



Catalonia Working Group on Central Banks (CACEB)

CACEB is a research group focused on discussing, studying and disseminating information on the role of central banking with the aim of laying the intellectual foundations for a future central bank of Catalonia. We believe it is crucial to evaluate the extensive literature on this subject, as well as existing institutions, from a Catalan perspective.

The members of CACEB hail from diverse backgrounds and hold a variety of political opinions. What binds us together is our shared interest in central banking and our dedication to the national liberation of our country.

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THE TAULA DE CANVI: A MONETARY PERSPECTIVE

The first public bank in Europe and its financial functions

1. Outline

The Taula de Canvi (1401) was the public bank of the city of Barcelona. It played a crucial role in the public finances of Barcelona and in the economy of Catalonia as a whole. Over the last century there have been numerous publications on the history of the Taula and the content of its books. This report approaches the institution from a monetary perspective, emphasizing the central banking functions it performed within the financial system of Barcelona. This study focuses particularly on the Taula's lending to the city's private banks in the 15th century, which was a source of institutional conflict.

2. Background: the Medieval Financial System

Maritime trade and trade fairs stand out as key features of European economic life in the late Middle Ages. The port of Barcelona was a meeting point for merchants from all over the Mediterranean. In the 12th century, the voyager Benjamin of Tudela documented his passage through Barcelona, noting the diversity of origins of the merchants he encountered. The presence of traders from Greece, Pisa, Genoa, Sicily, Alexandria, the Holy Land, and Africa indicates the extent to which Barcelona acted as a hub for trading networks.¹

The commercial integration of the age contrasted with a degree of political fragmentation that implied the minting and circulation of different coins in line with the laws of each jurisdiction. Mediterranean and European trade therefore relied on the business of exchange to maintain links between cities and gains from trade derived from the division of labour and different natural endowments.

Some merchants regularly exchanged currency in order to buy and sell in different places with the local currency and specialized in financial business thanks to the growing volume of transactions. These money changers developed the first banking practices in the Mediterranean. These particular origins are reflected in the words Catalans used to call bankers: "money changers" (canviadors), stressing the origin of the business or, interchangeably, "tablemen" (taulers), in reference to the place where they conducted their activities. Some authors, such as Usher, stress the money-changing origin of banking, according to the southern experience. Others, such as Postan, argue that in England, Flandes and the north of Germany banking developed in closer association to commercial credit.² The differences, however, are easily overstated.

¹ González Llubera, Ignacio. Viajes de Benjamin de Tudela 1160-1173 (V. H: Sanz Calleja, 1918), 52.

² Postan, M. M. "Early Banking", *The Economic History Review*, Vol. 16, No. 1 (1946), 63-67; Postan, M. M., *Medieval Trade and Finance* (Cambridge University Press, 1973)



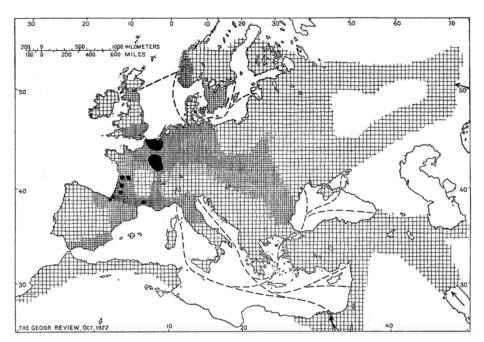


Figure 1. The economic sphere of the most important fairs of Europe, 12th -15th centuries.³

Credit is the the lifeblood of banking. It plays a key role in an economy whereby credit can be extended to trustworthy debtors without prior stockpiling of specie. Thanks to the reputation of the banker, deposits on his books, backed by credit, are valued as money and can be transferred to settle transactions and debts more broadly. Indeed, Usher begins his treatise affirming that "The essential function of a banking system is the creation of credit. Banks exercise a variety of secondary or incidental functions. [...] The primary activities of the banking system, however, are concerned with the creation and transfer of credit".

There were numerous banks in medieval Barcelona known by the family name of the banker, such as "the Banyeres, the des Fonts, the Llulls, the Dusays or the Abellas, and additionally bankers from Vic residing in Barcelona" Bank deposits had certain advantages with respect to coins. Payments by giro transfer were registered on the banker's books, which offered legal evidence of payment as was recognized by the Barcelona privilege of 1284. But bank deposits were most useful for the ability to overdraw an account, receiving immediate credit from the banker. In this way, banking credit brought flexibility to payments in an economy with a lack of metal coins of good quality.

The proliferation of banking credit with the economic growth of the late Middle Ages advanced hand in hand. However, then as now, financial crises occurred in which depositors could not withdraw their deposits for specie and bankruptcies were the order of the day. Some years before the

³ Allix, Andre. "The Geography of Fairs: Illustrated by Old-World Examples", *Geographical Review*, Vol. 12, No. 4 (Oct., 1922), 532-569.

⁴ Feliu i Montfort, Gaspar. Els primers llibres de la Taula de Canvi de Barcelona, Volum I (Fundació Norguera, 2017), 24.

⁵ Usher, Abbot P. The Early History of Deposit Banking in Mediterranean Europe (Harvard University Press,1943), 239.



establishment of the Taula de Canvi, Barcelona suffered from one such crisis. The municipal ordinance of 1397 mentions complaints and social unrest about the loss of wealth caused by bank failures.⁶

3. The Taula de Canvi

3.1. Foundation

The medieval city of Barcelona had several historical rights and privileges agreed with the King which afforded it autonomous institutions and self-rule. Among these rights were those regarding economic policy, such as levying tariffs arriving to the port⁷ or minting the *croat*, the coin of Barcelona.

The city's budget and fiscal needs grew with its economy. The private banking system was not up to the task. Bankers had shown their fragility in the crises of the late 14th century, revealing the risks to the public finances of relying too heavily on their services. Furthermore, the lack of a securities market and the financial conditions of the age meant that interest payments on the city's debts were a burden for the municipal government of many Catalan cities, Barcelona among them.⁸

A group of citizens, concerned by the large interest payments, proposed to the city government in 1400 establishing a public bank which would finance public debt with the deposits held by the public.

"On April 25th, 1400, the Council of One Hundred received a petition from a group of citizens suggesting that it would be good to establish a public bank where all deposits should be placed. From these funds and any others that might come in, and from what remained after meeting other obligations, they proposed to pay off the public debt that the city owed. The Council entrusted this matter to certain individuals".

The following year, in 1401, the municipal government established the Taula de Canvi. The institution differed from private banks in certain respects. First and foremost, the Taula was a public bank, an essential feature that endowed it with the characteristics that elevated it qualitatively over the rest of the city's banks. Since deposits were underwritten by the government, the public had a high level of confidence in their value. Writings on the Taula recurrently highlight the special care taken by the Taula's administrators with regard to the quality of the coins they accepted and offered, which guaranteed the value of the bank's reserves. Furthermore, the Taula was the fiscal agent of the city. Taxes and public expenditure went through its books.

⁶ Usher, 244.

⁷ Usher, 347.

⁸ Miquel Milian, Laura. The Taula de Canvi of Barcelona: success and troubles of a public bank in the fifteenth century (Journal of Medieval Iberian Studies, 2021), 3.

⁹ Rúbriques de Bruniquer, v. 5, c. 79.



One year after its establishment, it acquired certain legal privileges and became the bank where all forced deposits went, such as those derived from executions, guardianships and other similar legal constructs.¹⁰

3.2. Operations

From its inception, the Taula de Canvi was the main source of funding of the government of Barcelona. Instead of relying on the issue of public debt, the city treasurer overdrew his account in order to make payments. For example, in the case of a public purchase of grain, the treasurer transferred a deposit to the seller's account and simultaneously increased the debt in its account, which did not charge interest¹¹ and brought great flexibility to public finances.

In 1413 the Taula became one of the banks used by the Diputació del General.¹² Inhabitants of Barcelona and Catalans from other places held its deposits and could make transfers to anyone, even if the recipient did not already have an open account. However, no one could generate overdrafts on their account, as this was a right reserved for the city treasurer, even though, as described in later sections, this restriction was not always enforced. Aside from the aforementioned deposit holders, the Taula had other institutional clients, both secular and religious. In the following balance sheet, the relationship between assets and liabilities is summarized.

Taula de Canvi		
Assets		
Coins ~30%	Deposits	
Public debt	City treasurer	
Other credit	 Diputació del General 	
	• King	
	Church institutions	
	Merchants	
	Retail	

Figure 2. Example balance sheet of the Taula de Canvi

There are reasons to think that the funding flexibility the Taula offered caused some excesses in public spending. In 1412, the city approved bylaws that outlined a new relationship between the city treasurer and the public bank. They required the funding of recurrent spending with certain taxes, allocating specific income streams to expenditures. Furthermore, the administrators of the Taula took on the role of financial controllers, with real power in regard to how much the government

¹⁰ Miquel, 3.

¹¹ Feliu, 39.

¹² Usher, 422.



could spend each year¹³. The stability of the Taula and the good functioning of the economy of Barcelona depended on good management of public funds, since most of its assets were in the form of treasurer's overdrafts.

3.3. A Brief History

The operations of the Taula changed significantly during the Catalan Civil War (1462-1472). In 1468, after years of being depleted of specie due to war efforts, a reform was adopted that would transform the institution completely. The Taula was barred from engaging in the activity that was its *raison d'être*, namely the funding of the city's public finances. Overdrafts in the treasurer's account would no longer be allowed, in order to prevent the excesses and abuses that happened in wartime. This episode will be further explored in section 5.3, about war finance.

Although the Taula's books for the 16th century are missing, there are other sources that indicate it continued to operate in its new institutional form. At the beginning of the 17th century, low quality coins started circulating in increasing volume. This put the Taula in a difficult situation, since its operations relied on accepting and offering only high-quality coins. As a result, a new public bank was created in 1609, the same year in which the Bank of Amsterdam was created.

In 1714, once the War of Spanish Succession was over, in the reform to abolish the institutions of the losing side, Taula was stripped of most of its functions, even if it nominally continued to exist. In 1867 it was finally dissolved.

4. Central Banking

4.1. Definitions

Historiography classifies the Taula de Canvi as a public bank, a category that emphasizes its function as the financial arm of the administration. Its municipal ownership and the legal obligation to finance exclusively the city of Barcelona reinforce the suitability of the term. Other contemporary institutions, such as the Casa di San Giorgio in Genoa, are also classed as public banks by many historians. Generally, there is a reluctance to consider these public banks as central banks but analyzing these institutions from a monetary perspective opens up a different way of understanding their function within the financial system and the economy as a whole.

The latest systematic study on the issue is *Central Banking before 1800* by Bindseil, a collected history of thought on the origins of central banking. Bindseil presents his own proposal, linked to the tradition of authors like Van Dillen, Klein, Robers, Velde, and Ugolini, who include European public banks in their studies on the evolution of central banking. This perspective differs from the dominant paradigm that stipulates that the first institutions of this kind appeared in Stockholm (Riksens

¹³ Miquel, 4.



Ständers Bank) and London (Bank of England) as new or qualitatively different institutions from European public banks.

According to Bindseil's postulations, the emergence of modern central banking is a further step in the long European banking tradition. Central banks did not appear out of the blue but are a continuation of institutions already in existence in cities like Genoa, Naples, Venice, Amsterdam, and Hamburg. Following the timeline of institutions back to their beginnings, we could assert that the Taula de Canvi of Barcelona is the first example of a central bank. But what characterizes a central bank? The answer is that its deposits must be financial money of the highest quality.

"Central bank money may itself be defined as financial money of the highest possible credit quality, which is accepted for settlement of any other financial claim in the same way as species money is accepted (i.e. it is considered to be credit, liquidity, and market risk-free, to use modern terminology), and which is significantly used in an economy as means of payment"

The deposits at the Taula were considered the highest quality money and were widely accepted, which is why we can assert that the institution met Bindseil's necessary and sufficient condition. It is important to remember that the deposits were underwritten by the municipal government, ¹⁵ a mechanism that only failed to guarantee the liquidity of the Taula during the Catalan Civil War, when the deposits were converted into debt securities. The close relationship between the government of Barcelona and the Taula meant that taxes had to be paid into its book and payments by the treasurer were carried there as well. In addition, the Taula established stricter criteria than private banks when assessing the quality of coins, with a series of checks that were taken both at the time of accepting them and when handing them over to depositors withdrawing their money. These three factors underpinned the superiority of the Taula's deposits compared to those of private banks.

Bindseil adds two further conditions, based more on historical patterns than on monetary theory: 1) that every central bank be based on a public charter, and 2) its creation had to be based on public policy objectives, rather than private interest. The Taula de Canvi meets both requirements, therefore, according to this classification it can be considered the first central bank in Europe.

4.2. Bank Reserves and Credit

The study of the financial relationship between the Taula and private banks can reveal certain similarities between the dynamics of the medieval Barcelona financial system and modern central banking. Firstly, the fact that private banks had deposits at the Taula is an indication of a

15 Usher, 247.

¹⁴ Bindseil, Ulrich. Central Banking Before 1800: A Rehabilitation. (Oxford University Press, 2019), 2.



hierarchical principle according to which their superior quality led bankers to replace part of their metallic reserves (real assets) with liabilities of the Taula (financial assets). Secondly, the practice by the Taula of providing credit to banks is even more significant, as it would become necessary to develop the Lender of Last Resort doctrine, which emerged during the 19th century.

The history of the link between the Taula and private banks is marked by a secular conflict between the city's councilors and the bankers who were connected to them. The unexpected practice of a public bank providing credit to private banks proved to be, from the outset, risky and costly for the Taula. Defaults by private banks and some abuses of the system led to the repeated prohibition of bankers depositing money at the Taula, which was only partially implemented due to enforcement difficulties.

The first historical example is that of 1404, when the Gualbes bank, which was "the most active, powerful and prestigious bank in Barcelona", ¹⁶ went bankrupt after accumulating months with a negative balance in its current account at the Taula. The following illustration shows the magnitude of the overdraft of the Gualbes bank account as a timeline in the period from March 2nd 1404 to November 10th 1404. As can be seen, the account is almost always in the red.

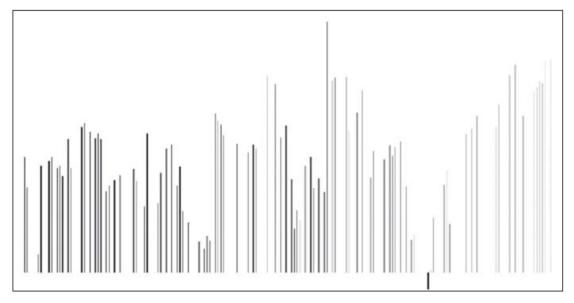


Figure 3. Amount overdrawn from Gualbes's account at the Taula de Canvi (May 2nd 1404 to Nov. 10th 1404).¹⁷

The credit to the Gualbes bank represents an example of the central banking functions performed by the Taula, in this case, the financing of struggling banks. If it were to be corroborated that the Taula was the only economic agent willing to give credit to the Gualbes family, we would be talking about a case of lender of last resort in the literal sense of the expression, four centuries before Bagehot. It is

¹⁶ Feliu, 152.

¹⁷ Feliu, 155.



notable that a fundamental function of central banking could appear in its simplest form only three years after the establishment of the Taula.

The practice of informally providing credit to financial institutions was a risky activity, as demonstrated by historical episodes of bank failures. Furthermore, the lack of explicit regulation of this function exposed the Taula to recurrent abuses. For this reason, in the 15th century, the city council approved a series of ordinances designed to separate the Taula from private banks. On November 5, 1437, the directors of the Taula were prohibited from accepting deposits from any banker, either directly or indirectly. Despite legislative insistence, the prohibition met with strong resistance, and efforts to exclude private bankers from the Taula's books were repeated for decades.

The second historical example is an episode where private bankers took advantage of deposits at the Taula to extract coins. In the session of October 11, 1442, the following case was discussed at the Council of One Hundred.

"[...] It was here explained that great abuse has been introduced for some time, detrimental to the Taula del Canvi of the aforesaid city, that is, through brokers and in other ways someone or some, committing serious abuses, having money in the aforesaid Taula, transfer it to other people for money they take, that is, 25 and 30 percent, and those who give them the said 25 and 30 remove the money in metal from the Taula and place it in unsecured tables, similarly to a certain gain. And then it happens that similar amounts are returned to the said Taula and transferred to the same persons from whom they were before, and they return later to perform similar acts themselves and to similar gains. And as the said things are done, they are practiced in ignominy and offense of our Lord God and be a usurious thing and great harm to the public, therefore they had thought that upon this should be made pertinent ordinances, by which similar acts would cease [...]

And having exposed the aforesaid things in the aforesaid council, all agreeably, considering great abuse the practice of removing the coin from the aforesaid Taula with such or similar contracts, referred to the aforesaid honorable councillors that, having taken counsel from the advocates of the city, according to their counsel, they should proceed in making preventive ordinances on the above-mentioned abuse!"

The text describes the abusive practice of withdrawing coins from the Taula to deposit them in a private bank and, eventually, transfer the same money back to the Taula, but without returning the coins. This money remained owed, and in this way, the Taula, not by action, but by omission, gave credit to private banks.

¹⁸ Usher, 309.

¹⁹ AMB, Reg. de deliberacions, 1438-42, f. 188v, 189; 11 d'Oct., 1442.



The city authorities, by prohibiting private bank deposits at the Taula, wanted to prevent them from receiving credit by generating overdrafts in their accounts, but from the beginning, the practice was so natural for a financial system that there were those who found loopholes and subterfuges to make it possible. Instead of accepting a hybrid system as a natural form of banking and developing institutional mechanisms to prevent the abuses described, the choice was made to try to separate the public element from the private directly.

More research would be needed to ascertain the reasons why, instead of prohibiting banks from having deposits at the Taula, it was not made mandatory to settle interbank transfers in specie. One possible explanation is that the regulator misunderstood the underlying phenomenon and a distinction was not drawn between the concepts of credit to the Taula (deposits) and credit from the Taula (overdrafts). Arguably, the monetary thought of the 15th century had not reached a sufficient point of maturity to articulate with enough precision practices that today are common in the day-to-day of central banking.

Returning to the issue of historical classification, Bindseil summarizes the characteristics normally attributed to central banking in the following way.

- a) Issue of central bank money,
- b) Based on a public charter,
- c) Pursuing public policy objectives,
- d) Convertibility and value stability,
- e) Increasing the monetary base,
- f) Public ownership,
- g) Lender of Last Resort.

The first three are the conditions he himself proposes, and the rest are characteristics associated with central banks. His historical analysis concludes that Naples had the banking system where the first actions similar to those of a lender of last resort occurred, while the Bank of Amsterdam was the first to perform them in a complete manner. As has been described in this section, it can be considered that the Taula from the beginning displayed behaviors characteristic of a lender of last resort by lending to banks in difficulty, which highlights how quickly some practices emerged in central banking.

4.3. War Finance

An additional characteristic historically associated with central banking is that of financing military actions, given the great mobilization of resources in a short period of time required by a war. The Taula played a fundamental role in financing military operations during the Catalan Civil War (1462-1472), in which Barcelona, along with the Diputació del General, faced King John II.



According to the exhaustive study by Miquel (2021), the Taula served to meet the liquidity needs of Barcelona and the Diputació del General. The metal reserves were rapidly reduced, as in the first months it provided credit for large amounts to the city. In the very first year of the war, there was concern about the financial state of the Taula. Despite efforts combining debt issuance to recover liquidity and the forced deposit of Barcelona citizens' metals, the situation was precarious. In 1467, five years after the outbreak of the war, it was decreed that the Taula's deposits were legal tender, although a provision was included that permitted contractual agreement for payment in metal currency.

On February 18, 1468, after years of fragility, the Taula went into suspension of payments and a comprehensive reform was enacted that would change the nature of the institution. The deposits were converted into debt securities. The most important reform was related to the role of the treasurer. From that moment on, the free availability of the Taula's credit for Barcelona's expenditure was ended. The treasurer's account had to have a minimum amount to ensure the availability of sufficient funds in case of extraordinary expenditure, and it could only access the Taula's credit if its creditors unanimously accepted it.

5. Conclusions

The Taula de Canvi had a crucial role within the Barcelona financial system, supplying the financial money of the highest quality, one of the key functions of a central bank. Indeed, from its very beginning the public bank extended credit to private ones, partaking in activities resembling those of a Lender of Last Resort.



5. Bibliography

Allix, Andre. "The Geography of Fairs: Illustrated by Old-World Examples." Geographical Review 12, no. 4 (1922): 532–69.

Bindseil, Ulrich. Central Banking Before 1800: A Rehabilitation. Oxford University Press, 2019.

Bindseil, Ulrich, and Pantelopoulos, George. "A Brief History of Payment Netting and Settlement." IBF Paper Series. Banking and Finance in Historical Perspective (August 18, 2022).

Castells i Calzada, Narcís. "Canvistes i banquers". Quaderns de la Revista de Girona Núm. 8. Diputació de Girona / Caixa d'Estalvis Provincial (1988).

Feliu i Montfort, Gaspar. Els primers llibres de la Taula de Canvi de Barcelona, Volums I i II. Fundació Norguera (2017).

González Llubera, Ignacio. Viajes de Benjamin de Tudela 1160-1173. V. H: Sanz Calleja (1918).

Miquel Milian, Laura. "The Taula de Canvi of Barcelona: success and troubles of a public bank in the fifteenth century." Journal of Medieval Iberian Studies (2021).

Miquel Milian, Laura. "La estructura del primer banco público de Europa: la Taula de Canvi de Barcelona (siglo XV)." Medievalismo 29 (2019).

Postan, M. M. "Early Banking." The Economic History Review 16, no. 1 (1946).

Roberds, William and Velde, Francois R., "Early Public Banks", FRB Atlanta Working Paper No. 2014-9, (August 1, 2014)

Ugolini, Stefano. *The Evolution of Central Banking: Theory and History.* Palgrave Studies in Economic History (2017).

Usher, Abbot P. *The Early History of Deposit Banking in Mediterranean Europe.* Harvard University Press (1943).

Usher, Abbot P. "The Origin of the Bill of Exchange." Journal of Political Economy 22 (1914): 566-566.

Vázquez de Prada, Valentín. "La institución Bancaria en Barcelona (siglos XV-XVII)." Pedralbes. Revista d'Història Moderna 13, no. 1 (1993).



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