, in which balance sheets can sometimes be found.\textsuperscript{22} Finally, balance sheet data and/or Standstill investments can, for certain banks, be found in published monographs\textsuperscript{23} or other archival records.\textsuperscript{24} In a 1936 book, Truptil (1936, p. 156) provides a classification of the twenty-two most significant merchant banks in London, according to their importance as acceptors. The sources described above allowed me to collect balance sheet information for a number of seventeen out of these twenty-two houses. The sample includes the five most significant acceptance houses, according to Truptil, and nine out of the ten largest acceptors.\textsuperscript{25} It also covers 72\% of all merchant banks in terms of market share at the end of 1928.\textsuperscript{26} Full details on the sources are provided in appendix A1.

4 The Liquidity Shock

4.1 British banks’ exposure to trade credit in the 1920s

A first feature that the balance sheet data allow documenting is the general exposure of British banks resulting from their activity as guarantors of debts. The late 1920s saw a boom in commercial credit (Balogh, 1947, Diaper, 1986, Roberts, 1992) and acceptances were at that time the main instrument used for trade finance. Figure 4 illustrates the credit boom by displaying the total amounts of outstanding acceptances appearing on the main merchant banks’ balance sheets at the end of each year, from 1914 to 1941. The volume of trade credit granted by the City peaked in the year 1928 after having surged during the 1920s. The drop observed thereafter seems to have been the unavoidable consequence of the


\textsuperscript{22}This is the case of Kleinwort, Sons & Co., Hambros Bank Ltd. and Morgan Grenfell & Co. Ltd, whose archival records are kept at the Guildhall Library.


\textsuperscript{25}Truptil’s (1936, p. 156) list of the ten largest accepting houses includes, in order of significance, Schröder, Kleinwort, Hambros, Lazard, Baring, Rothschild, Samuel, Japhet, Wm. Brandt and Morgan Grenfell.

\textsuperscript{26}Truptil (1936, p. 261) estimates the total amount of bills accepted by the London merchant banks at 170 million pounds at the end of 1928. Bills accepted by the merchant banks included in the sample amounted to 122.55 million pounds at the same date. The aggregate amount of acceptances outstanding for the ten clearing banks was of 83.3 million pounds.
decline in commodity prices of the early years of the Great Depression. In December 1930 though, the total amount of trade credits guaranteed by London merchant banks still exceeded those observed by the mid-1920s.

Figure 4 around here

Given the characteristics of the instrument described above, one should expect the credit boom to have been associated with considerable risk-taking behavior by the banks. Indeed, it was in the very nature of acceptances that they could be granted without the need for additional resources. Accepting houses did not have to worry about raising more capital or debt (and about the costs associated with it) for financing their booming activity. As for their general exposure, the only rule they were submitted to was their own, self-imposed prudential rule. Yet several elements shall lead us to mitigate this statement. First, there is evidence that the Bank of England was carefully monitoring the merchant banks. Most of the data on which this paper relies actually owe their existence to the Bank’s monitoring activity. The Bank was discriminating between the financial houses when choosing the paper eligible for rediscount or for direct purchases. For instance, bills carrying the signature of London Merchant Bank, Ltd., though eligible for rediscount, were not accepted for direct purchases by the Bank as part of its open market operations. The reason invoked for this situation was that the house did not have enough capital. Moreover, there also existed a market mechanism through which the banks were incited to prudence: their bills would hardly have found their way on the discount market if bill brokers had come to doubt their solvency. Merchant bankers understood the necessity of managing risks. According to Sir Robert Kindersley, acceptance houses willing to preserve the quality of their signature had to show they had “considerable means at [their] back” in order to face potential defaults. An unwritten rule, according to Kindersley, was that a house’s acceptances should never exceed three or four times the value of its capital and reserves.

Figure 5 around here

30 “If you are going to do an issue business as well as an acceptance business then the world must know that you have considerable means at your back, and as you increase your business you must have the capital.” (Committee on Finance and Industry, 1931b, Minutes of Evidence, vol. 1, p. 72, par.1163.)
31 Committee on Finance and Industry, 1931b, Minutes of Evidence, vol. 1, p. 73, par.1204. Also quoted by Burk (1989, p. 71) and Morton (1943, p. 34).
Figure 5 reports the end-year ratios of accepted bills to capital and reserves for the largest acceptors in the sample. The boom in trade credit of the late 1920s was clearly associated with a general rise in these leverage ratios, indicating that British banks did not raise the value of their capital proportionately to the increase in their acceptance activity. At the end of the year 1928, six banks in the sample had contingent liabilities exceeding four times their capital, and for three others, the ratio was located between 3:1 and 4:1. These banks were therefore highly exposed, according to contemporaries’ standards.

4.2 Acceptance houses’ illiquidity

In this context, a major shock such as the Central European crisis could have seriously impaired the merchant banks’ liquidity. Figure 6 quantifies the liquidity shock experienced as a consequence of this event. The graph shows the ratio of each bank’s 1931 Standstill acceptances (or unexpected liabilities) to the 1930 value of its capital and reserves. It also presents the relative size of each acceptance house, measured by its share in the total amount of bills accepted by merchant banks at the end of 1930. The graph reveals that a whole segment of the London market was dangerously affected by the Central European shock. Bills drawn from Central Europe accounted for a large share of the merchant banks’ acceptances. The extent of the troubles varied greatly across banks. The clearing banks were almost unaffected and some acceptance houses also had relatively low exposures. For other institutions however, the problems endured were extremely serious. Eight out of the seventeen merchant banks in figure 6 (representing 61% of the sample in terms of market share) had unexpected liabilities larger than their capital’s worth in 1931, and among them stood the three largest acceptance houses of the City (Kleinworts, Schröders and Hambros). These banks were therefore technically illiquid when the crisis arose. In addition, three other houses had more than half their capital immobilized. On 18 July, *The Economist* evoked “a situation of difficulty unprecedented, except in the case of war.”32

32 *The Economist*, 18 July 1931.

The great heterogeneity across banks can be well explained through both the nature of their business and the geographical area of their activities. For instance, the core of the clearing banks’ activity consisted in making direct loans to the domestic industry and households, and they only marginally

< Figure 6 around here >
engaged in the acceptance business. This is reflected in the ratio of their acceptances to capital, which remained at a low level all over the 1920s (figure 5). Other houses, like Morgan Grenfell, were more engaged in bonds issuance than in acceptances (Burk, 1989). Barings were quite much exposed to acceptances at the peak of the credit boom but the firm had considerably increased its capital between 1928 and 1931. Among the acceptance houses, the geographical distribution of operations also greatly differed. Indeed, the activity of an accepting bank mainly consisted in gathering information about foreign merchants/borrowers and monitoring them. Collecting such information implied high fixed costs and therefore encouraged economies of scale and specialization. As acceptors, the merchant banks were specialized in specific regions where they had accumulated long-time expertise and relationships, dating back to the nineteenth century. Ruffers had particular connections with France (through their partners in Lyons) and Spain (Truptil, 1936). Morgan Grenfell had strong relationships with the United States, where the firm’s partners were located (Burk, 1989). Hambros were primarily known for their connections with Scandinavian countries (Truptil, 1936). For these houses, the share of Central European acceptances remained relatively low. By contrast, Kleinworts were traditionally engaged in German business since the second half of the nineteenth century and their activity in this country expanded considerably in the 1920s, due in particular to connections with the German textile industry (Diaper, 1986). In the post-war years, Schröders had made substantial efforts to reactivate their German operations as well. Relying on their close connections with the firm Schröder Gebrüder in Hamburg, the house responded to the high demand for credit on the side of German merchants. Schröders guaranteed substantial amounts of bills for Hamburg industrial firms and developed close relationships with the Deutsche Bank (Roberts, 1992). Last, London Merchant Bank Ltd. was in close collaboration with the German Commerz und Privat Bank. These latter institutions were among the most gravely affected by the Central European shock.

\[\text{\cite{Kindersley}}\]

\[\text{\cite{MorganGrenfell}}\]

\[\text{\cite{Kleinworts}}\]

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\[\text{\footnote{Sir Robert Kindersley stated that: “the acceptance business insofar as the joint-stock banks are concerned is a sideline, if I may use the expression. The acceptance houses, on the other hand, are there primarily to do that business; they concentrate on it and it is their first business.” (Committee on Finance and Industry, 1931b, Minutes of Evidence, vol. 1, p. 72, par. 1162).}}\]

\[\text{\footnote{In 1931, Morgan Grenfell, Ruffers and Hambros had respectively 17%, 19% and 32% of their acceptances claims blocked in Central Europe.}}\]

\[\text{\footnote{In 1931, Kleinworts, Schröders and London Merchant Bank had respectively 45%, 54% and 74% of their acceptances frozen in Central Europe.}}\]
4.3 Run on the merchant banks

Given the banks’ critical position, fears should have arisen that some of the London acceptance houses could fail. Although exact data on the various banks’ exposure were not publicly available to contemporaries, there are good reasons to suspect that investors were well informed of the situation. Indeed, the merchant bankers’ origins and areas of specialization were widely known in the City and the public had access to the geographical repartition of their correspondents. Figure 7 looks at the evolution of deposits. The graph distinguishes between the exposed and unexposed banks (exposed banks being defined as those whose Standstill acceptances amounted to more than 50% of their capital at the time of the crisis). The year 1931 is clearly discernable on the liability side of the balance sheets: several merchant banks experienced severe deposit losses. Deposit withdrawals, though, are not proof in themselves that agents were worrying about possible banking failures. The year 1931 was also the year of a speculative attack on the pound and depositors might simply have withdrawn their deposits because of fears over the British currency. However, looking at the variation across banks provides a test. Indeed, if the currency problems were the cause of the run, all banks should have been equally impacted. This is because all domestic and foreign depositors holding sterling balances in London should have wanted to exploit the arbitrage opportunities.\textsuperscript{36}

Figure 8 plots the deposit losses experienced by British banks between 1930 and 1931 as a function of their initial Standstill exposure,\textsuperscript{37} while table 1 reports the estimated parameters of the corresponding regression. The relationship is clear-cut and the null that depositors treated all banks on an equal footing can be easily rejected. The ten clearing banks, as well as the merchant banks whose liquidity was not seriously threatened (Barings, Morgan Grenfell, Ruffers etc.) remained perfectly immune to the withdrawals. An insignificant intercept in the deposits regression in table 1 suggests that withdrawals unrelated to the Standstill were in fact negligible. By contrast, deposits declined by sixty-four per cent on average for the exposed banks.

\textsuperscript{36}Schnabel (2003, 2009) also looks at the heterogeneity across banks in order to discriminate between the currency and banking causes of the German crisis of 1931.

\textsuperscript{37}Standstill exposure is measured as in figure 6.
This strong relationship shows that currency problems cannot account for the huge deposit losses faced by the merchant banks during the year 1931. This is also evidence that depositors were very well able to discriminate between sound and unsound institutions. The Central European crisis therefore triggered real fears that several London acceptance houses could have been unable to meet their liabilities. The Standstill resulted in an informed run on these banks, and the deposit withdrawals in turn contributed to worsen their position.

5 Banks’ Reaction to the Shock

5.1 Fire sales

How did banks react to the liquidity shock? This section tracks down the symptoms of the liquidity crisis in the British banks’ actions, as revealed by their balance sheets. First, the banks’ liquid assets are examined. Figure 9 shows the annual amounts of bills and securities appearing on their balance sheets. This corresponds to all assets which could be sold on an open market.

The year 1931 is associated with a drop in this item for many of the merchant banks. Exposed banks liquidated their securities the most severely. Japhets, Lazards and London Merchant Bank reduced the amount of their bills and securities by more than seventy percent in 1931. These banks were indeed in urgent need of cash for meeting their unexpected liabilities and the only practicable way to obtain it was to get rid of their most liquid securities. The fire sales are more evidence that a severe liquidity crisis was at play. Banks in troubles were struggling to shrink their balance sheets.

5.2 Credit crunch

Second, the volume of new commercial credit guaranteed by London financial houses in the wake of the Central European crisis is considered. In their reports to the Bank of England’s Discount Office, several banks were indicating the amounts of Standstill acceptances remaining on their balance sheets at the end of each year after 1931. These amounts correspond to short-term debts granted to Central European customers before the crisis and which were subsequently rolled over. The information they provide allows
discerning, in the total amount of outstanding acceptances reported on the balance sheets, between the part corresponding to newly issued bills and the part corresponding to old credit, simply renewed through the Standstill agreements. Figure 10 shows this repartition for the institutions for which the information is available. Considering the gray part of the bars, it is evident that the volume of new credit guaranteed by the banks declined steeply after 1931. This trend has important implications. Indeed, since acceptances were the main instrument of trade finance, the decline in their issuance must somehow have impacted credit availability for exporters. Total estimates of sterling acceptances outstanding suggest that, at the end of 1928, around 20% of world exports were financed through the London discount market.38

< Figure 10 around here >
< Figure 11 around here >

Figure 11 reports a strong correlation between the value of world exports and the annual amount of bills accepted in London over 1927-1935. Of course, this correlation does not imply causation and it is rather likely that the trends in the two series were both due to a common cause. For instance, the economic depression as well as restrictive commercial policies certainly contributed to the fall in world trade and also affected the demand for commercial credit. Given the few data points available, it is difficult to distinguish here between the shock on credit supply and the shock on credit demand. However, when comparing sound and unsound houses in figure 10, it is apparent that the decline in acceptance credits granted in the 1930s was related to the banks’ initial Standstill exposure: the ten clearing banks, Ruffers, Bank E and Bank F, which remained unaffected by the Central European shock, restrained credit much less than the exposed banks (Bank A, Japhets, Samuel, London Merchant Bank, Lazards and Bank C). This provides suggestive evidence that part of the contraction in commercial credit was related to the 1931 shock on the acceptors. Due to their expertise and to the information they had accumulated on borrowers, the acceptance houses’ need to shrink their activity probably had a significant impact on exporters’ credit conditions. Merchants whose accepting banks were in troubles must have felt the pinch. They could probably not turn to another bank in order to obtain the guarantee their house could not offer them anymore because other potential acceptors did not have enough information

38According to Maddison (1995), the total value of world exports amounted to 6669 million pounds in 1928. The value of outstanding sterling acceptances was estimated at 328 million pounds at the end of 1928 (Truptil, 1936, p. 261). Since the great majority of these bills were of three months maturity, this value should be multiplied by four in order to obtain the approximate amount of bills accepted yearly by British banks. This gives an amount of 1312 million pounds, corresponding to 19.7% of the volume of world trade.
on them. Therefore, the Central European shock is likely to have resulted in a decrease in the overall quality of commercial credit intermediation and in major disruptions in the mechanisms of international trade finance.\textsuperscript{39}

5.3 London Merchant Bank, Ltd.: a case study

The conclusions drawn from balance sheet data are also supported by strong qualitative evidence that London acceptance houses were trying to shrink their balance sheets in the months and years which followed the Central European crisis, and that, for doing so, they were liquidating their assets and restricting further credit. The case of London Merchant Bank, Ltd. illustrates the situation of illiquid acceptance houses perfectly well. This bank, of a small size, was one of the most seriously affected by the Standstill (figure 6). In February 1932, an article in \textit{The Times} mentioned its difficulties.\textsuperscript{40} Documents found at the Bank of England allow describing how illiquidity arose for London Merchant Bank and how the house reacted. On 6 November 1931, a Discount Office’s note noticed the extent of the bank’s involvement in Central Europe. Its author wrote that, “like all weaker institutions, [it was] facing difficulties in placing its acceptances.” On 16 December, Mr. Harter, a director of London Merchant Bank, explained that the difficulty encountered on the discount market persisted. Moreover, he mentioned “a further decrease in liquidity, the quick assets being reduced by some 100,000 pounds in order to pay off deposits” (see figures 7 and 9). The National Provincial Bank granted 100,000 pounds in discount facilities to the house, but Harter doubted that this would be sufficient at all. In January 1932, the Bank of England noticed that the acceptance house was constrained to carry a substantial part of its own acceptances on its portfolio. In February, the Governor met with the directors and urged them to “reduce commitments where possible with a view to eventual liquidation.” London Merchant Bank eventually survived the liquidity crisis, but it had to restrict credit considerably (see figure 10). In this policy, the house was encouraged by the Issuing Institute itself. On 4 August 1932, a Bank of England official was “glad to note that [London Merchant Bank’s] structure ha[d] been reduced in accordance with our wishes, the acceptances being down by 400,000 pounds of which 150,000 were for German account”.\textsuperscript{41}

\textsuperscript{39}Bernanke (1983) argues that the 1930s banking panics in the United States had “real effects” in that they resulted in a rise in the cost of credit intermediation.

\textsuperscript{40}“London Merchant Bank: Review of a difficult year”. This article was found in Archives, Bank of England, C48/93.

\textsuperscript{41}Archives, Bank of England, C48/93.
6 The Currency Crisis

6.1 The merchant banks: role and influence

Having identified how the Central European panic affected the merchant banks’ position, the link between their difficulties and the sterling crisis remains to be established. In a fixed exchange rate system, banking troubles often lead to speculative attacks on the currency (Kaminsky and Reinhardt, 1999). This is in particular because investors expect authorities to loosen monetary policy in the near future, in order to support the banks (Chang and Velasco, 2000). In 1931, there were several reasons why investors could have expected the Bank of England to come to the support of the troubled merchant banks.

First of all, British monetary authorities might have been concerned for overall banking stability. As shown in the previous sections, the run on British banks remained confined to a specific segment of the market: the merchant banks. Measured in terms of capital or total balance sheet value, these houses’ size was relatively small compared to that of the joint-stock clearing banks. However, the merchant banks were still systemically critical for the British financial system in that they accounted for the majority of outstanding acceptances exchanged on the London market. This means that many other institutions in the City had invested in their bills and were dependent on their solvency. For example, the discount houses (or bill brokers) were among the largest holders of acceptances in London. These banks were using deposits and call money from other institutions in order to discount bills. Failures among the merchant banks would have immediately transmitted the troubles to the discount houses and this, in turn, might have led to a generalized banking panic. The Bank of England was very well aware of this risk. For instance, when Anglo-South American Bank Ltd., an Anglo-Foreign bank in troubles, asked for support from the authorities in September 1931, the Credit Committee requested an inquiry on the discount market’s exposure and finally replied favorably: “if such facilities are not given, the position of the Bank will be untenable and a major banking crisis will arise.”42 The Governor considered that the house’s failure could affect “the whole of the credit structure of this country.”43 Anglo-South American’s total amount of acceptances outstanding was however only half that of Kleinworts in 1930.

Second, the Bank of England could not let the merchant banks fail without severely weakening the position of London as an international financial center. Indeed, all the services that the London City was

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42 Archives, Bank of England, ADM33/20 (Richard Sayers’ papers). The Credit Committee’s reply is dated 23 September 1931.
providing to foreign borrowers were intermediated through these banks. These houses were not only the main intermediaries for trade finance but they also engaged in the underwriting of foreign sovereign and corporate bonds. The merchant banks’ accumulated information on borrowers and expertise in screening and monitoring them were what had allowed the London market to perform so well since the nineteenth century. From this perspective, the failure of the most significant acceptance houses would have been equivalent to a huge loss of human capital in the British financial services. It is rather unlikely that the Bank of England would have allowed it, especially in the context of the interwar years, where London was competing with New York in order to remain the world’s preeminent financial center. The Bank of England considered the existence of the merchant banks as crucial to the influence of the London market. For example, when, in February 1931, the Governor was informed of the taking over of the acceptance business of H. S. Lefevre & Co. (a small merchant bank) by British Overseas Bank Ltd. (a public bank), he said he supported the arrangement, but only reluctantly: “he considered the maintenance of a number of Accepting Houses to be vital to the future of the London market and he viewed with grave concern the absorption of the accepting businesses by banks, which policy, if continued, would ultimately reduce this market to the position of the Paris market.”

Finally, the acceptance houses’ own influence on British monetary policy-making also made their rescue more likely in case of difficulty. The merchant bankers’ interests, in contrast to those of the clearing banks, were very well represented at the Bank of England. The Governor was traditionally chosen among them (Montagu Norman was from Brown Shipley) as well as a large number of the Bank’s Directors. Seven out of the twenty-four members of the Court of Directors were partners in merchant banking firms in 1931. The houses of Barings, Hambros and Morgan Grenfell had been regularly represented since the nineteenth century and the partners in Schröders and Lazard were on the Court since, respectively, 1912 and 1914. For this reason, the Bank of England was regularly accused of serving the City’s interests (Truptil, 1936, p. 39). This long tradition might also have led investors to expect an intervention in favor of the merchant banks in the wake of the German crisis. There is indeed strong evidence that the Bank of England was ready to step in. On 14 July, in the middle of the German Bank Holiday, a Discount Office’s note made it clear that, in case the situation evolved into “a general moratorium for external debts”, the Bank would consider exceptional measures including “the provision

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44 Archives, Bank of England, G14/40, Committee of Treasury files, 4 February 1931.
45 These directors were Kenneth Goschen from Goschens & Cunliffe, Edward Charles Grenfell from Morgan Grenfell, Charles Jocelyn Hambro from Hambros, Sir Robert Kindersley from Lazard, Sir Edward Peacock from Barings, Frank Tiarks from Schröders and Walter K. Wigham from Robert Fleming. By contrast, the clearing banks had no representative.
where necessary of funds to enable acceptors to meet at maturity approved bills drawn from Germany." 46

6.2 The Bank of England’s support of the City in 1931

How did the Bank of England eventually react when the German moratorium was declared? In order to answer this question, a small detour is in order so as to consider the developments of the summer 1931 in the London money market. The previous sections have provided evidence that London acceptance houses had strong difficulties to maintain their liquidity after the Standstill. If true, this situation should have left traces in market interest rates: one should expect banks to have become reluctant to lend to each other in anticipation of possible failures as well as of their own liquidity needs. In order to test for this hypothesis, I collected daily data for money market rates in London from June to September 1931. The high frequency is clearly crucial here, as we will see that important movements were taking place in a few days. Figure 12 plots the rates on 3-months bankers’ drafts and 3-months T-bills against time, together with the Bank of England’s official discount rate. Assuming that the Bank was ready to rediscount paper without restriction at the current Bank rate, the latter can be considered as an upper bound for the market rate of discount. Market rates were usually located at approximately 0.5% below the official rate. On figure 12 however, it appears that the Bank rate stopped being effective in the week just preceding the introduction of capital controls in Germany (from 7 to 15 July). The spread between the Bank and market rates narrowed dangerously during these days and was close to zero when the German moratorium was declared (15 July). This situation is indicative of a shortage of money in the banking system. The Economist reported that most dealers were quoting higher rates due to concerns about the German situation. 47

< Figure 12 around here >

But the situation in the money market also very soon stabilized. As of 15 July, when the moratorium was declared, the Bank rate started being effective again (figure 12). This might seem surprising as the banks’ liquidity troubles became real as of this date. To understand how this could arise, one needs to have a look at the Bank of England’s balance sheet. Figure 13 shows the weekly evolution of the aggregate of

47 The Economist, 11 July 1931: “uneasiness as to the German situation, in view of the continued drain on the Reichsbank’s foreign exchange resources led most dealers quoting a full 1 7/8 per cent.”
four of the balance sheet’s items in which the Bank was registering the amount of bills it had purchased on the market.\textsuperscript{48} The stabilization of market rates exactly coincided with an increase in the Bank’s holdings of securities. Between 15 July and the suspension of gold convertibility, 30 million pounds of securities were purchased. The interventions were mentioned at several occasions by \textit{The Economist}\textsuperscript{49} and the newspaper related them to the “considerable stringency in the money market” and to the necessity to “widen the margin between market rate and Bank rate.”\textsuperscript{50} Since they implied issuing additional notes, the Bank of England had to ask for a suspension of one the rules it was submitted to under the 1925 Gold Standard Act: the maintenance of the amount of the “fiduciary issue” (defined as the difference between the notes issued and the amount of the gold reserve) under a certain threshold.\textsuperscript{51} Therefore, confronted to banking instability, monetary authorities immediately reacted by providing liquidity to the system. These open market operations allowed stabilizing market rates and avoided the Bank to raise its discount rate. The Bank rate was then raised twice on 23 and 30 July, but it remained unchanged at 4.5\% during August and September. This was a relatively moderate level compared to historical standards. For example, the Bank rate went as high as 6\% during the Baring crisis of 1890 and the sterling attack of 1906 and was raised to 7\% during the 1907 financial crisis. In 1931 however, the Bank of England decided to maintain its discount rate at a moderate level and it continued intervening until September in order to ensure its efficiency.

\textless Figure 13 around here \textgreater

The Bank’s open market operations probably contributed to relieve the pressure on the merchant banks. Moreover, acceptance houses were helped by another measure: in order to support the Standstill
\footnote{The items are the Issue Department’s “Government Debt and Securities” and “Other Securities” and the Banking Department’s “Government Securities” and “Securities”. In contrast to the “Discounts and Advances” item, which was reporting the amount of bills rediscounted by customers at the official Bank rate, the items considered here correspond to the bills purchased on the open market. In the evidence he gave to the Macmillan Committee, Sir Ernest Musgrave Harvey, Deputy Governor of the Bank of England made it clear that the different items of the Bank’s balance sheet did not correspond to different types of assets but to the different ways through which the Bank acquired these assets: “I ought to make this point clear that “Government Securities” includes Treasury Bills, that is, Treasury Bills bought by the Bank where the Bank initiates a transaction. If a Treasury Bill is brought in by anybody for discount at the Bank it is treated as a discount and goes into “Discounts and Advances”.”}

\footnote{\textit{The Economist}, “The Money Market”, 25 July: “Early in the week the Bank tried to relieve the position by open market purchases of bills (...) and the increase shown in the Bank return (...) in Government securities suggests that buying took place upon a substantial scale”; 1 August: “This would have created considerable stringency in the money market had not the Bank of England bought bills heavily both this week and last.” ; 8 August: “the open market policy of the Bank, which this week took the form of substantial purchases of September bills.”}

\footnote{The Economist, “The Money Market”, 25 July.}

\footnote{The Bank of England was authorized by the Treasury to increase the limit of the fiduciary issue from 250 to 275 million pounds for the period between August 1931 and May 1932 (Truptil, 1936, p.50).}
agreements, the Bank of England decided to continue accepting German bills as collateral for its lending through the discount window (Sayers, 1976). This was a departure from the Bank’s standard practice: usually, “renewal bills” (bills drawn to extend a credit rather than to grant a new one) were considered as bad collateral and were therefore not eligible for rediscount. By maintaining the status of the merchant banks’ acceptances as “Prime Bank Paper”, the Bank’s decision was of course ensuring that they could continue circulating their bills and fund themselves on the market. But this also showed that the Bank of England was ready to support the City, even at the cost of discounting massively possibly insolvent bills. According to Richard Sayers, around half the bills rediscounted at the Bank in the first half of 1932 were of German origin (Sayers, 1976, p. 509). In other words, British monetary authorities departed from the principles of Bagehot’s rule in the summer of 1931: the Bank of England did not raise its discount rate to a “very high” level, which might have helped fighting against the external pressure, and it agreed to rediscount paper previously considered as “bad collateral”.

6.3 Timing of the speculative attack

The Bank of England’s actions to support the merchant banks through liquidity provision, its moderate attitude in raising the Bank rate as well as its decision to accept possibly insolvent bills as collateral were also sending a clear signal to the exchange market that monetary authorities were ready to accommodate the banking system in the wake of the Central European events. In 1931, the British currency was particularly vulnerable to such adverse expectations. The pound was indeed emerging from a period of constant difficulties on the exchange market, with investors doubting the credibility of the gold parity since the year 1929 (Accominotti, 2009). In this context, the German crisis and the Bank of England’s initial reaction were likely to give a fatal blow to investors’ confidence in the pound.

Figure 14 tests for this proposition. It displays weekly quotations of the French franc/Pound sterling spot and forward exchange rates in Paris during the year 1931.\textsuperscript{52} The graph reveals that a shift in expectations took place by mid-July 1931: the German moratorium and Bank’s interventions were coincidental with a fall in the spot and forward franc/sterling rates. The spot rate fell below the gold export point towards France in the week following 15 July and stabilized thereafter, showing signs of relief in August. The stabilization of the spot rate was probably the consequence of the Bank of England’s

\textsuperscript{52}The reference currency is the French franc here since it was the most credible currency of the gold exchange standard period. See Accominotti (2009) for details.
active exchange market interventions in August, conducted with the support of the Bank of France and Federal Reserve Bank of New York.\footnote{On the Bank of England’s exchange market interventions, see Sayers (1976) and Cairncross and Eichengreen (2003).} However, forward sterling quotations reveal that the pound’s rally was pure illusion. Indeed, the forward rate continued its fall and never came back within the gold points, indicating strong devaluation expectations.

< Figure 14 around here >

In the opinion of investors therefore, the fate of the pound was already sealed by mid-July 1931. This view from the exchange market is also confirmed by several comments from informed observers. On 5 August 1931, John Maynard Keynes expressed in a letter the opinion that the abandonment of the gold parity was “nearly certain” at that point: “when doubts as to the prospects of a currency, such as now exist about sterling, have come into existence, Keynes wrote, the game is up...”\footnote{Quoted by Cairncross and Eichengreen (2003, p. 69).} Einzig (1932, p. 114) also noted that the suspension of the gold standard on September 21 “did not come as a surprise”. Even at the Bank of England, there were serious distrust in the ability to maintain the gold standard after the German crisis. An internal note dated 22 August 1931 established the link between the drain on sterling and the suspension of the free flow of capital on the continent. In this context, any policy to support the pound seemed bound to failure: “a point [had to] be reached soon at which the Bank [would have to] ask to be absolved from the obligation to pay gold on demand.”\footnote{Archives, Bank of England, EID4/102, “The Threat to the Gold Standard”, 22 August 1931.}

6.4 Sterling devaluation and German debtors’ recovery

On one level, the abandonment of the gold standard allowed the Bank of England to support the banking system. On another level, the pound’s devaluation also contributed to relieve the pressure on Central European debtors, whose debts were denominated in sterling. As an illustration, figure 15 compares, at different points in time between July 1931 and December 1938, the Reichsmark value of British banks’ total outstanding credit lines to German customers, to their hypothetical Reichsmark value, had the pound not been devalued. As apparent on the graph, the burden on German debtors was considerably reduced (by 65%) between 1931 and 1938. This was due to a 40% reduction in Standstill debts (in sterling terms) as well as a 40% depreciation in sterling. By devaluing the pound, Britain
therefore implicitly bailed out the German debtors. This was all in the interest of the merchant banks, which were their creditors.\textsuperscript{56}

This perspective therefore casts doubt on the view that the British economy had fallen victim of a “Bankers’ Ramp” during the interwar period, that is, that the City would have pressed for orthodox economic policies, costly to the industry, in order to enjoy the benefits of being on the gold standard.\textsuperscript{57} The abandonment of the gold anchor was in fact a good operation for the British banks. There was no such divergence between the interests of the industry and the interests of finance.

\section{Conclusion}

This paper has provided new evidence on the role of international contagion during the 1931 global financial crisis. The question of the transmission channel through which the 1931 crisis propagated has been a topic of debate in the literature on the Great Depression. Several authors have argued that the banking system played a limited role in transmitting the troubles and many have instead described the contagion problem as an issue of confidence. I have proposed to revisit this issue by reconsidering the famous sterling crisis of September 1931. Based on original data and material, I was able to document the repercussions of the Central European crisis of the spring 1931 on British banks. I found that the banking system was an important channel of contagion during this episode. My analysis reveals the existence of large interdependencies within the international financial system on the eve of the Great Depression. These close interconnections had their roots in the credit boom of the late 1920s and in the institutional organization of trade finance, which facilitated the transmission of shocks. The Central European panic endangered the liquidity of the London merchant banks because these houses had guaranteed large amounts of short-term commercial debts on account of merchants from this region. Evidence from balance sheet data show that the troubles on the continent resulted in a run on these banks. I then explored how these banking troubles, together with the Bank of England’s reaction, affected investors’

\textsuperscript{56}Truptil (1936, p. 315) argues that sterling depreciation gave German debtors “considerable inducements to repay sterling credit”. Baster (1937, p. 301) also writes that “British creditors fared considerably well after September 1931, because their German debtors seized the opportunity of paying off sterling debts at favorable rates of exchange”.

\textsuperscript{57}See Williamson (1984).
expectations over the pound’s future. This new interpretation is more in line with accounts of the episode made by certain contemporaries (Einzig, 1932, Morton, 1943) and historians (Sayers, 1976, James, 2001, 2009).

I did not intend to argue here that contagion was the unique cause of the sterling collapse, nor that it can account for all aspects of the crisis. For instance, my emphasis on the Central European events does not offer a fully satisfactory explanation for why the Bank of England did not raise its discount rate much more aggressively in the summer of 1931. Several reasons might explain this behavior. First, a high Bank rate was likely to divert business from the merchant banks, and from the City in general, since merchants always preferred to discount their acceptances in financial centers where low interest rates prevailed (Greengrass, 1930). Second, a rise in the Bank rate would also have increased the service of Treasury bills for the British government (Greengrass, 1930). This could have deteriorated an already critical fiscal position, therefore undermining the efforts to defend the parity. Last, monetary authorities might also have wanted to avoid the repercussions of a restrictive monetary policy on the unemployment rate. Therefore, previous explanations emphasizing the budget deficit (Williamson, 1984, 1992) or unemployment (Eichengreen and Jeanne, 2000) are not necessarily incompatible with the story presented in this paper. How much these various factors contributed to the final decision to leave the gold standard and whether an increase in the Bank rate could have saved the parity are questions which are beyond the scope of this paper. I simply notice here that international contagion fares much better than these other factors in explaining the timing of the speculative attack. The Central European shock was the final trigger behind the sterling crisis.

Finally, this paper has interesting implications for the current policy debate, following the recent financial crisis. First, it illustrates the role of credit insurance instruments in propagating liquidity problems in troubled times. From this perspective, acceptances then were not very different from Credit Default Swaps now in propagating and magnifying the effects of the financial crisis. This illustrates the need for adequate capitalization for institutions engaging in this activity. Second, at a time when governments and central banks have never been so active in attempting to stabilize the banking system, the sterling crisis allows drawing important lessons for the role of monetary policy in achieving recovery. Since now more than twenty years, a substantial body of research has shown that leaving the gold standard was the right thing to do for countries wanting to find the path to economic recovery during the 1930s, because it allowed stimulating industrial activity (Eichengreen, 1992, Eichengreen and Sachs,
1985, 1986). But the British episode reveals that the abandonment of the gold peg also had a nice side effect, which was to relieve the pressure on banks. The pound’s devaluation was in itself supporting the banking system in that it allowed authorities to provide liquidity, while reducing the burden on Central European debtors. Had Britain been faithful to the gold standard in 1931, the merchant banks’ situation would have been even more critical. Several acceptance houses might have failed and the effect would have been felt in terms of dramatic welfare costs. Therefore, the British economic recovery of the late 1930s might also have been the result of the Bank of England’s decision not to let the banking system collapse as a consequence of international contagion.
References


Appendix A1. Data and Sources

I. London banks’ balance sheets and Standstill claims

- Ten Clearing Banks
  a) Balance sheets
  b) Acceptances outstanding
     In their published balance sheets, London clearing banks reported an item called “Liabilities of customers for acceptances, endorsements & c.” This item comprises all contingent liabilities associated with endorsing bills and therefore does not allow distinguishing the amount of acceptances outstanding. The following sources provide the true (aggregate) amount of the ten London clearing banks’ acceptances:
  c) Standstill acceptances (Germany only)

- Baring Bros. & Co. Ltd.
  a) Balance sheets
     1935-1938: Published balance sheets (*Bankers’ Almanac and Year Book*)
  b) Standstill acceptances
     7/1931: Orbell (1985, p. 78). Outstanding credit lines to German and Hungarian clients.

- Guinness Mahon & Co.
  a) Balance sheets
  b) Standstill acceptances

- Hambros Bank, Ltd.
  a) Balance sheets
     1920-1938: Guildhall Library, Ms19044. Years ended 31 March.
  b) Standstill acceptances

- S. Japhet & Co. Ltd.
  a) Balance sheets
  b) Standstill acceptances

- Kleinwort, Sons & Co.
  a) Balance sheets
     1921-1941: Guildhall Library, Ms22117.
     (Deposits are available for 1930-1941 only. They are the sum of two balance sheet items: “Creditors on current
account” and “Fixed term deposits”. The “Creditors on Current Account” series has been completed by the ledger Ms22133 for December 1930.)

b) Standstill acceptances

- Lazard, Brothers & Co. Ltd.
  a) Balance sheets
  b) Standstill acceptances

- London Merchant Bank Ltd.
  a) Balance sheets
     1927: Truptil (1936, pp. 336-337)
  b) Standstill acceptances

- Morgan Grenfell & Co. Ltd.
  a) Balance sheets
     1924-1941: Guildhall Library, Ms28190.
  b) Standstill acceptances

- A. Ruffer & Sons Ltd.
  a) Balance sheets
  b) Standstill acceptances

- M. Samuel & Co. Ltd.
  a) Balance sheets
  b) Standstill acceptances

- J. Henry Schr¨ oder & Co.
  a) Balance sheets
  b) Standstill acceptances

- Bank A
  a) Balance sheets
  b) Standstill acceptances
- Bank B
  a) Balance sheets
  b) Standstill acceptances

- Bank C
  a) Balance sheets
  b) Standstill acceptances

- Bank D
  a) Balance sheets
  b) Standstill acceptances

- Bank E
  a) Balance sheets
     by the archivists). Years ended 30 June.
  b) Standstill acceptances

- Bank F
  a) Balance sheets
  b) Standstill acceptances (Germany only)

II. British banks’ Total German Standstill Claims
Archives, Bank of England:
07/31/1931, 10/31/1931, 11/30/1932: OV34/132; 12/15/1933: OV34/133; 12/31/1934: OV34/135; 12/31/1935:
“Total Credit Lines”, except July 1931: “Total short-term indebtedness”.

III. Bank of England’s balance sheet
   - Gold Reserve (Total Bullion), daily
   - Other items, weekly
     4-12/1931: The Economist

IV. Franc/Sterling Spot and Forward Exchange Rates
Table 1: Were Deposit Losses Caused by A Run on the Pound? A Test

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<thead>
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<th></th>
<th>Coefficient</th>
<th>t-stat</th>
</tr>
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<tr>
<td>Standstill Exposure</td>
<td>37.38</td>
<td>5.52</td>
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<tr>
<td>Intercept</td>
<td>12.76</td>
<td>1.83</td>
</tr>
<tr>
<td>N</td>
<td>17</td>
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<tr>
<td>Adjusted R²</td>
<td>0.65</td>
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OLS estimates. Dependent variable: Percentage decline in deposits between 1930 and 1931 (Bank A: 1930-1932). Standstill Exposure is measured as the ratio of each bank’s 1931 Standstill acceptances to the 1930 value of its capital and reserves. Sources: see appendix A1.

Figure 1: Daily Change in Bank of England’s Gold Reserve, (in million pounds), 1-9/1931

I. Operations at bill's discount

1) Ships goods; 2) Draws a bill on the accepting bank/Pays fee; 3) Accepts the bill; 4) Sends the bill for discount; 5) Discounts the bill/Provides cash.

II. Operations at bill's maturity

6a) Pays the accepting bank; 6b) Pays the bill’s holder.
Figure 3: Typical Acceptance House’s Balance Sheet

**Liabilities**
- Acceptances (Liabilities to bills’ holders)
- Deposits
- Capital and Reserves

**Assets**
- Acceptances (Liabilities of Customers)
- Cash, bills and securities
- Loans

Note: A similar diagram was published in Truptil (1936).
Figure 4: Acceptances Outstanding (in million pounds), 1914-1941

Sources: See text and appendix A1.

Figure 5: Ratio of Outstanding Acceptances to Capital and Reserves, 1914-1941

Sources: See text and appendix A1.
Figure 6: Ratio of Standstill Acceptances to Capital and Reserves, 1931

Note: Ratio of 1931 Standstill acceptances (including Germany, Austria and Hungary) to end-1930 capital and reserves (left scale) and share in merchant banks' outstanding acceptances at the end of 1930 (right scale). Sources: See text and appendix A1.
Figure 7: Deposits (in million pounds).
Figure 8: Standstill Exposure and Deposit Withdrawals, 1931

Note: Variables are the same as in table 1. Sources: See text and appendix A1.
Figure 9: Bills and Securities (in million pounds)
Figure 10: Standstill Bills vs. Newly Issued Bills (in million pounds)
Figure 11: **World Exports and London Acceptances, 1927-1935**

![Graph showing the relationship between world exports and London acceptances from 1927 to 1935. The graph illustrates a positive correlation between the two variables. The y-axis represents world exports (in million pounds), while the x-axis represents the annual amount of bills accepted (in million pounds). The data points are marked with specific years (1927, 1928, 1929, 1930, 1931, 1932, 1933, 1934) and show a consistent increase in both variables over time.]

Note: y-axis: World Exports in current US dollars are from Maddison (1995, pp. 238-239) and have been converted into current pounds. The exchange rate comes from League of Nations, *Statistical Year-Book*, various issues. x-axis: Annual amount of sterling bills accepted. The annual amount is estimated by multiplying by four the year-end figure for acceptances outstanding. This figure is taken from Truptil (1936, p. 261) for 1927-1934 and from Baster (1937, p. 297) for 1935.
Figure 12: **Daily Money Market Rates (in %), 4-9/1931**

Note: B 3 months: 3 month bankers' drafts; T 3 months: 3 month Treasury bills. Source: *The Economist*.

Figure 13: **Bank of England’s Holdings of Securities (in million pounds), 4-12/1931**

Note: Total securities correspond to the sum of Issue Department: “Government Securities” and “Other Securities” and Banking Department: “Government Securities” and “Securities”. Source: *The Economist*.
Figure 14: **Franc/Sterling Spot and Forward Exchange Rates, 1931**


Figure 15: **RM value of British banks’ German Standstill Claims and Sterling Depreciation, 1931-1938** (in million RM)

Sources: See text and appendix A1.