The Puzzling Slow Rise of a Theory of Central Banking: Between the Lender of Last Resort, Defensive and Active Monetary Policy

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The paper is based on a monograph entitled:

"Monetary Theory and Policy from Hume and Smith to Wicksell: Money, Credit and the Economy"

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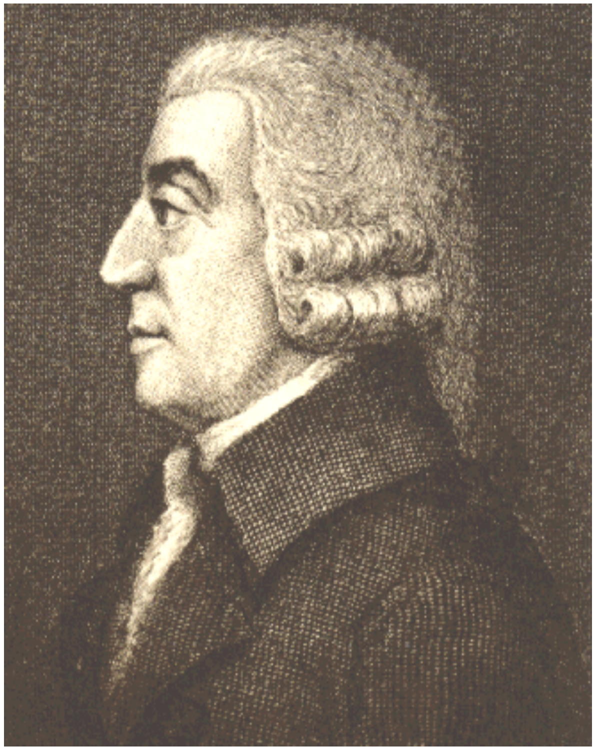
The issue covered in this paper is the attitude – explicit or implicit – of scholars towards "interventions" in the monetary system and in the financial sector more generally. Such interventions contradicted the common invisible hand approach to money and banking so typical of David Hume and Adam Smith

Adam Smith David Hume



Hume & Smith

- Convertibility

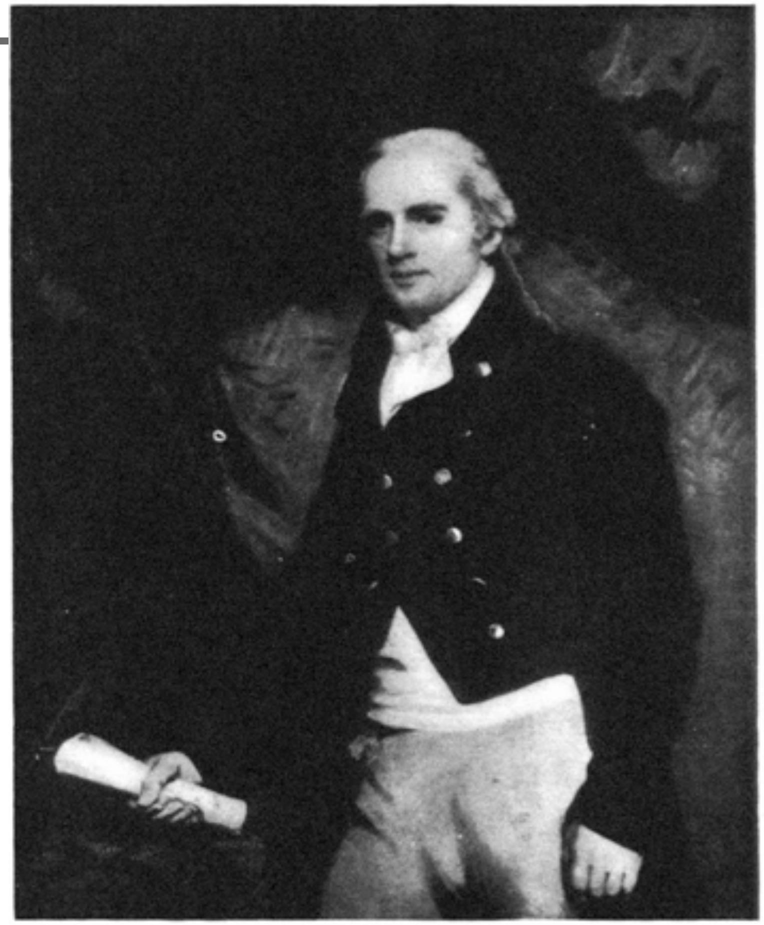
- Hume and the specie-price-flow-mechanism

- Smith and free banking

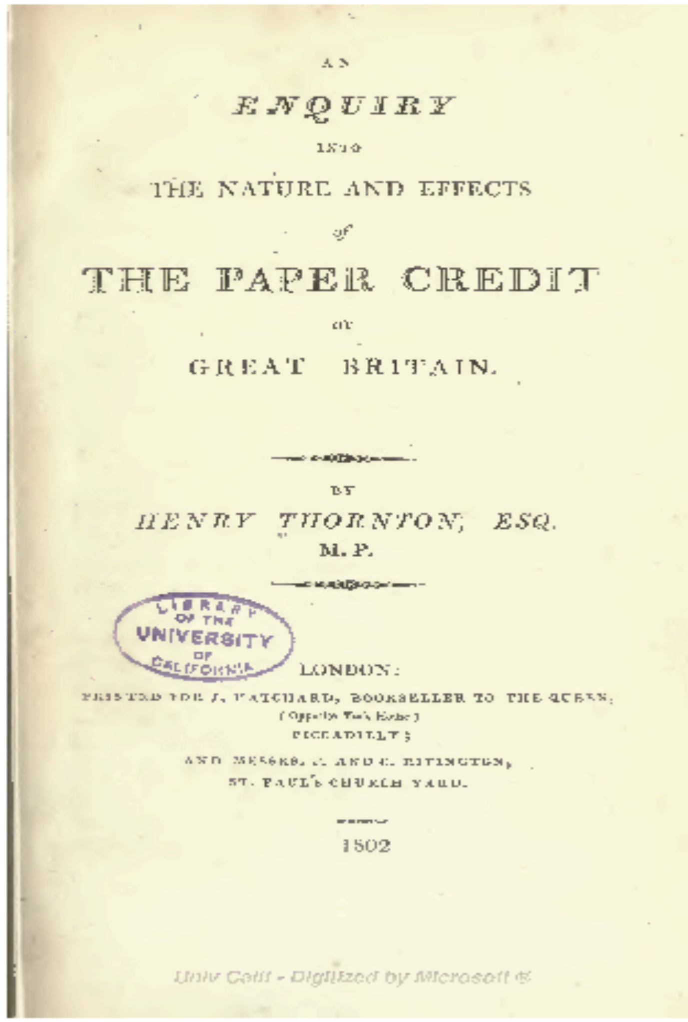
====➔ No Interventions in the Monetary System

- **The 1797 crisis and the creation of an inconvertible monetary system**
- **The debate between those objecting an early return to convertibility the anti bullionists and the supporters of return to gold the bullionists**
- **Thornton (1802) *An Enquiry into the Nature and Effects of the Paper Credit of Great Britain* (1802) [*Paper Credit*]**

Henry Thornton (1760-1815)



[From the painting by J. Hoppner



AN

ENQUIRY

INTO

THE NATURE AND EFFECTS

of

THE PAPER CREDIT

OF

GREAT BRITAIN.

BY

HENRY THORNTON, ESQ.

M. P.

LONDON:

PRINTED FOR J. HATCHARD, BOOKSELLER TO THE QUEEN;

(Opposite York House)

PICCADILLY;

AND MESSRS. F. AND C. RIVINGTON,

ST. PAUL'S CHURCH YARD.

1802

Thornton

- Defends the feasibility of a system without gold
- Explains that a convertible as well as an inconvertible systems require management by a central body
- Argues that in England there exists such a body, the Bank of England (although a private, joint stock, bank) that should manage the system. [HOPE (2009)]
- Furthermore, the management of the banking system should be based on assessments of the current conditions in the economy and tuning the quantities of money and credit
- Understands that not only the payments system needs managements, i.e. interventions, but also intermediation.

Paper Credit (1802)

Against Smith and the Real Bills Doctrine

"It appears, that the sentiment which Dr. Smith leads his readers to entertain, namely, that there is in every country a certain fixed quantity of paper, supplying the place of gold, which is all that 'can easily circulate' (or circulate without being forced into circulation), and which is all (for such, likewise, seems to be the intended inference) that should ever be allowed to be sent into circulation, is, in a variety of respects, incorrect. . . .

Paper Credit (1802)

payments can be made with debts and credits (IOU)

the role of confidence

It may already have occurred, that if bank paper were abolished, a substitute for it would likely to be found, to a certain degree, in bills of exchange; . . . But further; if bills and bank notes were extinguished, other substitutes than gold would unquestionably be found . . . Merely by the transfer of the debts of one merchant to another, in the books of the banker, a large portion of what are termed cash payments is effected at this time without the use of any bank paper, and a much larger sum would be thus transferred, if guineas were the only circulating medium of the country." (100-1)

Paper Credit (1802)

On Country banks and the Bank of England

"While the transactions of the surrounding traders are thus subject to the view of the country banks, those of the country banks themselves come under the eye of their respective correspondents, the London bankers; and, in some measure, likewise, of the Bank of England. The Bank of England restricts, according to its *discretion*, the credit given to the London banker. Thus a system of checks is established, which, though certainly imperfect, answers many important purposes, and, in particular, opposes many impediments to wild speculation." (176 my emphasis)

Paper Credit (1802)

On crises

"The observations which have now been made sufficiently shew what is the nature of that evil of which we are speaking. It is an evil which aught to be charged not to any fault in the mercantile body, but to the defects of the banking system" (186).

Paper Credit (1802)
The risk for a crisis will diminish since:

First, the Bank of England will learn to be more generous towards the country banks and navigate between leaving the country banks to face their responsibilities and saving the credit system.

Second, and most importantly, the country banks will learn to accumulate enough liquid assets. This will increase the stability of both the country banks and the Bank of England, making the entire system safer.

Third, those among the public using notes of different houses will learn to distinguish between them and to place confidence in those notes issued by the most prudent banks.

Paper Credit (1802)

The Bank as the regulator of the monetary system

"The preceding observations explain the reason of a determination, adopted some time since by the bank directors, to limit the total weekly amount of loans furnished by them to the merchants. The adoption of a regulation for this purpose seems to have been rendered necessary by that impossibility of otherwise sufficiently limiting, at all times, the Bank of England paper . . . The regulation in question I consider as intended to confine within a specific, though in some degree fluctuating, sum, the loans of the bank, for the sake of restricting the paper." (258)

Paper Credit (1802)
"the true policy of the directors of an institution circumstanced like that of the Bank of England"

"To limit the total amount of paper issued, and to resort for this purpose, whenever the temptation to borrow is strong, to some effectual principle of restriction; in no case, however, materially to diminish the sum in circulation, but to let it vibrate only within certain limits; to afford a slow and cautious extension of it, as the general trade of the kingdom enlarges itself; to allow of some special, though temporary, encrease in the event of any extraordinary alarm or difficulty, as the best means of preventing a great demand at home for guineas; and to lean to the side of diminution, in the case of gold going abroad, and of the general exchanges continuing long unfavourable." (259)

- **Ricardo, the Currency School and the Banking School all knew Thornton**

- **The theoretical hegemonic approach, though not necessarily the practice, was that of rules rather than discretion; only when discretion reappeared, Thornton was rediscovered.**

explaining the puzzling delay in the formation of a theory of monetary policy (- though in practice LLR policy had been used –)

- between passive and active forms of monetary policy:
  - The passive form of monetary policy includes those “interventions” in the monetary system made when a specific institution - the monetary authority, i.e. the central bank - acts to rescue the system.
  - The active form of monetary policy relates to actions aimed at improving the performance of the real economy via monetary instruments.

Between LLR & Defensive CB

- **Lender of Last Resort (LLR) refers to "interventions" where an emergency causes a strong institution – for example, the Bank of England in nineteenth-century Great Britain – to function outside its normal day-to-day operations and address the crisis as a measure of last resort.**
- **Defensive Monetary Policy, on the other hand, refers to more than just undertaking rescue measures when an emergency is already apparent. Defensive central banking, known also as defensive monetary policy, aims to implement appropriate (defensive) policy in normal times in order to prevent the conditions that might lead the system into crisis in the first place.**

- **LLR had been the focus of much of the debate in the British monetary thinking that led to the famous monetary orthodoxy in the 1870's.**

- **Francis Baring, discussed the Restriction and the possibility of intervention by the Bank of England under extreme conditions: the Bank is "not an intermediate body, or power; there is no resource on their refusal, for they are the *dernier resort,"* (Baring 1797, p. 22). This is the French forerunner term for what became the Lender of Last Resort.**

Thornton went further than Baring:

- the role of the Bank of England could and should play in the banking system in normal times as well as in times of crisis. Monetary policy was not only that of a Lender of Last Resort in an emergency, but aimed more generally at defensive policy.
- Furthermore, there are suggestions in Thornton's writings for more ambitious interventions in the monetary system than those that defend stability; interventions that are more active in nature, trying to affect the real economy. The puzzling theoretical rejection of all three forms of monetary policy – Lender of Last Resort, Defensive and Active Monetary Policy - during the first three quarters of the nineteenth century -- though not always their rejection in practice – are the focus of this paper.

- **Bagehot (1873)** ***Lombard Street: A Description of the Money Market***

The reserves of the financial system, unlike any other institution in the world and without precedence in England as well, were now concentrated in the Deposit Department of the Bank

Walter Bagehot (1826-1877)

- **Bagehot's formulation of monetary policy, known as the Bagehot Principle, gave the final shape to what has since been described as the British monetary orthodoxy.**
- **Bagehot Principle was the most advanced concept concerning monetary policy of his time; but it was only defensive monetary policy.**
- **Strangely enough, Thornton is not credited with discussing the concept**

- **Laidler (2004) sees Bagehot as "an exponent of the hard-money Banking School ideas" whereas Thornton, "on the other hand, in many respects looked further forward than that, to the quantity theory based approach to stabilization policy developed by Hawtrey (1919) and Keynes (1923)." (52) Moreover, Thornton's approach to central banking, developed many years before in "a remarkable intuitive insight", reflects a more general theory of central banking than does Bagehot's. (46) Laidler highlights the different focuses of the two analyses, with Bagehot emphasizing the bank assets whereas Thornton emphasizes the bank liabilities.**
- **Beyond the focus on assets vs. liabilities, Bagehot's analysis rehabilitates the importance of finance in any monetary economy, and does so without focusing the analysis on the exchange process as did the Currency School. Bagehot emphasizes intermediation and show a deep understanding for the crucial place of credit and trust in the process of wealth creation in the real economy.**

- **The first element of proper policy was a large reserve, built ahead of the difficult times. Bagehot is fully aware of the gap between private interests and costs and public ones.**
- **Bagehot’s recommendation, his well known “rule,” is simple: the Bank should extend loans at the start of a crisis, but at escalating interest rates.**
- **The directors were not yet fully ready to fulfill the responsibility**

- **Bagehot's description and analysis of a typical cycle combines the real and non-real dimensions.**
- **In the real dimension, a crisis can occur also in a barter economy, not only in a monetary economy. But in modern societies, where a monetary economy functions, credit can be a cause for a cycle independent of and on top of real causes.**
- **Bagehot explains the supply of credit and the demand for it as derived from the savings and investments in society.**
- **The dynamics of the rate of interest explains the behavior of profits rates, as well as the peculiar and violent changes in crisis years (1825, 1866).**

Bagehot on:
The Rate of Interest, Prices and Crises

"This is the meaning of the saying `John Bull can stand many things, but he cannot stand two per cent:' it means that the greatest effect of the three great causes is nearly peculiar to England; here, and here almost alone, the excess of savings over investments is deposited in banks; here, and here only, is it made use of so as to affect trade at large; here, and here only, are prices gravely affected. In these circumstances, a low rate of interest, long protracted, is equivalent to a total depreciation of the precious metals. … Jevons showed, and so far as I know, was the first to show, the necessity of eliminating these temporary changes of value in gold before you could judge properly of the permanent depreciation. He proved, that in the years preceding both 1847 and 1857 there was a general rise of prices; and in the years succeeding these years, a great fall. The same might be shown of the years before and after 1866, *mutatis mutandis*." 141

As to the correct policy: No simple rule

"What is almost a revolution in the policy of the Bank of England necessarily follows: no certain or fixed proportion of its liabilities can in the present times be laid down as that which the Bank ought to keep in reserve. The old notion that one-third, or any other such fraction, is in all cases enough, must be abandoned. The probable demands upon the Bank are so various in amount, and so little disclosed by the figures of the account, that no simple and easy calculation is a sufficient guide. A definite proportion of the liabilities might often be too small for the reserve, and sometimes too great. The forces of the enemy being variable, those of the defense cannot always be the same.

I admit that this conclusion is very inconvenient. In past times it has been a great aid to the Bank and to the public to be able to decide on the proper policy of the Bank from a mere inspection of its account. In that way the Bank knew easily what to do and the public knew easily what to foresee. But, unhappily, the rule which is most simple is not always the rule which is most to be relied upon. The practical difficulties of life often cannot be met by very simple rules; those dangers being complex and many, the rules for encountering them cannot well be single or simple. A uniform remedy for many diseases often ends by killing the patient." 320-21

As to the correct policy:
No simple rule

- **Thus, Bagehot concludes the book and his description of the money market with the following lesson:**
- **"We must therefore, I think, have recourse to feeble and humble palliatives such as I have suggested. With good sense, good judgment, and good care, I have no doubt that they may be enough. But I have written in vain if I require to say now that the problem is delicate, that the solution is varying and difficult, and that the result is inestimable to us all." 336**
- **Defensive Monetary Policy**

Wicksell

The 1898 *Geldzins und Guterpreise*

Translated in 1935 as:

Interest and Prices A Study of the Causes Regulating the Value of Money

Originally aimed at an "examination of the case for and against the Quantity Theory" as Wicksell states in the preface.

Knut Wicksell (1851-1926)

Wicksell on the Quantity Theory

The crux of the matter is whether the velocity is determined by "*independent factors*" or is a "*resultant*, given the quantity of goods exchanged and the available money, [and] of the particular level of commodity prices, themselves determined by *quite different* causes," (54). Wicksell chooses to address this question separately under three payments systems: A) Pure Cash Economy; B) Simple Credit; and C) An Organized Credit Economy.

Wicksell, the QT and the Two Rates Analysis

Wicksell's proposals derive from the theoretical discussion in Chapter 9 of *Interest and Prices*: what can be done to stabilize the price level and to provide order and security is to "exert an indirect influence on the *money rate of interest* and bring it into line with the natural rate, or below it, more rapidly than would otherwise be the case," (188). Stable prices, the objective of such policy, could be reached "more cheaply, and far more securely through the monetary institutions of the various countries."

Wicksell's Policy Rule

"The procedure should rather be simply as follows: *So long as prices remain unaltered the banks' rate of interest is to remain unaltered. If prices rise, the rate of interest is to be raised; and if prices fall, the rate of interest is to be lowered; and the rate of interest is henceforth to be maintained at a new level until further movement of prices calls for a further change in one direction or the other*." (189, emphasis in the original)

This policy rule, which we may call "Wicksell's rule," is aimed at the general public good; its implementation may contradict the private interests of the banks.

- **The banks may lose profits if, as recommended, they decrease the interest rate while prices are falling; in the opposite case, they may lose customers.**
- **"I should like then in all humility," writes Wicksell, "to call attention to the fact that the banks' prime duty is not to earn a great deal of money but to provide the public with a medium of exchange – and to provide this medium in *adequate measure*, to aim at stability of prices. In any case, their obligations to society are enormously more important than their private obligations." (190)**
- **If the banks could not fulfill their obligations to society as private institutions, the task would be "a worthy activity for the State."**
- **The policy proposal calls for cooperation between the banks of the world, or at least between those of the gold standard countries.**

The central bank must "retain a free hand to be used *in the last resort*, if not earlier, over bank-rate policy." (191, emphasis in the original).

"There is first of all the individual regulation of *relative* rates of interest, which aims at maintaining the rates of exchange, the balance of payments, and the *relative* level of prices, and which, by the nature of the case, must proceed in *opposite* directions in different countries or groups of countries. At the same time, and more important, there can, and should, on occasion come into being a co-operative regulation of the rate of interest, proceeding everywhere *in the same direction* with the object of maintaining the *average* level of prices at a constant height." (192)

- **A proposal for international cooperation, based on a theory that systematically links intermediation and exchange, the rate of interest and the level of prices, was rare.**

- **"For my part," writes Wicksell, "I regard such an eventuality as no less undesirable than a further fall in prices. … [It] would be possible to avoid such a rise of prices only by the *suspension of the free coinage of gold.* This would mark the first step towards the introduction of an ideal standard of value," (193).**

- This "international paper standard", he claims, is welcome and is certainly not a cause for "consternation." The current gold standard system is ridiculed by Wicksell, who describes it as a "fairy tale, with its rather senseless and purposeless sending hither and thither of crates of gold, with its digging up of stores of treasure and burying them again in the recesses of the earth." (193)
- Such a paper system can function if the credit institutions obey the "Wicksell rule" and adopt an interest rate policy that will guarantee both equilibrium in the balance of payments and stable world prices.

The Lectures II:

- History of the debate; Ricardo & Tooke
- More on Monetary Policy
- Intermediation & policy

The classical dichotomy and Wicksell's "trichotomy"

The simplified classical dichotomy was in fact rejected by Wicksell and turned into a "trichotomy" between:

a) production, where relative prices and the natural profit rate are formed;

b) exchange, where absolute price are formed; and

c) intermediation, where the loan market rate is determined.

In production and intermediation, two different rates are determined; the two are not necessarily always equal. The two rates could continue to be in disequilibrium thus sending the price level up or down continually.

Intermediation, the process of bringing the savers and investors together through loans supplied and demanded in the banking sector, was not fully analyzed either by the classicals or by Bagehot

Why ‘puzzling’? Why delay?

- The delay in forming a theory of monetary policy is the result of the Classical’s conclusion that such a theory is not necessary.
- Since 1821, when the Restriction was over, efforts focused on preserving convertibility; from advocating convertibility as the cure, the major tendencies turned to the “metallic correspondence” principle and thought that this would be all that was necessary.

A gap in theory and lessons from history

- **Thornton described a theoretical gap that discretion could and should answer. Wicksell returned to this line of argument.**
- **The recurring financial crises explains partly the acceptance at long last of LLR. It can also explain defensive monetary policy that aims at preventing the need for LLR. i.e. Bagehot policy recommendations**

- **However, active monetary policy comes from a different perspective altogether. The latter assumes that we can improve the performance of the economy via monetary policy; prevent some losses and increase wealth. This approach to policy was shared by Thornton and Wicksell. They both thought that monetary policy can provide, at least partial, answer to the built-in disharmony characterizing a competitive monetary economy.**
- **Their conclusion, derived from theory and from the experience of crises, was that the rules and structural reforms in the monetary system – basing it on gold – are doomed to fail. And discretion is not as bad an idea as many political economists in the 19th century thought.**

Is there really a puzzle?

I think there is:

- Free Banking was rejected
- The rules and structural reform – failed
- Discretion was known to the practitioners, and tried in reality
- The theoretical weaknesses of “no policy” were exposed and explained in 1802…Why it took one hundred years to rediscover them?

- **The hegemonic view could not accept monetary policy (LLR, defensive or active) – since this contradicted its meta-theory, or belief, concerning the supposed harmony characterizing competitive capitalism.**
- **But there is another important distinction: Thornton, Bagehot and Wicksell focus not only on the Exchange process and price formation but address Intermediation and its complexity and inherent instabilities.**
- **The Currency School had the upper hand.**