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BOYD, BARING AND
THORNTON'S INNOVATIVE
IDEAS**

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Discussion Paper No. 07-14

October 2007

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The Early Round of the Bullionist Debate
1800-1802:
Boyd, Baring and Thornton's Innovative Ideas*

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* An earlier draft of the paper was presented at the 34th Annual Meeting of the **History of Economics Society**, *June, 2007* at George Mason University, in Fairfax, Virginia. I would like to thank David Levy for his discussion and Neil Skaggs and other participants for their helpful comments. The paper has been written while I was visiting ILER at UC Berkeley. I thank the Institute for its hospitality and intellectual environment.

The following paper is based on ongoing work towards a monograph provisionally titled: *Money, Credit and the Economy: Studies in the History of Monetary Theory from Smith to Wicksell*.

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Abstract

The Restriction period, which began in England in 1797, marked a crucial turning point for both monetary theory and policy. The debates during the Restriction concerning the complicated relationship between inflation, the exchanges and monetary aggregates came to be known as the Bullionist Debate. The Bullionists were critical of the Bank of England and supported a return to convertibility, whereas the anti-Bullionists defended the Bank and were satisfied with the inconvertible system.

Throughout the period, discussions fluctuated in intensity, as Jacob Viner (1937) and Frank W. Fetter (1965) pointed out, with the market price of gold. When the price of gold in terms of inconvertible notes was high, as in 1800-01 and in 1809-10, and the exchanges were bad, the controversy intensified. The first round in the debate started with a Bullionist argument published by Walter Boyd (1801) to which Francis Baring (1801), the anti-Bullionist, reacted; their intense exchange provides an historic context for examining and re-evaluating Henry Thornton's seminal contribution to monetary theory.

The paper will argue that Thornton's path breaking *Paper Credit* (1802) presents an innovative and consistent anti-Bullionist position, one that differs from that of Baring who accepted the Smithian Real Bills Doctrine for both convertible and inconvertible situations. Thornton, on the other hand, rejected the Real Bills Doctrine and more generally Smith's monetary thinking as it applied to both convertible and inconvertible monetary arrangements. The fundamental idea behind Thornton's defense of the Bank of England and inconvertibility was the crucial role of the Bank in managing the monetary system under both currency regimes.

After 1802, particularly as a member of the famous Bullion Committee, Thornton played an

important role on the side of the Bullionists that resulted in his being described by later scholars as a "moderate Bullionist." However, as I intend to show, his reserved support for convertibility during this period reflects his disappointment with the Bank directors, whose poor management skills and fundamental misunderstanding of the monetary system threatened the stability of the British economy. For this reason, the shift in Thornton's position may be better understood as a political and pragmatic response to an untenable situation rather than as a reversal of his theory or a principled rejection of an inconvertible, properly managed, regime.

1. Introduction

The Restriction Period began in England in February 1797 when, under the shadow of a run on the banking system, the sovereign suspended the specie convertibility of Bank of England's notes. The suspension of cash payments, which started the Restriction period, remained in effect until 1821. That decision marked a crucial turning point for both banking theory, and monetary institutions and their policies.

Founded in 1694, the Bank of England was a private institution with some privileges: for example, it was the only bank in London whose charter permitted it to issue notes within the city and its vicinity. Other banks in London, the London private banks, did not issue notes, but did deal with all other aspects of banking, while banks outside the London area, known as the country banks, faced almost no legal restrictions concerning note-issuing. The importance of the heavily-capitalized Bank of England, both in financing public expenditure and in holding reserves for the other banks, turned it into the pivot of the British banking system. However, the implications of the unique place held by the Bank of England in the British economic system were not fully understood until the 1870's when Walter Bagehot published *Lombard Street*, a book about the role of the Bank of England in the city of London. In hindsight, it was the Bank's powerful position, particularly its monopoly in note-issuing in London, and its own unwillingness to take responsibility for that position, which made it the focal point of a controversy within the British economic system that lasted over seventy years.

The early years of the 19th Century, the Napoleonic war years, witnessed a period of intense economic debate. The debates during the Restriction period on the complicated relationship

between inflation, the exchanges and monetary control came to be known as *the Bullionist Debate*. The name refers to a prevalent Restriction-era conversation about the reasons for the fluctuating market price of gold and the advisability of a return to specie convertibility. The Bullionists were critical of the Bank of England and supported an early return to convertibility, whereas the anti-Bullionists defended the Bank and were satisfied with the inconvertible system.

Discussions of the reasons for the discrepancy between the pre-Restriction Mint price of gold, which was fixed at £3 s17 d10.5, and the market price of gold continued into the 19th Century, fluctuating in intensity, as Jacob Viner (1937) and Frank W. Fetter (1965) pointed out, with the market price of gold. When the price of gold in terms of inconvertible notes was high, as in 1800-1801 and in 1809, and the exchanges were bad, the controversy intensified, as it did, for example, in 1803-1804, when the exchange of the Irish pound was not on a par with the English pound.

These discussions proved fruitful insofar as they culminated in attempts to formulate theories tenable in situations of inconvertibility; however, the debates also extended to the relation between internal circulation and international movements of gold and commodities, to a new assessment of the power of the Bank of England to control the circulation, and even to influence credit and the banking system as a whole. The crucial question was how to formulate policy in the absence of a standard to which notes could be compared.

The first round in the debate between 1801 and 1804 started with publications by Walter Boyd (1801), the Bullionist, and Francis Baring (1801), the anti-Bullionist. The public debate also took place in other forums, for example, in Parliament, in Parliamentary Committees of enquiry, in the press, as well as in pamphlets. Many people, particularly advocates of the Bank of England, participated in these forums. Many commentators, though not all, tended to present the Bullionists

as having the more reasonable and well-argued position; they leaned toward the view that the Bullionists were right and that the anti-Bullionists, who represented the interests of the Bank and the Government, were wrong.

Viner (1937), Fetter (1965), Denis O'Brien (2004) and Friedrich von Hayek (1929/1991), among others, present Boyd, Peter King, and Francis Horner, together with Thornton, as the main contributors to this debate from the Bullionist side.¹ This group of writers is often referred to in the secondary literature as the "moderate Bullionists," to be distinguished from the "extreme Bullionists," such as John Wheatley (1803) and later on David Ricardo, who entered the scene in the second round of the Bullionist debate, which took place between in 1809-11. In this same literature, Baring has usually been described as the only serious anti-Bullionist, a defender of the Bank of England and the Restriction.²

The present paper proposes a different reading: Thornton, I will argue, was an anti-Bullionist, at least in terms of his monetary theories and certainly in 1802. His association with the Bullionists is partly due to his public activities and positions on policy after 1802; in particular his

¹ See Viner (1937), ch. 3, especially pp. 119-122; Fetter (1965), ch. 2; O'Brien (2004), ch. 6, pp. 175-181; and Hayek (1929), p. 197. Although, Hayek's (1929) paper was not published until 1991, Thornton's ideas were important to Hayek, in terms of his [Hayek's] intellectual development. (See editors' comments in Hayek (1929\1991, 127). Hayek's deep appreciation of Thornton may explain his decision to republish Thornton ten years later, in 1939, and to write the famous introduction to the republication of *Paper Credit*. However, in 1939, unlike his colleagues, (Viner and Fetter) Hayek did not repeat the above association of Thornton's theoretical stance with that of the moderate Bullionists. I will return to this point below.

² O'Brien adds Henry Boase (1804) to the "serious" anti-Bullionist pamphleteers. David Reisman (1971) argues that Jacob Hollander (1911) offered a different categorization insofar as he associated Thornton with the anti-Bullionists (p 72). Clearly, Hollander thought, and rightly so, that Thornton defended the Bank, though he (Hollander) did not use the term anti-Bullionist to describe Thornton. Rather, Hollander thought that Thornton's stance on inconvertibility was untenable; and he agreed with Horner's early criticism of the Bank. Hollander erroneously described Thornton as a director of the Bank. Reisman, however, also argued that Thornton "accepted the gold standard, but not the orthodox version defined by the Currency School" (71).

participation in the 1804 Irish Currency Committee and in the controversy surrounding the Bullionist debate from 1810-11. However, if Thornton can be said to have changed his views, he did so for pragmatic and/or political reasons that left his theories unchanged. Thus, although Thornton joined and led the anti-Bullionists in 1802, he did not accept Baring's ideas. Instead, he constructed the most important economic theory of his career (and of the era) in defense of inconvertible monetary systems.³ To fully appreciate the power of Thornton's thinking, one has to recall that two hundred years ago what 21st Century economists think of as a natural and obvious theoretical position on inconvertibility, was considered by many to be extraordinarily innovative and unconventional.

Henry Thornton's journey to relative anonymity and back to fame in the years since the Restriction has attracted many historians of economic thought who still debate the reasons for his prolonged disappearance from the canon of monetary theory. Nevertheless, an emerging consensus contends that Thornton's views, though in many cases not attributed to him, remained influential, by virtue of their impact on other major thinkers, especially from the Banking School (e.g., Tooke, see Skaggs 1995, 2003).⁴ Thanks to the efforts of Friedrich von Hayek, Thornton's path breaking book, *An Enquiry into the Nature and Effects of the Paper Credit of Great Britain*, originally published in 1802, was republished in 1939. In his celebrated *Introduction*, Hayek wrote that the book was "...very likely . . . at least in the shape in which it was ultimately published . . . intended as a reply to Boyd" (Hayek 1939, 45).

³ David Laidler (2000) comes closer to this paper's interpretation by arguing that "[Thornton's 1802] position in that debate is hard to classify, because though its analytic content places it firmly in the Bullionist camp, it nevertheless defends the policies pursued by the Bank of England after 1797" (8). However, I will argue below that Thornton 1802 provided an anti-Bullionist analysis.

⁴ See also Arnon (1991, 28, 48-9 and 76). But Arnon as well erroneously identified Thornton as a moderate Bullionist. See also Peake (1978) and Beaugrand (1982) and Arnon (1987).

Altogether, Hayek's introduction secured Thornton's place in the history of monetary theory by overturning previous scholarship⁵ and by making it clear that he thought highly of Thornton's achievements. He did this in part by addressing the consistency of the views Thornton advocated in *Paper Credit*.

In particular, Hayek emphasized the differences between the first part of the book, "devoted to pointing out the dangers of an excessive contraction of the issue of paper" and the later sections, where the main problem Thornton addressed was that of "the effects of an absolute increase of the circulation." The former had been labeled in the secondary literature as "deflationary," whereas the latter was dubbed "inflationary." Thus, argued Hayek, it is in the latter parts of the book, where Thornton dealt with the issues of inflation and foreign exchanges, that his "best-known achievement" appeared (See Hayek's *Introduction* (1939, 45-48)).

Like Hayek, many observers agree that there are at least two Thorntons, if not three, in that great work. John Hicks (1967), in his "Thornton's Paper Credit (1802)," emphasized the "change in the character of the historical situation that is being considered" (181), while insisting on the conformity of Thornton's positions, describing them as "Keynesian."⁶ However, Hicks also argued that in the second part of the book Thornton showed "the other side of the medal; the danger of maintaining inconvertibility when it was not necessary" (181). Moreover, Hicks read Thornton as a firm supporter of the gold standard, stating that "Thornton always believed in the Gold Standard,"

⁵ "Although Thornton's merits have long been overshadowed by the greater fame of Ricardo, it has now come to be recognized that in the field of money the main achievement of the classical period is due to Thornton . . ." Hayek (1939, 36)

⁶ "If we look at these introductory chapters alone . . . we must, I think, be of opinion that Thornton has started off on what we should consider a remarkably Keynesian tack. And it is not in this section alone that he exhibits 'Keynesianism;' it persists, as we shall see, into the next round" (Hicks 1967, 177).

while adding "That looks a surprising statement, in view of his support of the 1797 Restriction."⁷

By establishing Thornton's support for a non-Gold Standard, I expect that surprise will fade away.

In a recent exchange, Antoine E. Murphy (2003, 2005) and Neil T. Skaggs (2005) returned to these issues. Murphy argued that there were not two Thorntons but three. The first two, as suggested by Hayek and Hicks, criticized deflation in the early parts of the work and inflation in the latter parts, to which Murphy added a third Thornton, in the form of a supporter of non-metallic money (Murphy 2003, 447-451). Skaggs' *Comment* on Murphy agrees with the latter's description of the first Thornton, the anti-deflationist, while disagreeing with him on the second and third Thorntons. In Skaggs's view, there was only one persona, no schizophrenia, and no internal contradictions. The Thornton that Skaggs sees as the consistent Thornton adheres to stability and to gold as the preferred standard.

I would like to propose a different interpretation: Thornton disagreed with Boyd and developed an innovative anti-Bullionist position, very different from that of Baring. Thornton rejected the Real Bills Doctrine, together with other monetary ideas of Adam Smith. For this reason, he considered Baring's defense of the Bank to be unconvincing and specious. Unlike the Bullionists, Thornton did not reject inconvertibility; sometimes he even referred to it as the superior monetary system; though, as with any financial system, whether convertible or inconvertible, Thornton insisted on the necessity of implementing a discretionary policy and in Great Britain monetary policy had to be implemented by the Bank of England. Thus, in my view, the "real" Thornton was the third one, and the apparent differences in analyses in the first and second parts of the book are

⁷ The proof comes in the form of a quote from a speech in 1811, on which Hicks commented: "This, to be sure, is 1811, not 1802; but it is incredible that the man who believed this, with such conviction, in 1811 could ever have believed anything else" Hicks (1967, 184). We will return to this issue below.

simply the implementation of one framework under two different circumstances. Hence, the one, non-schizophrenic Thornton, was the innovative monetary theorist whose analysis favored a non-metallic, managed, monetary system.

The Bank of England under the Restriction was a private institution, profit-seeking and free of any supervisory authority. Although the Bank's implemented policies that were legal, its directors displayed a profound ignorance of a fundamental truth: The Bank's pivot role on the system. By acting in their own self-interest, the directors demonstrated a lack of concern for the public's interests. What changed therefore between 1802 and 1811 concerned Thornton's mistrust of the Bank directors' understanding of their role in the system and his lack of confidence in their ability to implement proper policies as he saw fit.

Although both Reisman (1971) and David Laidler (2000) describe Thornton as a moderate Bullionist, in 1802 as well as in 1810-11, they are also aware of the changes in his position concerning the Bank's policy. Reisman writes that: "By 1810, he [Thornton] may simply have altered his position on events in the real world as he learned the Bank was not exercising what he felt to be adequate discretion" (73). Laidler's claim is even stronger: "By 1810, he [Thornton] and his colleagues could have no such confidence in the Bank, given its directors' enthusiastic embrace of the Real Bills doctrine: hence the *Bullion Report's* emphasis on the urgent need to re-impose convertibility as constraint on their activities" (16). However, in 1810-11 Thornton would not have rejected the feasibility of inconvertibility in principle had the Bank understood its discretionary, hence, public role. In other words, the change in his position did not imply a theoretical change. As the foregoing example illustrates, the apparent shift in Thornton's position on inconvertibility did not indicate a change in, or rejection of, the fundamental beliefs underlying his monetary theory.

Section 2 presents Boyd's Bullionist and Baring's anti-Bullionist views. Section 3

elaborates on Thornton's 1802 arguments, and establishes the consistency of his positions in the two parts of the book where he defended the Restriction, as well as the Bank's directors, and advocated the possibility and advantages of having an inconvertible monetary system. Section 4 briefly summarizes Thornton's positions after 1802, up to and after the 1810 Bullion committee.

2. The Early Round: Boyd versus Baring

Boyd was born in 1753 in Scotland. His career brought him to the continent where he was active in banking and finance and, in 1785, became a partner in a private bank in Paris. The revolutionary changes in France sent him back to London in 1792, where he was active in the exchanges markets and in making large loans to Austria, an ally to the British, to finance their war expenditures. The huge deals he helped broker brought criticisms from various quarters and even led to the establishment of a committee of inquiry. By the late 1790's, his financial standing had deteriorated, and by March of 1800, Boyd was bankrupt. When he traveled again to France, he managed to regain some of his fortune, even though he lost his freedom, finally returning to England in 1814.⁸ Boyd was a Member of Parliament twice: once in 1796 and again between 1823 and 1830. He had close links to policy makers, particularly to Prime Minister William Pitt (the younger) in the 1790's, though at the time, he also had some strained relations with the Bank of England.

2.1 Boyd's Letter to Pitt – A Critique of the Bank of England

Boyd's best known text, *A Letter to the Right Honourable William Pitt on the Influence of the Stoppage of Issues in Specie at the Bank of England on the Prices of Provisions and Other Commodities* [A Letter to Pitt] was written in late 1800. It was sent a few weeks later with some additional factual supportive data to Pitt, before its publication in early 1801.⁹ The pamphlet

⁸ See Daunton (2004).

⁹ See the Preface to the First Edition. Boyd mentioned the date of writing the letter as 11th November 1800. In the weeks that elapsed before he actually sent it to the publisher, new facts became available in response to a request made by Parliament to the Bank of England concerning

attracted many reactions, the most influential by the famous Sir Francis Baring. Baring's response caused Boyd to publish a second edition, *With additional Notes; and a Preface Containing Remarks on the Publication of Sir Francis Baring, Bart* (1801b).

The pamphlet's first edition presented an analysis of the new, inconvertible monetary regime, the economic consequences that followed from the new regime, and some proposals for reform. Boyd's analysis of note issuing under inconvertibility was straightforward: Since there was no restriction on the issuing bodies in the form of convertibility, including on the Bank of England, that body, acting under the new rules prevailing since February 1797, and in line with its own best interests as a private company, was responsible for the monetary expansion and price rises. After more than one hundred years, during which time the Bank of England observed the obligation to pay on demand in specie, which:

indeed formed the fundamental condition of its institution . . . there was little danger of an excessive circulation of Bank-notes; but, from the moment this condition was dispensed with, the danger of excessive issues became apparent. Indeed it is not to be supposed, that a corporation, whose profits chiefly arise from the circulation of its Notes, and which is exclusively directed by persons participating in those profits, has been, or could possibly be, proof against the temptation, which the license they have enjoyed since February, 1797, has afforded. (4)

The crucial conflict between public interests and those of private parties, sometimes described as that between the State and individual parties within its sovereignty, changed its form radically with the legal change concerning the convertibility of the Bank's notes. Although Boyd

the amount of Bank of England notes in circulation which, along with the price of gold, strengthened his arguments.

himself and the general public had no available information as to the size of the "increase in paper" that occurred after February, 1797, Boyd based his critique on the assumption, sometimes described by him as a "feeling," that there was too much paper money in circulation.

The additional money, called by Boyd the "multiplication of the representative signs of money," to distinguish it from what it represents, caused prices to rise. Boyd described rise in prices as "evil" on account of two factors: its proportion and timing. Furthermore, wrote Boyd, the expansion of money was caused by misguided "principles of public oeconomy." However, whereas in a convertible system the surplus would have been exported to other countries, under inconvertibility it stayed in England where it had an enormous effect. In a very interesting statement that attracted the attention of later commentators, Boyd explained that:

By the words "Means of Circulation," "Circulating Medium" and "Currency," which are used almost as synonymous terms in this letter, I understand always *ready money*, whether consisting of Bank Notes or Specie, in contradistinction to Bills of Exchange, Navy Bills, Exchequer Bills, or any other *negotiable* paper, which form no part of the circulating medium, as I have always understood the term. The latter is the *Circulator*; the former are merely *objects of circulation*. (Boyd 1801, 1-2, note)

What constituted the circulating medium, how its quantity was determined, and what should be its right proportion relative to the value of the annual produce were the questions that fueled much of the debate. What was clear to Boyd while writing the *Letter to Pitt*, before the data from the Bank concerning the quantity of the circulating medium suddenly appeared and became public, was that a sharp increase in that quantity during a short time interval can produce a significant effect on prices. The subject of the circulation is "peculiarly complex and obscure," wrote Boyd. The "human mind" tends to "confound causes with effects" and to "ascribe to one object the qualities which

belong to another" (16). According to Boyd, some writers argued that "the encrease of the public debt, as forming an addition to the circulating medium of the country" is responsible for the rise in prices, "while the fact is, that the public debt and the currency of the country are 'Distinct, as is the swimmer from the flood.'"

Another common example of confusion in the human mind related to the role of country banks vis-à-vis the circulation, an issue that was to remain at the heart of the debate throughout the Restriction. Some blamed the country banks for the great rise in prices. "This is clearly mistaking a secondary cause for a primary one," commented Boyd. The country banks must either pay their notes in gold or with Bank of England notes.¹⁰ The same mechanism which kept the Bank of England from increasing its issues when convertibility prevailed, now prohibited the country banks from increasing their issues. Thus, argued Boyd, the Bank of England carried the blame:

The circulation of these notes of Country-Banks is under a controul equally salutary as that which restrained the issues of Bank of England notes, while that corporation was bound to pay, and did pay, every demand upon it, in specie . . . [these notes] must necessarily be proportioned to the sums, in specie or Bank of England notes, requisite to discharge such of them as may be presented for payment; but the paper of the Bank of England has no such limitation. It is itself now become (what coin of the country only ought to be) the ultimate element into which the whole paper circulation of the country resolves itself. (Ibid., 19-20, emphasis added)

Hence, argued Boyd, the Bank of England was the regulator of the circulation during the

¹⁰ "Every note which the Country Banker issues is payable on demand, either in specie, or in notes of the Bank of England. It may therefore be inferred, that no part of these issues can possibly remain in circulation, beyond what the encreasing prosperity and industry of the country where they circulate, can fairly absorb or digest" (Boyd 1801a, 18).

Restriction as gold had been the regulator before. The standard of the circulation, the "ultimate element" in Boyd's terminology, were Bank of England notes. The other banks, both the country banks and the London banks, follow the directions and rules set up by the Bank of England. Boyd concluded that the Bank mismanaged the circulation when left with no obligation to pay its notes in cash, and "the issues are under no other controul than that of the corporation whose profits depend upon them." (50) Hence, "it is impossible to stifle the suspicion, that these issues may have been extended much beyond the limits by which they would have been bounded, had the Bank continued to be subjected to the salutary obligation of paying its notes on demand."

Boyd, like almost every other participant in the debate, relied on the authority of Smith. Had Smith been alive, and asked about the so-called price revolution, he would not have supported the arguments promoted by the defenders of the Restriction. Neither the War, nor the seasons, nor population changes would have satisfied Smith as convincing explanations. "He [Smith] would find none of the assigned causes, which are *partial*, equal to the effects, which are *general*. He would naturally proceed to enquire, whether some important cause might not have diminished the Value of Gold and Silver. He would begin to suspect some astonishing increase of the *quantity* of those metals, or of their *powers*."

This hypothetical cause was possible in principle, argued Boyd, but the dramatic increase in prices in such a short period of time was impossible to account for. But, had we told Smith that a stoppage had been declared since 26th February 1797 on payments of Bank notes, and that the Bank can issue "*ad libitum*... Would he not say, that this cause is, of itself, adequate to all the extraordinary rise which had taken place?" (65-66)

He [Smith] would say, that not only the currency of the country had been changed from a *certain* to an *uncertain* standard, but that the *quantity* of it, in all probability, had been

greatly augmented . . . and that thus the prices of all objects of exchangeable value necessarily feel the influence of a *positive* degradation of the standard, and of a *probable* augmentation of the *quantity* of money in the country. . . . He would recommend to those who are entrusted with the great interests of the country, to examine, without delay, whether or not the Directors of the Bank of England had yielded to the almost irresistible temptation to which they had been exposed; for he would consider, that, in all probability, those Gentlemen, far from thinking it their duty to *with-hold* the advances solicited from them, may have thought they were rendering a meritorious service to the country, by *lending liberally*, on good security, the paper-money which Parliament had invested them with the power of coining. (Ibid., 66-67)

The increased demand for credit, coming as Boyd said from the Government asking for huge loans from the Bank (three million pounds in just eight months) and from private interests had been answered by the Bank's directors. The latter, believing that they were providing good services both to the country and at same time to themselves, could not act otherwise. To expect them to act differently was "utterly incompatible with the ideas which led to the system of issuing paper not payable on demand." Parliament was responsible, argued Boyd, not the Bank's Directors, who did not set the rules that created the new inconvertible regime. Furthermore, the decision to extend the Bank's charter for an additional 21 years, a decision Boyd described as payback for a six years' loan to the Government with no interest, sent the wrong signal: "If they had justly estimated the tendency of such a system; if they had thought, as it became the acting guardian of public credit to think, on that subject, they would have spurned the boon which they accepted . . . By accepting the indulgence which that prohibition gave them, they afforded an infallible standard for ascertaining the depth of their conceptions" (68, emphasis added).

But probably the most sensitive line of criticism was to question the authority's motives. "Why had Sir Pitt supported the measures taken in February 1797?" asked Boyd. Was he acting as a Statesman or was he managing the support of "the Monied Interest?" To these rhetorical questions Boyd added sarcastically, "I wish you could answer in the negative." He also added his suspicions that the suspension had been prepared in advance of the time of the sudden crisis of February 1797. Thus, in 1801, looking back to 1797, he considered the policies during the months before the Restriction to be part of a policy calculated to deliberately create a shortage in the circulation so that the public, suffering as it did from this scarcity, would be ready to accept any new measures. The idea that such a conspiracy took place may explain Boyd's decision to quote an interesting initiative by a group of persons he led in April 1796 who had by then proposed a reform that would have created a rival institution to the Bank in London.¹¹

2.2 Sir Francis Baring 1801 Defense of the Bank and Boyd Second Edition

Boyd's pamphlet had an impact on the public and naturally it irritated many in the Government and the Bank. One famous reaction came from the respectable Sir Francis Baring who by 1797 had already published two pamphlets defending the Restriction.¹² Baring (1740-1810) was a merchant and a banker who created the well known house of Barings. His business had been based on a network of financial links in important centers in Europe and North America based on confidence. Baring was close to Lord Shelburne (later Lord Lansdowne) and the Whigs. Early in 1801 Baring

¹¹ See Boyd (1801a) appendix B.

¹² Baring published in 1797 a famous defense of the Restriction, the *Observations on the Establishment of the Bank of England and on Paper circulation of the Country* to be followed by *Further Observations* on the same year.

published *Observations on the Publication of Walter Boyd*, where he explained, somewhat polemically, his decision to react to Boyd by publicizing the apparent negative influence of the latter's pamphlet: In "some circles the work had made an impression and contributed to raise an alarm." (5) Baring accused Boyd of contributing to "lessen that confidence" in the Bank circulation, thus causing the "Public to believe that the excessive dearness of provisions arises from the circulation of Bank Notes." As a result, claimed Baring, the "ignorant" and "half informed" might be influenced by "a name," especially since that particular authority, i.e. Boyd, argued for some sound principles. In consequence, Sir Baring felt it was his duty to defend the Bank of England: "I hope to prove that the paper issued by the Bank has never exceeded wants, and even the convenience of the Public, still less that it has operated to produce any advance in the price provisions." (9) Baring represented the establishment, both of the Bank and of the Government. He argued in the name of the difficult circumstances in England at the time and the necessity to implement certain measures as a result of the war. Blaming the Bullionists, and particularly Boyd, for his part in eroding the public's confidence, was a calculated measure to reduce their impact. Boyd, who had some conflicting material interests, was an easy target.

The quality of Baring's and the anti-Bullionists' arguments was another matter. Baring, like the Bank directors and government policy makers, relied on Smith's Real Bills Doctrine, though unlike Smith, who argued the Doctrine under convertibility, Baring and the Bank made it the basis of their monetary theory under inconvertibility. Already in 1797, Baring defended the Restriction, arguing that even when "gold was refused on the presentation of the Notes," the "Directors of the Bank must understand correctly the amount to which their Notes can circulate without depreciation

or discount; their Notes continued to circulate at par.”¹³ The discussions in the secret committees of 1797, as well as in parliamentary debates, made clear how widespread that doctrine had become.

Boyd's pamphlet may well have contributed to the country's economic instability by eroding the public's confidence in the Bank of England, as Baring thought. In all events, the pamphlet became the focus of heated debate and attracted many criticisms immediately after its publication. Some of the reactions contained negative personal attacks. Two such pamphlets, which had been ascribed to Baring in the Goldsmith Library catalogue, were especially tough.¹⁴

To these criticisms Boyd reacted abruptly, adding many notes to the second edition as well as a very long preface of more than fifty pages directed against Baring and others. He also “endeavoured to obviate” with some success the “personal abuse” directed at him, especially in some of the anonymous tracts. The reaction to Sir Baring was altogether of a different attitude. Boyd believed that their differences of opinion had been rooted in earlier days, when their first discussions took place, immediately after the Stoppage. The augmentation of the circulation was

¹³ See Baring (1797, 10-13). Baring trusted the Directors' skills and used the concept of lender of last resort in 1797. See a famous quotation in Baring (1797, 47): "as the merchants, manufacturers, et. Can pay no more than 5 per cent. Per annum, and as money was not to be obtained at that rate in the market, they were driven once more to the Bank as a *dernier resort*" (emphasis in the original). See also p. 22.

¹⁴ Baring [?] (1801b) "*A Twelve-Penny Answer to a Three Shillings and Six-Penny Pamphlet, Intituled A Letter on the Influence of the Stoppage of the Issue in Specie at the Bank of England, on the Prices of Provisions and other Commodities*" to be followed by Baring [?] (1801c) "*A Second Twelve-Penny Answer to a New (and Five Shillings) Edition of Three Shillings and Six-Penny Pamphlet, Intituled "A Letter on the Influence of the Stoppage of the Issue in Specie at the Bank of England, on the Prices of Provisions and other Commodities; with additional Notes and a Preface."* The advertisement page in the *First Twelve-Penny* mentioned Baring's *Observation* as appearing too late for the author to take notice. If so, the attribution of those two pamphlets to Baring in the Goldsmith Library catalogue, although uncertain since square brackets appear around the name, may be wrong unless it was intended to hide the author. The author's agreement with Baring is almost complete, and he had used many similar arguments which might have convinced some that it was another pamphlet by him. The date for the advertisement was February 3rd, 1801, which date points to Boyd's earlier publication.

significant, argued Boyd, it was the *circulator* which increased by more than three million to be distinguished carefully from the *objects of circulation*. This distinction escaped Baring.

What is striking in the debate between Baring and Boyd is that both argued that the confidence in the Bank and its notes had not declined; notes and gold pass, so they argued, at the same value. There is no difference in prices quoted in Bank notes or in coins. "The *current* value of Bank-notes and of gold is the same." The depreciation in value affected both mediums and occurred as a result of the stoppage of cash payments and the disappearance of a mechanism capable of restricting the circulation of money. (Boyd 1801b, xxxix-xl) True, the increase was only three and a half million pounds, but Boyd insisted it was enough to cause the effects. Furthermore, confirmation from official sources that this assumed increase actually took place came late, between the time the Letter's first edition had been written and published.

Boyd thought that Baring had changed his position concerning the suspension of cash payments since 1797 with no appropriate explanation. At that time, Baring described the Bank as having "failed," claiming that it "had passed the line of bankruptcy" (Boyd 1801b, lv). Now, four years later, the events which were then described by Baring as a "bitter pill which the Public had been forced to swallow" are "passed over in perfect silence." Boyd concluded the detailed examination of his opponent's inconsistencies with a complaint: "Sir Francis has taken some pains to represent me as at variance with myself. It would have been fully as proper to have reconciled his printed opinion of 1797, with that of 1801."

3. Thornton 1802 – Defending Inconvertibility and the Bank

Thornton stated in the Introduction to *Paper Credit* that his work consists of two parts; the early chapters of the work addressed "... the evil of a too great and sudden diminution of our circulating medium," whereas the "latter Chapters are employed in pointing out the consequences of a too great augmentation of it" (Thornton 1802/1939, 68).¹⁵ Hicks speculated that the book was written over a long period, and the chapters were written chronologically, the first already in 1796.¹⁶ Murphy thinks that the whole book was written in 1800-01, though in my view the supporting evidence is inconclusive and unconvincing. As we will see below, both the first and later parts contain penetrating and innovative ideas; some of which disappeared for a long time from the more conventional schools of thought. In the two parts of *Paper Credit*, Thornton writes as an anti-Bullionist within one, consistent, conceptual framework that allows him to explain the causes for changes in various monetary aggregates, linking them to both non-monetary internal economic developments and to international trade.

In section 3.1 I will show that the first part of *Paper Credit*, which dealt with the deflation years, presents a position in defense of both the Restriction and the Bank of England's behavior. In section 3.2 I focus on the second part of *Paper Credit*, which addresses the question of an increase in the circulation that became the focus of discussion around 1800. In both parts of his book,

¹⁵ In the following references to Thornton's *Paper Credit* only page numbers will be used.

¹⁶ This speculation of a long writing process is supported by Thornton's statement in the Introduction that "A person who presumes to differ from the authorities which have been mentioned [Smith, Hume Steuart, Locke and Montesquieu], and who proposes to correct the public opinion on the important subject of our paper credit, ought, undoubtedly, to be very cautious lest he should propagate new errors while he is endeavouring to remove the old. A sense of the duty of mature considerations has caused **some delay in the publication** of the following work" (Thornton, 1802/1939, 68, emphasis added). See also Hayek (1939, 42).

Thornton gives sophisticated explanations for the respective events that, viewed together, provide a convincing theoretical defense of the Restriction and the Bank's directors' policies that leaves no doubt: Thornton's position was an anti-Bullionist position. Thus, *Paper Credit* should be read as an early exploration into the possibility of having a stable monetary system that is not based on convertibility to a commodity-money but is managed by a national bank.

3. 1 *Paper Credit* on the Contraction of the Circulation.

Thornton begins his book with some general observations concerning money, credit and transactions. He defines commercial credit as the "confidence which subsists among commercial men." That confidence does not depend on the existence of money, argues Thornton. Commercial credit can be used "Even in that early and rude state of society, in which neither bills nor money are as yet known . . . " (75) Commercial credit, hence confidence, "is the foundation of *paper credit*," which helps to "enlarge, confirm and diffuse confidence among traders." He then describes the transformation of exchange in society from barter to the convenience of the use of gold as money. But the focus of the analysis is on understanding the working of the exchange of goods using credit instruments, such as bills of exchange. The analysis and the book offer a critique of Adam Smith's monetary theory, written in a modest and reserved tone.

A Critique of Smithian Monetary Theory

Smith's monetary analysis assumed convertibility and was founded on the banks' discounting only

so-called real bills, thus guaranteeing the proper working of the banking system.¹⁷ His underlying assumptions were that real bills are well-defined, and their quantity restricted, such that the bank's self-interest will force them to discount only such bills. After carefully describing the different purposes served by real bills, Thornton went on to explain that in actuality, banks can't differentiate between "real" and "fictitious" bills. The former supposedly derive from the genuine sale of a commodity, where the buyer receives credit from the seller and in exchange provides a bill stating the terms of his debt. The fictitious bill, on the other hand, originated not in a sale of goods, but rather in the coordinated actions of merchants who were interested in having a medium that can be discounted. Thornton described the fictitious bill as a "note of accommodation." He disagreed with Adam Smith that the use of fictitious bills will prove "ruinous to the party resorting to it;" i.e., ruinous to those who, acting in his/her self-interest, will not discount them. Moreover, he thought it was improbable that the bankers, or any of the merchants, could distinguish between the two types of bills:

To determine what bills are fictitious, or bills of accommodation, and what are real, is often a point of difficulty. Even the drawers and remitters themselves frequently either do not know, or do not take the trouble to reflect, whether the bills ought more properly to be considered as of one class or the other; and the private discounters, or bankers, to whom they are offered, still more frequently finds the credit of the bills to be the only rule which it is possible to follow in judging whether he ought to discount them. (89)

Thus, Thornton rejected Adam Smith's Real Bills Doctrine. His analysis of bills, i.e. debts, was the foundation for his analysis of circulating paper. In *Paper Credit* he discusses the rise of bank notes "payable to Bearer on Demand" where the issuing body kept only fractional reserves in

¹⁷ See Smith (1776), Book 2, Ch II; Laidler (1981); Santiago-Valiente (1988); and Gherity (1994).

money. He argued that naturally a "powerful and well accredited company will probably be the first issuer" of such paper. The tendency to see at the pivot of the system a great public bank makes this body a source for a "reservoir of gold to which private banks may resort with little difficulty, expence, or delay, for the supply of their several necessities" (90).

Thornton's discussion of circulating paper explicitly criticizes Smith and Boyd, who he believed had not fully appreciated, either the complex links between bills, bank notes and gold, or that bills and bank notes are both money. The somewhat mechanical treatment of note issuing by Smith, argued Thornton, misses some important distinctions. Smith, who argued that the rise of fractional reserves frees resources by supplying the circulation with a cheap medium (notes) while keeping in reserve less gold than had to be kept without the service of banks, misses some important distinctions.

First, gold and notes are not really perfect substitutes since in their performance of payments they have different impacts; for example, Gold's velocity of circulation is higher than that of notes. Moreover, bills are part of the circulating medium and perform better than bank notes in that capacity. The major advantage of bills is that their value rises over time while they are held as a means of payment that carries interest. The very sophisticated and, some will say, modern, discussion concerning costs and benefits of the various means of payments covers both the individual agents in the exchange process and the macroeconomic implications.

Thornton's discussion of the macro-implications caused him to criticize Adam Smith once again; this time, he directed his critique at the nature and role of debts and credits. In his argument, Thornton quotes from Smith's chapter on banking, Book 2, Chapter II: "The whole paper money of *every kind* which can *easily* circulate in any country, never can exceed the value of the gold and silver of which it supplies the place, or which (the commerce being supposed the same) would

circulate there, if there was no paper money” (Thornton 1802, 95, quoted from Smith; emphasis added by Thornton).

This formulation enabled Smith to argue that had the banks followed his Real Bills Doctrine, the quantity in circulation would have been the right one. Up until this point, Thornton's attention had been focused on the first term emphasized, "*of every kind.*" What, asked Thornton, was included in paper money according to Smith? Are bills of all kinds included, as Thornton thought they rightly should be? And if so, was the proposed criteria a valid one to determine whether the circulation was "right" when comparing the total sum of all the mediums in circulation with the quantity of gold that was supposed to circulate if only coins existed? "[W]e feel surprised that the erroneousness of the position did not strike Dr. Smith himself," writes Thornton (ibid.).

The error seems at first to be a technical one. According to Thornton, it is not the quantity of gold and notes that one should look at but their effect in the economy. Their effect depends on the speed at which mediums change hands, hence on their velocities. The velocities, which Thornton describes and explains in the most comprehensive manner, are not identical for each medium. Neither are velocities constant over time, since they depend on many economic circumstances. Hence, the simplistic, mechanical, substitution of notes for gold is misleading and a wrong idea.¹⁸

However, Thornton's criticism of Smithian monetary theory goes much further. In the act of circulation, when payments are made, mediums other than gold and notes can be used. These credit and debt credits and debt mediums, based, as we have seen before, on confidence, can perform the role of making payments. Thus, both bills of exchange and bank deposits should be considered part

¹⁸ "The error of Dr. Smith, then, is this: - he represents the whole paper, which can easily circulate when there are no guineas, to be the same in quantity with the guineas which would circulate if there were no paper; whereas, it is the quantity not of 'the thing which circulates,' that is, of the thing which is *capable* of circulation, but of the actual circulation which should rather be spoken of

of the mediums in circulation and should not be excluded.

thus, then, 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. . . . There is a further objection to the same remark of Dr. Smith. It would lead an uninformed person to conceive, that the trade of a country . . . might be carried on altogether by guineas, if bank notes of all kinds were by any means annihilated. 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 . . . Banks would be instituted, not of the description which now exist [sic], but of that kind and number which should serve best to spare both the trouble of gold, and the expence incurred by the loss of interest upon the quantity of it in possession. 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)

Thornton's criticism of Smith, which lead him to make a clear break from conventional “monetary theories of credit,” and can be read instead as an early expression of what Schumpeter

as the same in both cases” (Ibid., 96).

called "credit theories of money,"¹⁹ remind one also of Wicksell's "pure credit" frameworks, though they were not to be developed consistently for more than one hundred years.

The Role of the Bank of England

At the core of the English financial system stood the Bank of England, which is the subject of a detailed scrutiny by Thornton in *Paper Credit*. Once again, Thornton carries out the investigation of the modus operandi of that institution through a critical reevaluation of Smith's positions. The outcome is an innovative, revisionist monetary theory, in which Thornton argues that Smith's empirical observation that the quantity of notes in circulation, particularly those issued by the Bank of England, was too high, was incorrect.²⁰ This was of course a point of great importance in the debate and Thornton returned to it throughout his book. In this and other ways, his position concerning policy was clearly anti-Smithian, and therefore also anti-Boydian: "however just may be the principle of Dr. Smith when properly limited and explained, the reduction of the quantity of Bank of England paper is by no means a measure which ought to be resorted to on the occasion of every demand upon the bank for guineas arising from high price of bullion, and that such reduction may even aggravate that sort of rise which is caused by an alarm in the country" (104). This critique of Smith's policy conclusion, which hints at the necessity to determine first what kind of demand the Bank faces and only then to act, acknowledging that contraction may lead sometimes to more damages, calls for special attention.

¹⁹ See Schumpeter (1954, 722-28).

²⁰ "Dr. Smith probably could not be acquainted with the secret of the actual quantity of those bank notes, of the number of which he complains; he must, therefore, have taken it for granted, that they were what he terms excessive, on the ground of the price of gold being high, and the coinage great"

From its inception the Bank of England was at the center of many financial transactions and had a large amount of capital. What was unique about that institution was its "independence" vis-à-vis the government. The Bank did not raise funds for the government by relying on its ability to issue notes, wrote Thornton; nor did the government really need the Bank to finance itself; nor would the Bank's Directors allow such an operation, unless they were convinced it was in the Bank's best interest. The role of the Bank's owners was crucial in achieving the proper balance between private and public interests: "the numerous proprietors who choose the directors, and have the power of controlling them . . . are men whose general stake in the country far exceeds that particular one which they have in the stock of the company" (109).

This somewhat naïve claim is further supported by the more selfish argument that for most proprietors, the "dividend" from excessive issue would not be worth the damage to the "commercial credit of the country" and would have a negative impact on price levels (110). Moreover, it is not the quantities per se, of either paper in circulation or gold reserves, which constitute the appropriate measure for judging the circulation. The only measure that Thornton and "commercial men" knew was that "all bills and paper money should have their value regulated as exactly as possible" by gold coin: "This is the great maxim to be laid down on the subject of paper credit. Let it, then, be next considered what is necessary, in order sufficiently to secure that, whatever the circulating paper may be, gold shall be the standard to which the value of that paper shall conform itself" (111).

Thornton's description of the crisis is illuminating and should prevent one from concluding that he supported convertibility. The only security that could be found for the system was in a "considerable fund of gold" at the Bank of England that could answer both common fluctuations in the demand for coins and, the less common demands arising from either an "unfavourable balance

(103).

of trade," or "any extraordinary demand at home" (111-12). But that security could never be perfect. The analysis led to Thornton's well known and important discussion of external and internal drains. The two are not symmetrical, he argued, and there is no way to guarantee that the reserve will always suffice to cover an internal drain. Hence, the imperfections in any monetary system and the necessity to manage its risks and maintain discretion.

A relevant example addressed by Thornton was the period just before the suspension. The demand for gold coins, in particular in the counties outside London, and the demand for Bank notes in London, caused interest rates to rise. The Bank, pursuing "the path which a reader of Dr. Smith would consider . . . lessened the number of their notes." Such a policy could aggravate the economic conditions and "produce a very general insolvency in London, of which the effect would be the suspension of confidence, the derangement of commerce, and the stagnation of manufactures throughout the country" (113-4).

Thornton argued that the financial center will find alternatives to the missing Bank notes; however, these alternatives will be less efficient and more expensive. For example, he rejected the attempts on the part of economic reformers, such as Boyd, to create a note-issuing body in London that would challenge the Bank of England's monopoly on note-issuing. Thornton argued that such alternatives derived from the erroneous idea that it's "being at all times a paramount duty of the Bank of England to diminish its notes, in some sort of regular proportion to that diminution which is experienced in its gold." That idea (held by the Bank and some economists) is "merely theoretic," wrote Thornton, expressing his disapproval in a phrase that reflected his attitude, less toward theories than toward those recommendations he and other well-informed observers of the money market perceived to be unrealistic.

The supporters of the above contraction policy assumed that as a result of their actions gold

would be brought in. Thornton did not think so. He analyzed in detail the various channels for such a causal link, only to dismiss them as missing the point. While discussing the failure to achieve the corrective results, Thornton explained the principled differences between a “national bank” and private houses. The former should not be judged by the same criteria used to evaluate the latter. The Bank was a "national bank" that should not "pursue its own particular interest" but instead should have taken “upon itself the superintendance [sic] of general credit, and seeking its own safety through the medium of the safety of the public." Although the Bank was very different from any other so-called "private house," the Bank's directors had not understood this fact and behaved as if the Bank was still in its "infancy;" i.e., at a stage in which the "country was less dependent upon it for the means of effecting its payments." However, the Bank became responsible for the country's financial health, concluded Thornton, and the way to act was to implement discretionary policy: to evaluate the macro conditions, to determine the appropriate policy, and to implement it. Thus, Thornton rejected automatic contractions, which were in line with Smithian ideas as well as with the Bank's seeking profit motive.

The suspension of cash payments was in his view an expression of "the general wish of the nation" seeking to substitute the agreements to pay in money with an agreement to pay in "money's worth." Thus it is clear that Thornton supported the decision to suspend cash payments in 1797, a position that he continued to defend as we shall see below when discussing the second part of his book.

3.2 *Paper Credit on the Expansion of the Circulation.*

The second part of Thornton's book addressed the Restriction years and in particular the

"unfavourable state of the exchange between this country and Europe." It seems that these parts, at least from chapter 5 on, had most probably been written or completed, after 1800/1.²¹ Thornton's general theoretical arguments concerning trade imbalances are clear: a discrepancy between commercial imports and exports has a tendency to disappear. Assuming otherwise would mean that either we infinitely accumulate debt or that we hoard more and more bullion.²² The mechanism described is not the Humean one based on relative price changes but one based on the equalization of incomes and expenditures by individuals who will react to a possible gap between imports and exports by either economizing on expenditure or creating more income. However, summarized Thornton, "Our mercantile exports and imports, nevertheless, by whatever means they may be rendered disproportionate, necessarily become, in the long run, tolerably equal" (145). Thornton thus articulates another long-term equalization mechanism, not identical to the famous Hume mechanism, but similar in essence.

Gold is not only an "article by which a balance of trade is discharged," but also a commodity, and like all other commodities, its movements are determined by its profitability. Thornton discussed in detail a famous example, assuming that the Bank of England was still paying its notes in cash, as before 1797. The example concerned large importations of corn to England causing unfavorable exchanges, and the financing of this importation.²³ The price of bullion in Hamburg, reflected in the price of bills of exchange traded there, would be higher than the mint price of gold. Thus, if the difference between the market price of gold and its mint price were large

²¹ Hayek thought that *Paper Credit* had been written over a long time. But see Murphy (2003) for another assessment concerning the dates.

²² "The equalization of the commercial exports and imports is promoted not only by the unwillingness of the richer state to lend to an unlimited extent, but also by the disinclination to borrow in the poorer" (Thornton 1802, 142).

²³ See the example discussed on pp. 145-153. "It is assumed, for the present, that the bank is paying

enough, a process of buying gold coins from the Bank in exchange for bills of all kinds would have taken place. At this time, the Bank faced conditions in which it had to buy bullion dear and sell it cheap: “The bank [sic], if we suppose it, as we do, to carry on this sort of contest with the melters, is obviously waging a very unequal war; and even though it should not be tired early, it will likely to be tired sooner than its adversaries” (147).

The most important lesson that Thornton sought in describing this process was to clear the Bank of England from any wrong doing. The high price of bullion was not the responsibility of the Bank. This was not the common doctrine, however; nor was it Smith's position. Thornton writes:

There seems, nevertheless, to be much of inaccuracy and error in the doctrine of Dr. Smith on this subject. He begins by representing the quantity of paper which may properly circulate, as to be measured by that of gold which would circulate if there were no paper. The reader is, therefore lead to believe, that the difference between the mint price and the market price of gold arises from an issue of a greater quantity . . . At the time of a very unfavourable balance of trade (an event which Dr. Smith leaves totally out of his consideration), it is very possible, as I apprehend, that the excess of paper, if such it is to be called, is merely an excess above that very low and reduced quantity to which it is necessary that it should be brought down, in order to prevent the existence of an excess of the market price above the mint price of gold. (150\1)

Thornton thought that in a case of unfavorable balance of trade, caused, for example, by a harvest failure, it made sense that some of the payment for wheat's excess importation would necessarily be in gold. Changes in the level of prices, brought about by a contraction of the circulation, might be costly and could take some time. Again, he criticizes Smith:

in guineas” (147).

Dr. Smith [who] leaves totally out of his consideration . . . whether the bank, in the attempt to produce this very low price, may not, in a country circumstanced like Great Britain is, so exceedingly distress trade and discourage manufactures as to impair . . . those sources of our returning wealth to which we must chiefly trust for the restoration of our balance of trade, and for bringing back the tide of gold . . . It is also necessary to notice in this place, that the favourable effect which a limitation of bank paper produces on the exchanges is certainly not instantaneous. (152)

Country Banks

Thornton's analysis of country banks shows the economist at his best. His description of the rise of country banks, emerging when merchants first entered the business of turning bills of all sorts into money and vice-versa, prior to issuing their own notes, is brilliant. The discussion of tradeoffs between liquidity and income of the different kinds of paper, represented by their time to maturity and interest rates, is clearly explained. The important role of probability in banking, and the justification of less than 100% reserves on the part of the banks, is also there, made cogent by a complex mind seeking to understand the big picture. But Thornton's biggest achievement is his understanding and description of the complicated British financial system, of the relationship between the country banks, the London private banks, and the Bank of England. His analysis of the outcome of these interdependencies and their effects on the workings of the British monetary system is probably the best in the literature. The advantages of having hundreds of competing country banks are clear, but Thornton also addresses the disadvantages. For example, the country banks supply payment services, "receipts and the payments of money," which support and reflect

further divisions of labor.

Altogether, the banking industry plays a positive role in the economy on account of its cautious practices and disciplinary actions, both of which restrict credit expansions and speculations. By issuing paper, it increases the "productive capital of the country." Here Thornton explicitly follows Smith's celebrated arguments and provides additional ones to counter the claim that more paper was the cause for the high price of corn in 1800. According to Thornton, this claim was rooted in a misunderstanding:

a paper medium . . . has been . . . quite as convenient an instrument in settling accounts as the gold which it has displaced . . . To reproach it with being a merely fictitious thing, because it possesses not the intrinsic value of gold, is to quarrel with it on account of that quality which is the very ground of its merit. Its merit consists in the circumstance of its costing almost nothing. By means of a very cheap article the country has been, for some years, transacting its money concerns, in which a very expensive material has previously been employed. (178/9)

Therefore, the substitution of gold, an expensive medium, with a cheap one, paper, leads to more productive capital being employed. There are however, argued Thornton, some "solid objections" to the system of banking just described. The first objection relates to "the tendency of country banks to produce, occasionally, that general failure of paper credit" which causes a crisis in commerce and manufacturing. This can be the result of a single bank failure, causing other banks to be at risk: "If any one bank fails, a general run upon the neighbouring ones is apt to take place," putting them at risk of failure. In practice, this means that the strong chain of links and dependencies that constitute the banking system may very well transfer the crisis to other banks, including the Bank of England, none of which may be responsible for the original failure. Naturally,

the Bank of England has to be prepared for such occurrences. Thus, estimating the advantages of having the country banks' note circulation, one has to deduct, not only the gold kept as reserve in the country banks' coffers, but also the costs incurred to the Bank of England for having to hold necessary additional gold (180-82).

Thornton's detailed analysis of a typical financial crisis, starting at the periphery counties and ending up at the metropolis in "a general failure of commercial credit," is illuminating. Thornton hypothesizes a situation in which "an extra demand on the Bank of England for three millions of gold has been made through the extinction of the paper of country banks, and through the slower circulation and hoarding of gold which have attended the general alarm." The Bank then reduces its note circulation by one million, and hence, necessarily, increases its loans by two millions. Thornton assumes that the Bank extends these loans to the merchants and not to the government. He concludes that "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 ought to be charged not to any fault in the mercantile body, but to the defects of the banking system" (186).

According to Thornton, the tendency to have such a crisis will diminish, however, as three corrective counter forces are strengthened. First, the Bank of England will learn to be more generous towards the country banks. In a note, Thornton observes that the behavior of the Bank should navigate midway point between leaving the country banks to face their responsibilities and saving the credit system.²⁴ Secondly, and most importantly, the country banks will learn to

²⁴ "It is by no means intended to imply, that it would become the Bank of England to relieve every distress which the rashness of country banks may bring upon them: the bank, by doing this, might encourage their improvidence. There seems to be a medium at which a public bank should aim in granting aid to inferior establishments, and which it must often find very difficult to be observed. The relief should neither be so prompt and liberal as to exempt those who misconduct their business from all the natural consequences of their fault, nor so scanty and slow as deeply to involve the

accumulate enough "property which is quickly convertible into Bank of England notes, and, therefore, also into gold;" i.e., liquid assets. Such actions will increase the stability of both the country banks and the Bank of England, making the entire system safer. Thirdly, those of the public who are using notes of different houses will learn to distinguish between them and to place confidence in those notes issued by banks that are the most prudent.

Defending the structure of banking in Britain, Thornton criticizes a common allegation raised against the country banks that they tend to expand their note issuing, thus causing prices to rise. Theoretically this can happen, he writes, but the system prevents such occurrences. Thornton ascribes the formation of prices to the relative state of supply and demand and to the bargaining process, which utilizes power relations. Thus, there are two processes which together determine prices, one specific to a certain commodity and another, a general one, reflecting the circulation of money: "[T]he price at which the exchange (or sale) takes place depends on two facts; on the proportion between the supply of the particular commodity and the demand for it, which is one question; and on the proportion, also, between the state of the general supply of the circulating medium and that of the demand for it, which is another" (194).

How can an increase in paper "lift up the price of articles?" When more paper circulates, traders' behaviors change. When that happens, the buyers and sellers' bargaining positions change in opposite directions and prices move up. As events in the 1795 corn market have shown, the same force will also work in the other direction: "It was a new and sudden scarcity of cash, not any new plenty of corn, which caused the price of corn to drop" (196). Moreover, the same process can influence trade in financial instruments, as actually happened in 1797 in the market for government securities.

general interests" (188 note).

Just days before the suspension, a shortage of Bank of England notes drove their prices down, and a few days later, when their quantity rose, their prices went up again. But the truth is, wrote Thornton, "that paper fluctuates in price on the same principles as any other article, its value rising as its quantity sinks, and *vice versa*;" although "an exact correspondence between the quantity of paper and the price of commodities can by no means be expected always to subsist" (197).

Throughout *Paper Money*, this issue of the causal link between the quantity of money and prices will continue to attract Thornton's attention. He writes:

The reader possibly may think that, in treating of this subject, I have been mistaking the effect for the cause, an increased issue of paper being, in his estimation, merely a consequence which follows a rise in the price of goods, and not the circumstance which produces it. That an enlarged emission of paper may often fairly be considered as only, or chiefly, an effect of high prices, is not meant to be denied. It is, however, intended to insist, that, unquestionably, in some cases at least, the greater quantity of paper is, more properly speaking the cause. (197-8)

Thus, Thornton's fundamental argument is not with the Quantity Theory per se, but with some errors, or inappropriate policies, that led to undesired consequences. In this case, he disagreed with the anti-Bullionists' denial of a possible influence of money expansion on prices.

Defending the Bank's Directors

Thornton defended the Bank's directors by asserting that the pressures on the exchanges were the result of the war and bad harvests and not of an expansion in note circulation. Not that the latter cannot, as a matter of principle, cause unfavorable exchanges and a market price of bullion that is

above the mint price, but that is not what happened. A larger quantity of Bank of England notes can raise the price of goods just as the high prices of goods can cause an increase in the quantity of Bank notes. "There is considerable danger, lest, in this respect, we should, in some degree, at least, mistake the effect for the cause; and should too much be inclined to consider an advanced price of commodities to be both the cause of an increased issue of paper and the justification of it" (221).

Thornton's defense of the structure of British banking is firm. Though the Bank has a monopoly power, it uses its power to guide the system between the dangerous alternatives within the monetary system: "that of a depreciated paper currency on the one hand, and that of an interruption to our paper credit, and a consequent stagnation of our commerce and manufacturing, on the other" (226).

In his analysis, Thornton rejects the too liberal approach of Smith, based on his Real Bills Doctrine, because it sees "no danger in almost any extension of its discounts . . . provided only the bills discounted . . . were real bills . . . of sufficiently safe and responsible houses" (227). But the other proposals, for example those who call for the establishment of a "rival" institution to the Bank of England, are also rejected since they will bring "the additional temptation to exercise that liberality in lending, which it is the object of competition to promote, the London notes, and also the country bills and notes, would be more liable to become excessive. Our paper credit would, therefore, stand in every respect on a less safe foundation."

Thus, concludes Thornton, "... we derive a material advantage from the power enjoyed by the Bank of England of exclusively furnishing the paper circulation of the metropolis. To this very circumstance the bank stands indebted for its faculty of regulating all the paper of the kingdom" (228). Thornton's analysis provides the basis for his unique position on the policy implemented by the directors of the Bank of England. In *Paper Money* he specifically targets those who thought that

it was enough for the Bank's directors to follow the Real Bills Doctrine. He further explains the error of this position as based on two possible arguments: One, there is no such thing as too much money, causing prices to rise, the exchanges to fall, and the market price of gold to be above the mint price. And two, that there exists the possibility of too much money, but this does not happen since "bank paper has a natural tendency sufficiently to limit itself" (232). He then explains at length why both arguments are wrong.

More money will not change the basic characteristics of the economy, nor will it create more capital or trade in the economy, except perhaps for a brief period during which those who find themselves with more money will try to exchange it, causing prices to rise. Thus, like Hume, whom he quotes, Thornton thinks that the impact of more money will be short lived (238). He further explains that the expansion of Bank notes is very similar in its effect to mining more gold: "[T]he value of it would fall nearly in proportion to the extension of its quantity . . . The metropolis of Great Britain is so circumstanced, that the issue of an extraordinary quantity of bank paper for the purpose of effecting the payments in London, in a considerable degree resembles the creation of an extraordinary supply of gold for the general uses of the world" (242).

The same argument concerning the effect of the quantity of money on prices holds true for a pure coin circulation, a mixed coin and paper circulation, as well as when paper alone circulates. In all cases, goods will rise in price and be exported. Thus, concludes Thornton, gold movements depend on the balance of trade and on the quantity of the circulating medium, since the latter influences the former.

Does the Bank "restrain" itself? To answer this question, Thornton first rejects, again, the "security of real bills" since they can be easily multiplied. "If the bank directors were to measure their discounts by the amount of real bills offered, . . . bankers and other discounters . . . might

become much more considerable holders of mere notes of hand, or of fictitious bills, and an opportunity might thus be afforded of pouring a vast additional quantity of real bills into the Bank of England” (253). Second, Thornton explains that the restriction of the quantity will not come from the borrowers who will compare the rate of interest at the bank with the "current rate of mercantile profit" (254). As long as the former lies below the latter, writes Thornton, there will be a demand for bank loans. The increase in note circulation may seem to provide some relief, but this will be temporary and will translate itself into higher prices. "The danger of enlarging the loans of the bank in proportion to the extension of the demand for them, may be none [sic] particularly shewn by adverting to the case of the sudden transfer to foreign countries of capital which had been antecedently lodged in this” (256).

Thornton concludes that the Bank is 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)

In an often quoted statement, Thornton makes it clear that he has (monetary) policy in mind while talking about the "true policy of the directors of an institution circumstanced like that of the Bank of England." He further emphasizes the "principle of restriction" but also the need to control the monetary system:

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, increase 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 diminution, in the case of gold going abroad, and of the general exchanges continuing long unfavourable. (259)

In other words, Thornton states the need to act differently according to the prevailing specific circumstances. It is not right to leave the monetary aggregates to the determination of market forces, to the demands of the borrowers or to a rule. It is the responsibility of the Bank, i.e. its directors, to assess the conditions in the economy and decide what course to take. Thus, it is monetary policy in its modern sense that he describes. Thornton defines, again, in very modern terms, the conflicting targets of monetary policy.

The concluding chapter of *Paper Credit* presents Thornton's views on the core issue of prices and money, and one cannot ignore the strong anti-Bullionist tone of the argument. The criticisms are directed at both Montesquieu and Hume. The analytical approach he has used to understand how the British system disciplines itself, he now extends to the world. As the exchangeability of country paper and London paper prevents over-issuing, which causes a "great local rise in the price of commodities within our own island," so does it in the world at large.²⁵ But

²⁵ "It was observed in a former Chapter, that a very considerable advance in the price of the commodities bought and sold in one quarter of this kingdom, while there was no such rise in any other, was not supposable; because the holders of the circulating medium current in the spot in which goods were imagined to have been rendered dear, would exchange it for the circulating medium of the part in which they were assumed to be cheap, and would then buy the commodities of the latter place, and transport them to the former, for the sake of the profit on the transaction"

one circumstance is unique to the "isle": That country bank paper is always convertible to "London paper" without any discount. This is not true internationally.

In his analysis, Thornton distinguishes between prices in terms of British paper and British coin and prices in terms of bullion. The question that he focuses on is whether an increase in the quantity of paper can be the cause for any discrepancy. He measures the first discrepancy by looking at the difference between the market and mint prices of bullion, or the state of the exchanges. These differences are small, argues Thornton, and attributable to "real" factors like bad agricultural seasons. Bullion prices of commodities may have changed, he tells us, but not due to credit expansion.

Thornton then goes on to describe what is commonly known as Hume's celebrated international mechanism, or the specie-price-flow argument. To make Hume's argument, Thornton first assumes an ideal type, a pure circulation, where only coins are used as means of payments.

[L]et us assume that we still find ourselves able to procure for our commodities sent abroad a higher bullion price than before. In this case the bullion price of articles at home will also experience a rise; for the high bullion prices abroad will have the effect of enlarging our exported and diminishing our imported goods; of rendering our balance of trade favourable, and of bringing gold into the kingdom; which encrease of gold will have precisely the same effect as an augmentation of paper, namely, that of raising British prices. The bullion will continue to flow in until it shall have brought the bullion price of goods in England to a level with the bullion price of the same articles in foreign parts, allowing for charges of transportation. On the ability, therefore, of Great Britain to maintain a high bullion price for her goods abroad, would depend the bullion price of her commodities at home, in the event

(260).

of her employing gold as her only circulating medium. (263/4)

Thornton then assumes that paper takes the place of coins as the circulating medium. As in the example above concerning pure circulation, he assumes that Britain will face higher bullion prices abroad. The same logic and process will be at work, and Britain "will experience, exactly as if she made use only of gold, an encrease in the price of her commodities at home, as well as an enlargement of the quantity of her circulating medium." However, "[t]he case will differ, inasmuch as, instead of importing the additional circulating medium which is wanted, she will create it" (264). This difference will have an effect on the level of exports and the exchanges.

Hume, argued Thornton, understood these considerations. However, he preferred the use of gold to that of bank paper, unless the paper was fully covered by gold reserves, as was the case in the bank of Amsterdam. Quoting from Hume's *Essay Of Money*, Thornton argued that although Hume's argument had been made for a pure circulation, it is also valid for the mixed one (269 note). Criticizing Hume, Thornton explained how more money will raise prices and cause gold to "transport itself." However, a country that will not expand improperly the quantity will enjoy the advantages of substituting gold for paper, while deriving the "whole advantage of this augmentation of capital." Thornton thought that paper credit has no influence on raising the price of provisions (269-70). His proof was twofold.

First, there had been no increase in the total circulating medium over the last two or three years, when the prices were high. Thornton's case had been based on the size of the metropolis (i.e. London) circulation, and the previous argument that the counties' circulation has to conform to that of the metropolis. Thornton then rejected a second argument, based on the supposedly negative impact of loan extensions on prices. Due to their note creation capacity, country banks extended loans and "encouraged mercantile speculation; and that we may ascribe to the spirit thus excited

much of the late rise in the price of articles in general, and of corn in particular" (271). The important factor in determining prices is "paper;" i.e., notes issued, not loans, argued Thornton. He claimed, moreover, that intermediation has no effect on prices whatsoever. How do banks extend loans? Either by accepting deposits and using the sums for extending loans, or by extending their own notes. But then these notes will substitute for gold in circulation, which will be either hoarded or exported.

Thornton's support for the Restriction was not in doubt. Britain has been saved from the violence on the continent "through the favour of Providence."²⁶ The island's political strength, however, depended on prosperity and that in turn necessitated what Thornton called mercantile confidence. The enemy had tried to disturb this confidence and hence the measures taken by Britain, which Thornton defends fully in the last paragraphs of his treatise:

It therefore became us to protect ourselves by the best means in our power against this species of injury; and the continuance of the law for suspending the cash payments of the Bank of England has been one of the steps which parliament has deemed necessary . . . In a commercial country, subjected to that moderate degree of occasional alarm and danger which we have experienced, gold is by no means that kind of circulating medium which is the most desirable. It is apt to circulate with very different degrees of rapidity, and also to be suddenly withdrawn, in consequence of its being an article intrinsically valuable, and capable of being easily concealed. If, during the war, it had been our only medium of payment, we might sometimes have been almost totally deprived of the means of carrying

²⁶ Thornton was well known for his religious activities with the famous Clapham Sect. He was also heavily involved with the abolitionists at this same time. As David Levi suggested, his leaning towards public policy in monetary matters may have been related to his desire to see government actions also on the side of the anti-slavery movement.

on our pecuniary transactions; and much confusion in the affairs of our merchants, great interruption of manufacturing labour, and very serious evils to the state, might have been the consequences. (275/6, emphasis added)

Again, one cannot not read Thornton's *Paper Credit* but as a principled defense of inconvertibility and the Bank's directors.

4. A Brief Look Beyond 1802

Horner was an important figure in the monetary debates in Britain during the Restriction, more visible in the public sphere than at the level of theory. He for one thing, helped found the famous *Edinburgh Review*, wherein he published his most famous piece, a review of Thornton's book.²⁷ Horner's career as an author was short-lived; he quickly moved to the London political arena, where he served as an MP from 1806 until his early death in 1817.

In his famous *Review of Paper Credit*, Horner summarized the foundations of Thornton's monetary theory, clarified his main arguments and contributed to his reputation.²⁸ The two were to meet and cooperate later as joint members of the Bullion committee. Thornton's views of the Restriction, the role of the Bank of England, and in particular his position on an early return to cash payments changed before 1810, a year when he became a major figure and played a central role in

²⁷ See Fetter (1957) *Introduction to Francis Horner and the Edinburgh Review*. See also the detailed description of the early days of the *Edinburgh Review* in Bourne and Taylor (1994), pp. 195-232. Horner wrote: "The analysis of Thornton cost me a considerable degree of trouble; but this labour has served to break up the ground in one of the most necessary fields of political economy." See Bourne and Taylor (1994, Doc 100, 257-8).

²⁸ "The origin, and the solid foundation of every system of paper-money, Mr Thornton has correctly placed in that credit, which subsists among commercial men with regard to their mercantile transactions" (Horner 1802/1957, 30-31).

the Bullion committee on the side of Horner and the Bullionists. An interesting window into the process of change and its scope can be found in Thornton's comments on King (1804) as they appear in Thornton's copy of that important work, now in the Goldsmith library.²⁹ Thornton's comments had been written on or around April 1804.³⁰

Thornton's disagreements with King focused on whether the paper circulation was really excessive, and in particular, whether the Bank of England expanded its paper beyond what was right. Thus, the argument was to a large extent about the behavior of the Bank's directors. Thornton commented on King: "The chief danger of an over-issue arises from the circumstances of the Directors perhaps not sufficiently perceiving that a limitation of Paper will improve the Exchanges and that it is necessary if the Exchanges continue long unfavourable to make this reduction even against the general sense of the merchants" (Thornton 1804, 316).

Thus, argued Thornton, the general circumstances that put the Directors in a difficult position, forcing them to work against both the merchants and their own instincts, created the incentives that led to increase the circulation as, actually happened from time to time. However, by 1804, the Directors had learned their lesson. King argued that in 1799-1802 the exchanges were "against England . . . probably occasioned by the increase of the paper currency of the Bank" (King 1804, 37). Thornton, who had some reservations concerning the criteria used by King to assess both the circulation and the exchanges, commented: "I agree however with Lord King that it is probable there may have been about this time a somewhat too great issue of Bank of England Notes"

²⁹ See Hayek's introductory note in Thornton's *Paper Credit*, (1939, 312). In the copy of King (1804) at the Goldsmith Library, the following statement appears: "The Manuscript Notes in this copy are by Henry Thornton Esq. M. P.". Hayek noted that "[T]here seems to be no reason to doubt the correctness of the ascription." The comments are on King's "second enlarged edition" of the original work that had been originally published in 1803.

(Thornton 1804, 317). Although Thornton admitted that such an event may, and probably did occur, his commentary on King, continued to express support for the Restriction.

Thornton wrote that as long as the war lasts, the Bank of England has to be "protected from the danger of having Gold demanded in indefinite quantities" (emphasis added). However, he was careful to add a reservation: The Bank should not be protected when the demand rose due to "long continuance of an unfavourable Exchange" (321). Thus, clearly, a major question for him was whether the Bank was responsible for such a long term situation. In 1804 Thornton clearly still considered the answer to be negative. He writes:

Lord King himself admits in many parts of his book that the Bank of England is able by the restriction of its Paper to remedy the unfavourableness of the Exchange. If then the restriction of its paper will not fail to rectify the Exchange, it can only be necessary that Parliament should resort to such measures as shall be sufficient to secure this Restriction. Measures short of that of compelling the Bank soon to open, let the alarm of Invasion be what it may, would unquestionably produce the Restriction desired. Indeed it may be doubted whether the Bank has not at this time (April 1804) almost sufficiently confined its paper to turn the Exchanges in our favor . . . The Directors of the Bank of England if they have erred at all, have erred but a little and their Error has resulted from the circumstance of their not sufficiently perceiving the great and important principle which Lord King has so well laid down, namely that an Excess of Paper is the great radical cause of a long continued unfavourable Exchange. (Thornton 1804, 321-2, emphasis added)

Thus, it was not "expedient now to determine the period when the Bank Restriction Bill shall cease, except indeed that it ought to be made to cease in a moderate time after the termination of the War."

³⁰ See Thornton (1802\1939, 321).

This was indeed the anti-Bullionists' position.

King quoted Boyd (1801a) favorably arguing that: “[T]he Proof of a degraded currency founded upon the two tests of the price of bullion and the rate of exchange was strongly and successfully urged by Mr. Boyd in his Letter to Mr. Pitt, published in December 1800” (1804, 32).

Thornton commented on King's remark as follows:

Mr. Boyd in his letter to Mr. Pitt insisted that the *Nonconvertibility* of Paper into Gold was the cause of a depreciation of it which he assumed to be so great as to account "more than any other cause" for the high price of Bread. He did not measure the degree of the Rise which an Excess of paper occasioned by the variation in the Exchange as he ought to have done and he did not seem to consider that this Nonconvertibility of Paper into Gold does necessarily produce a depreciation of paper, but produces only when it serves to encourage the Issues of Paper to issue it to excess. A non-convertible Paper *which is limited* and is in full credit may maintain its price just as if it were convertible. (316-17, emphasis in the original)

Thus, once again, at this stage Thornton defended an anti-Bullionist position; he argued that a non-convertible paper can function well, were its quantity to be restricted. One can see here the seeds of modern monetary thinking on inconvertibility. Thornton finds his explanation for preserving the inconvertible monetary system, in spite of the obvious incentives of private interested parties, like the banks, to expand it, on a concept of "responsibility" of the Bank of England. Thornton tries to answer the question: Why should the Bank's directors, the ultimate regulators of the English monetary system, be motivated by public interest rather than by the Bank's private interests? Thornton's comments on King's discussion of Irish banking are revealing in this context.

King addressed the crucial tension between private and public interests under inconvertibility. At the time of his writing, the Irish currency had depreciated and the reason was, argued King, an excess quantity of notes. Thornton then pointed out that the Irish and English systems were quite different: The Bank of Ireland did not have a monopoly over the supply of paper currency in Dublin and did not have the same power as the Bank of England over the circulation in the country. "[T]he limitation of the Bank of Ireland paper . . . might possibly have little other effect than that of leaving to the other private Banks (which are completely rival Establishments) those profits which the Bank of Ireland should relinquish" (Thornton 1804, 319). Thus, the structure of the English system with the unique role of the Bank of England as the pivot of that system, having the power to determine the circulation in London and hence in the countries, made the difference.

While reading King and fortunately leaving us his running commentary on the text, Thornton was already also deeply involved with the Irish currency question. This familiarity resulted first in some speeches in Parliament and then in his role in the important, but sometimes neglected, committee of 1804. Fetter, in his 1955 introduction to *The Irish Pound 1797-1826*, credited Thornton with "major responsibility for the work of the Committee" of which he was a member.³¹ Moreover, the above mentioned issues concerning the Irish banking structure became the subject for many of the questions the committee put before those who gave evidence, which Fetter thought "suggest the hand of Henry Thornton."

However, Thornton's position as he expressed it in the 1804 Irish Committee should still be

³¹ Beyond Fetter's important introduction, the volume includes a reprint of the 1804 Report, and selection of the *Minutes of Evidence from the House of Commons Committee On the Circulating Paper, the Specie, and the Current Coin of Ireland*.

interpreted as defending the Bank of England and the Restriction of cash payments. Thus, his analysis was theoretically that of an anti-Bullionist who supported the suspension and defended the Bank's directors. Although the 1804 Committee concluded that the 1797 Restriction of cash payments had permitted a monetary expansion, it did not recommend a repeal of the Act. Rather, its recommendations were directed at the Irish banks, calling for their notes to be redeemed in Bank of England notes or in "London funds" and for a more restrained credit policy.³² The latter recommendation was valid, in Thornton's view, for the Bank of England as well, though the Bank of England was a powerful monopoly which was fulfilling its duties. By 1810 Thornton's positive assessment of the Bank's directors and their credit policy would change.

In 1809-10 attention had moved again to the monetary disparities concerning the English currency, which showed clear signs of declining in value as both the price of gold and the Hamburg exchanges depreciated. Horner was an important figure in that debate. As a result of his proposal, the Bullion Committee was established with Horner as its Chair.³³ The Bullion committee of 1810 was the better known, and most heavily quoted, monetary committee among the many British Parliamentary committees. The Bullion committee work showed clear links to the Irish committee of just a few years before, not only in terms of membership but also in its contents.³⁴ Horner, as chairman, together with Thornton and Huskisson, drafted its report. Having chosen not to cover the report here, suffice it to say, the Bullion Committee Report has long been considered a manifesto of the Bullionist position. Two speeches made by Thornton after Parliament discussed and rejected the report in 1811 will help establish the nature of the modifications in Thornton's position.

³² See Fetter (1955, 44-48). In a debate in Parliament in March 1805, Thornton stated that he "was surprised" that the Bank of Ireland "had not taken the hint given in the report of the committee."

³³ See Horner (1957) and Horner (1994).

³⁴ See Fetter (1955) and Fetter (1965).

According to the Preface to the pamphlet where the speeches appear,³⁵ the first speech addressed "the practical measure of limiting the Bank paper." The Bullion report, which was the subject of the debate, focused on a point of principle which Thornton discussed at length, trying to clarify the difficult subject:

[Was it] expedient that the Bank should regulate the issues of its paper with a reference to the price of Bullion, and the state of the Exchanges. The Bank and the Bullion Committee were at variance on this leading and essential point. The Committee affirmed that the quantity of paper had an influence on the price of Bullion, and the state of the Exchanges; all the Directors of the Bank who had been examined, affirmed that it had not. (Thornton 1811, 327)

Clearly Thornton now found himself criticizing the Bank and its directors; thus, he was on the Bullionists' side. However, because he did not accept the Bullionists' doctrines, he should not fully be identified as a Bullionist, but rather as an anti-Bullionist who entered an alliance for exclusively political or pragmatic reasons. One can argue that in failing to convince the Bank directors to act in accordance with his thinking, Thornton joined forces with their critics. In his speech he analyzed the effect of changes in the quantity of money, an effect he demonstrated in two instances: first, in its influence over price of commodities; then, in its impact on the price of gold and the exchanges. By way of illustration, he described, methodically, three hypothetical cases: first, the case of convertibility with no restrictions on the movements of gold; secondly, the case of convertibility with restrictions on the movement of gold from England and usury laws, as was the case in England before 1797; and thirdly, the case of inconvertibility as it existed after 1797 and up

³⁵ The first speech was made on May 7, 1811 the second on May 13, 1811. The two were issued together with a short Preface. See in Thornton (1802/1939, 325-361).

to the time of his speech.

Analyzing the third case, Thornton expressed his reservations towards the Bank directors' decisions:

The Bank, since they became protected against the necessity of making cash payments, not unnaturally thought that they might use more liberality than they would have ventured to exercise under the same circumstances of our trade, if they had been subject to a drain for cash. They, perhaps, were not much to be blamed on this account. Indeed, they appear not to have believed that a reduction of their paper would mend the Exchange, for they had not examined very deeply or philosophically into the subject. (333)

Here one can find a hint as to the probable causes for Thornton's changing attitude towards the Bank's directors:

It was, however, important not to mistake leading principles, and not to fancy that an exchange running against us with all countries for two or three years, and reaching the height of 25 and 30 per cent., accompanied with a corresponding high price of gold, ought at no time and in no degree to be checked by that limitation of the currency to which nature, as it were, as well as our own practice before 1797, taught us in such cases to resort. (333, emphasis added)

In other words, the Bank's directors, freed from the dictates of gold, stopped listening to the signals which should have led them to implement better policy. Surveying other banking systems (France, Russia, Sweden, America) Thornton showed that the same principles applied there.

Thornton summarized his disagreement with the anti-Bullionists as follows:

All the banks which he [Thornton] had mentioned, except that of Russia – namely, the Bank of France, the Bank of Sweden, and the Banks of America, were establishments more or less

independent of the government: they all emitted their paper in the way of loan, furnished at a moderate or low interest; and they had all issued it to excess. The adversaries of the Bullion Committee had grounded a great part of their argument on the following distinction between the Bank of England and all those Banks of which the paper had been depreciated: - The Bank of England, they said, issues nothing, except in return for something valuable: they receive a bill, representing real property, for every note which they emit; and therefore they cannot issue to excess . . . But it was of the utmost consequence to understand, that, even when a supposed equivalent is received in return for the paper issued, excess might arise; and the excess, as he had already said, was likely to be great in proportion as the rate of interest was low. (341)

And again: "The Bank Directors should not continue to act on the principle that a limitation of paper had no influence whatever on the exchange. This was the point on which they were at issue with the Bullion Committee . . . The Parliament had now to decide on this point of difference between the Committee and the Bank" (343).

As I read Thornton, he maintained a consistent position which was critical of anti-Bullionists like Baring. In particular, he rejected their support of the Real Bills Doctrine. However, he also disagreed, on a theoretical level, with the Bullionists' reliance on gold as an automatic device that will leave the system free to regulate itself.

Surprisingly as it may seem to those who remember Thornton mainly from the Bullion Committee days, his views of 1802 put him in the anti-Bullionist camp, defending the Bank of England against its critics and lending support to the stoppage of cash payments. Thornton's published comments on King's (1803) book, as well as his involvement in the Irish currency debates and the Irish Committee of 1804, paved the way to his important role in the celebrated Bullion

Committee. In the end, however, his role in the Committee had been restricted to his dissatisfaction with the Bank's directors mainly concerning their misunderstanding of the Bank's public role. In 1810 Thornton gave reserved support to a return to cash payments, but did not accept Horner's and Huskisson's metallic approach. On the committee he was and remained the third personae.

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