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**Financial Institutions and Liquidity of Public Debt  
in  
England [1694 – 1720]**

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**Abstract**

The methods England took to restructure its public debt during the British Financial Revolution consisted of improving liquidity. Accordingly, the State sought to reestablish its solvability by basing its debt on tax revenues as well as to homogenize it, reduce its cost and improve the functioning of the primary and secondary markets of the debt. Finally, it favored the creation of new institutions, i.e., the establishment of companies with stocks whose commercial and/or financial activities would be connected to its debt. The Bank of England and the South Sea Company, created in July 1694 and September 1711 respectively, are two prime examples of this. In this article, we highlight the role of these two financial institutions in the process of the creation of liquidity through the restructuring of the national debt. We establish the fundamental differences between the financial experiments led by these two establishments. Indeed, if the project of converting the titles of national debt into shares of the South Sea Company led to the creation of the South Sea Bubble, the circulation of short-term government bonds (exchequer bonds) by the Bank of England after 1707 constituted an unrivaled financial success. Finally, we discuss the diverging commentaries of Hume (1752), Steuart (1767) and Smith (1776) on these financial experiments.

**Keywords:** Public debt, liquidity, Bank of England, South Sea Company

**JEL:** B11, B12, G 21, N23

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## 1. Introduction

The methods England took to restructure its public debt during the British Financial Revolution consisted of improving liquidity. Accordingly, the State sought to reestablish its solvability by backing its debt on tax revenues as well as to homogenize it, to reduce its cost and to improve its financing conditions on market. Finally, it favored the creation of new institutions, i.e., the establishment of joint-stock companies whose commercial and/or financial activities would be connected to its financing and the restructuring of its debt. The Bank of England and the South Sea Company, created in July 1694 and September 1711 respectively, are two prime examples of this.

The measures of State funding and debt restructuring that both the Bank of England and the South Seas Company put in place consist primarily of: i) the intermediation of loan to the State ii) the circulation of Exchequer bills and iii) the conversion of State bonds into shares. These operations did not only help to improve the liquidity of the public debt, but they were also the origin of the appearance and the development of the financial market in general: financial transactions developed for different kinds of public debt, but also for the shares of the two above mentioned joint stock companies. It would not be until the nineteenth century that the financial market broke away from State bonds. (Morgan & Thomas [1962])

In this article, we highlight the role of the Bank of England and of the South Sea Company in the creation of liquidity by means of State financing and debt restructuring. We consider the fundamental differences between the financial experiments carried out by these two establishments. In fact, if the project of converting State bonds into South Sea Company shares in 1720 led to the creation of the South Sea Bubble, the intermediation of the loan to the Treasury (1694), the conversion of “tallies” (1697), as well as the circulation of Exchequer bills (starting in 1707), by the Bank of England all constituted a financial success beyond compare. Finally, we analyze this contrast with regard to the convergent commentaries of Hume (1752), Steuart (1767), and Smith (1776) on i) these financial experiments and ii) the liquidity of the public debt.

## 2. Public Debt and the Bank of England<sup>3</sup>

During its first 25 years of existence, the Bank of England, established on 27 July 1694, played a decisive role in the managing of English public debt in three ways: by intermediating loans, by accepting State bonds, the “tallies”, for the payment of its own shares and by circulating exchequer bills.

### 2.1 Debt intermediation

The creation of the Bank of England was the result of two and a half years of negotiations , from January 1692 to 1694, between a group of investors led by William Paterson, the chancellor of the Exchequer Charles Montagu, and the Parliament. Neither the investors nor the government, nor the Parliament had the creation of a bank in their sights. With the Nine Years’ War (1688-1697)<sup>4</sup> in the background, the negotiations focused on the modalities of a new loan to Treasury. The creation of a bank was not the intention of the investors, the government, or the Parliament. The intention was to create a liquid “State note” in order to reduce its cost while also raising a large sum. From the outset of the discussion of four successive projects, the solution consisted of intermediating the loan to Treasury for the means of a new institution, the Bank of England.

The discussion focused on the amount of the loan, on the means to ensure liquidity, and on its cost. Concerning the amount, the objective was one million pounds<sup>5</sup>, but it became necessary to add two-hundred-thousand pounds of worth funds tied up for the investors, intended to support the liquidity of the loan, i.e. its negotiation at face value. The remuneration of these additional funds, which were not lent to the State, led mechanically to increase by 20% the cost for the million lent. In order to ensure the liquidity of the loan, the group of investors proposed in the initial project that the “State notes” in question would be legal payment. This proposition was rejected by the Parliament and did not appear in the following projects<sup>6</sup>. Concerning the rate, it grew from 6% in the initial

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<sup>3</sup> Our research is based on Andréades (1904), de Boyer (2006), Broz & Grossman (2002), Clapham (1944), Horsefield (1960) and Scott (1912).

<sup>4</sup> Also called War of the Grand Alliance.

<sup>5</sup> This was the amount from the first project. It was increased to 2 million in the second project, only then to be taken back down to 1 million in the third and fourth projects.

<sup>6</sup> These “notes” would not become means of legal payment until 1833.

project to 9.5% in the last one. The negotiation on the modalities of a negotiable “State note” on the market failed.

The solution consisted of creating a bank with an eleven-year charter. Instead of contributing a million pounds to the government in the form of acquiring debt bonds and constituting a two-hundred-thousand pound fund to support its liquidity, the shareholders subscribed up to one million two hundred thousand pounds of the Bank of England capital, 60% of which was called in 1694 then 20% of which was called in 1696. These calls provided the bank with cash. The bank was authorized to issue convertible notes, on sight, for an amount limited to the level of its shareholders’ funds.<sup>7</sup> The issue of Bank notes allowed, starting in 1694, the financing of a loan to the State for one million two hundred thousand pounds at 8%.

**Bank Establishment and intermediation: 1694-6**

**Intermédiation**

<p><i>Cash</i></p> <ul style="list-style-type: none"> <li>• 1694                    <b>720</b></li> <li>• 1696                    <b>240</b></li> </ul> <p><i>Capital not called</i></p> <ul style="list-style-type: none"> <li>• 1694-6                <b>240</b></li> </ul> <p><i>Loan</i></p> <ul style="list-style-type: none"> <li>• 1694                    <b>1.200</b></li> </ul> <hr style="width: 50%; margin-left: auto; margin-right: 0;"/> <p style="text-align: right;"><b>2.400</b></p>	<p><i>Notes and deposits</i></p> <ul style="list-style-type: none"> <li>• 1694                    <b>1.200</b></li> </ul> <p style="margin-top: 100px;"><i>Shareholder's fund</i></p> <ul style="list-style-type: none"> <li>• 1694                    <b>1.200</b></li> </ul> <hr style="width: 50%; margin-left: auto; margin-right: 0;"/> <p style="text-align: right;"><b>2.400</b></p>

We note that at its creation, the Bank of England issued £ 1,200,000 worth of convertible notes in legal tender even though the cash balance was only £ 720,000. The creation of liquidity was enacted at the level of the bank and not at the level of the public debt. The State debt – which took the form of credit on bank assets – was illiquid, intermediated, financed by the bank notes – which appeared on liabilities side of the Bank

<sup>7</sup> The Bank was also authorized to grant discounts, manage deposits, buy and sell bonds as well as precious metals excluding all other commercial activity.

balance sheet – and which were liquid. The creation of liquidity consisted of a new source of financing at the origin of leverage on the profitability of shareholders' funds<sup>8</sup>. This leverage helped fixing the loan to the State at 8% even though since 1688 the rate of loans to the State vacillated between 10 and 14%<sup>9</sup>. In 1708, the rate would be lowered to 6%.

## **2.2 The conversion of tallies**

In 1697, following the failure of the Chamberlen project to establish a Land Bank, confronted with a 40% devaluation of the tallies and the difficulty to reimburse its creditors, the government negotiated an anticipated renewal of its charter which incorporated a plan for converting these bonds into shares issued by the Bank<sup>10</sup>. The Bank then proceeded to issue new shares, for the amount of one million pounds, payable in 80%<sup>11</sup> tallies and 20% bank notes, which carried the bank's capital to two million two hundred thousand pounds. This increase in capital which would take a portion of the tallies and notes out of circulation sought to reduce the devaluation of tallies as well as the Bank exposure to the risk of liquidity. The negotiation incorporated a guarantee offered by the State to remunerate the tallies at 8%, as well as a compensation to be paid to the shareholders of 1694.

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<sup>8</sup> For the classic approaches of the role of shareholders' funds in the creation of liquidity cf. de Boyer (1998, 2003 et 2009)

<sup>9</sup> Cf. Homer & Sylla (1996)

<sup>10</sup> This was how the Bank was able to ensure that the parliament could no longer authorize the establishment of a new bank created from shares in England and in Wales.

<sup>11</sup> The tallies were accepted at their face value.

**Public debt conversion 1697**  
**Conversion**

<i>Cash</i>		<i>Notes and deposits</i>	
• 1694	720	• 1694	1.200
• 1696	240		
<i>Capital not called</i>		• 1697	- 200
• 1694-6	240		
<i>Loan</i>		<i>Shareholder's fund</i>	
• 1694	1.200	• 1694	1.200
<i>Tallies</i>		• 1697	1.000
• 1697	800		
	3.200		3.200

Precisely, in compensation for the dilution of their share of the capital of the Bank, this latter credited the account of the original shareholders for an amount equal to the capital called in 1694 and 1696, £960,000. This operation was accompanied by credit of the account of capital not called (£240,000) and a debit of up to £1,200,000 of a new accrual asset account created to this end, and called the “Fund of the Bank of England.”

### 2.3 The “circulation” of Exchequer bills

From 1698 to 1707, the bank not only paid out in dividends (credit for shareholders accounts) the entirety of its benefits, but also the reimbursement of capital subscribed in 1697, one million pounds. This increased its exposure to the risk of liquidity. From the accounting aspect (*c.f.* the black arrow below), it was not the equity capital that was debited, but an accrual asset account. The Bank adjusted the situation with an increase of capital of the same amount as in March 1707<sup>12</sup>.

1707 was a pivotal year. The Bank was authorized to increase its capital for an unlimited amount, engaged in the circulating of Exchequer bills up to one and a half million pounds, and obtained the guarantee that its charter would stand as long as the entirety of Exchequer bills were not reimbursed.

<sup>12</sup> For this operation, Scott (1912) is the most precise.

The “circulation” of Exchequer bills signified that the Bank assured their subscription by the public and their redemption at par value at its counters. In summary, the Bank increased its exposure to the risk of liquidity in hopes of guaranteeing the liquidity of these short term public debt bonds. In order to do this, from 1708 to 1710, the bank proceeded to increase capital several times thereby allowing it to grow to 5,6 millions pounds. When the capital was raised in December 1709, the bank’s loan to the Treasury increased by a third – from £1.2 to £1.6 millions – without raising interest, which meant a rate reduction from 8% to 6%.

**Shareholder's funds Consolidation 1707-1710**

**Circulation**

<b>Cash</b>		<b>Notes and deposits</b>	
• 1694	720	• 1694	1.200
• 1696	240	• 1708	400
• 1707-10	<b>4.400</b>	• 1697	- 200
<b>Capital not called</b>		• 1697	960
• 1694-6	240	• 1698-1706	1.000
• 1697	- 240	• 1707	<b>1.500</b>
<b>Loan</b>		<b>Shareholder's fund</b>	
• 1694	1.200	• 1694	1.200
• 1708	400	• 1697	1.000
<b>Tallies</b>		• 1707-10	<b>4.400</b>
• 1697	800	-	<b>1.000</b>
<b>Fund of Bank of England</b>			
• 1697	1.200		
<b>Exchequer bills</b>			
• 1707	<b>1.500</b>		
<b>Regulation</b>			
• 1698-1706	1.000		
• 1707	- <b>1.000</b>		
	<u>10.460</u>		<u>10.460</u>

The interest rate of Exchequer bills, which were at 7.5% in 1695, fell to 6% in 1708, which was to be the rate in force until 1722<sup>13</sup>. The outstanding bills that the bank had been circulating initially at £1.5 million rose to £2.5 million in 1709 and then to £3.7 million in 1713. During this year, the Bank launched a one million pounds subscription, distinct from the bank capital in order to ensure circulation of Exchequer bills<sup>14</sup>. This financial innovation was well received on the market. Thus, the share of the bank attained its par

<sup>13</sup> It then falls to 5%.

<sup>14</sup> These bonds had their own quotations in the stock markets of London and Amsterdam.

value (£100) for the first time in the month of April 1707. In the month of August, the share price grew from £109.5 to £111.5. In the month of October, it reached £119<sup>15</sup>.

## **2.4 Intermediation, conversion and circulation**

From 1694 to 1713, the Bank of England held an active role in improving the liquidity of the public debt. Both the intermediation of the 1694 loan and its amount increase in 1709 allowed the subtraction of this loan to Treasury from the market and to lower the interest rate. The conversion of tallies into Bank shares in 1697 reduced the outstanding of devalued debt and restored its price. The circulation of Exchequer bills after 1707 offered the State the possibility of managing the short term Treasury debt by issuing an entirely liquid bond with a reduction in interest rates. This tool would be precious in 1793 when, for the first time in its history, the bank would play the role, along with the Treasury, of the lender of last resort.<sup>16</sup>

These successes of the Bank stand in contrast with the failure of the South Sea Company. It should be noted that during its first 15 years, the Bank distributed all of its benefits, and reimbursed the shareholders with the capital that they subscribed to, including when it had been paid with devalued tallies. We focus then on the increase of the capital in February 1709, for the amount of £2.2 million, there was a share premium of 15%, which was simultaneously distributed in monetary compensation to the former shareholders and credited in equity<sup>17</sup>. The share premium had been treated as a distributable profit.

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<sup>15</sup> Cf. Scott (1911), vol III.

<sup>16</sup> Cf. de Boyer (2010)

<sup>17</sup> The regularization does not take place until 1742

### **3. Restructuring the public debt: the conversion of the public debt**

#### **3.1 The creation of the South Sea Company, 1711**

The South Sea Company (hereafter referred to as SSC), a joint stock company, was created the 8 September 1711 by royal charter<sup>18</sup>. By virtue of the charter, the English government granted the company the privilege of a monopoly to trade with the Spanish colonies in the “South Seas” (Spanish America) in return for the restructuring of the floating public debt of £9,471,324.

Indeed, from 1688 (date of the Glorious Revolution) to 1713 (date of the Treaty of Utrecht), England endured two long wars: the Nine Year War (1688-1697) and the War of Spanish Succession (1702-1713), so long that the English public debt more than tripled between 1702 and 1713, passing from £16,395,000 to £53,681,000<sup>19</sup>. Moreover, between 1714 and 1717, the charge of this debt came out to be the equivalent of half of State revenue<sup>20</sup>. Furthermore, the total of English expenditures (including war expenditures) is estimated at £49,320,145 between 1688 and 1697, then to £93,644,560 between 1702 and 1713<sup>21</sup>. Thus, to address the ever-growing expenses of war, the English government resorted to the issuing of loans to the public. It should be noted here that the debt, essentially for the war, is considered unfunded debt or “floating debt”; this means that it is a debt contracted without a prerequisite composition of fiscal funds guaranteeing the repayment. It was mainly constituted of tallies and past-due interest<sup>22</sup>.

As the amount of the public debt and the number of public creditors grew (40,000 agents in 1720 according to Dickson [1967 (1993)]), financial operations on debt bonds multiplied considerably on the secondary market. The well functioning of this market as well as its attractiveness depended on the liquidity of the public debt and the solvency of the State.

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<sup>18</sup> “An Act for making good Deficiencies, and satisfying the Publick Debt; and for erecting a Corporation, to carry on a Trade to the South Seas, and for the Encouragement of the Fishery; and for Liberty to trade in unwrought Iron with the Subjects of Spain; and to repeal the Acts for registering Seamen.” Ruffhead [1761].

<sup>19</sup> Cf. Hamilton [1947 : 127]. See also Hargreaves [1930].

<sup>20</sup> See Brewer [1994] and Dale [2004 : 41].

<sup>21</sup> Dickson [1967 : 10].

<sup>22</sup> See Dickson [1967] et Dickson & Sperling [1970].

Before the creation of the South Sea Company, the public debt market encountered some difficulties, due notable to the excessive growth of unfunded debt. With regards to this situation, the market price of the public debt dropped from 30% to 40% under its nominal value<sup>23</sup>, worsening the conditions of the issuing of new State loans on the primary market. In summary, the public debt at the beginning of the eighteenth century suffered from considerable illiquidity.

The SSC project allowed public creditors to exchange their public debt bonds against shares constituting its nominal capital. The conversion project was a great success for the holders of public debt since nearly £9,177,967 of the floating public debt was finally converted into SSC shares, i.e. 97% of the total debt.

By this operation the English government homogenized and reduced the cost of its debt. Thus, instead of paying off the interest of 9% for the profit of various holders of the floating debt, the government paid, in the case of total conversion of the debt about, an annuity of £568,279, i.e. 6% in favor of the sole SSC, which was to become the sole holder of English floating debt<sup>24</sup>. Furthermore, the SSC paid back to shareholders the interest the government received by way of dividends: 3% payable at Christmas and 3% in midsummer<sup>25</sup>.

### **3.2 Restructuring of long term Public Debt: the South Sea Bubble**

In 1719, a new project for the conversion of the public debt (1710 lottery loan) into SSC shares, takes shape. For this occasion, the nominal capital of the SSC increased the amount of the converted debt (£1.75 million) taking it to £11.75 million<sup>26</sup>.

The year 1720 was characterized by the implementation of the *South Sea Scheme*. This project sought to convert into SSC shares all the long term public debt, except the one held by the Bank of England and the East India Company. The outstanding to be converted raised to £31,6 millions.

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<sup>23</sup> Scott [1911, 1912, III: 289].

<sup>24</sup> The amount of the annual interest that the government must pay to the Company is guaranteed by the levying of taxes on wine, vinegar, tobacco, merchandise from East India, raw silk and whale fins.

<sup>25</sup> As a result of lower interest rates (from 9 to 6%), it is hereafter compensated by the perspective of large benefits coming from the commercial activity of the Company and the regularity of the payment of dividends.

<sup>26</sup> The company begins its commercial and financial activities with a nominal capital of £9,177,967 (97% of the floating debt was converted) to which the sum of £822,033 is added in 1715, constituting principally the back interest of the Treasury, thus giving a nominal capital of £10 million.

Before the adoption of the *South Sea Scheme*, the English public debt was evaluated at £49.9 millions and was divided into 3 categories:

- A debt owed to Joint stock companies, that is to say the Bank of England (£3,375,028), the East India Company (£3,2millions) and the South Sea Company (£11 746 844).
- A recoverable debt that the government had the option to redeem at any moment without the public creditors authorization<sup>27</sup>: it was evaluated at £16,546,202.
- An irrecoverable debt which could not be reimbursed by anticipation of the government; it is comprised of a portion of long annuities whose value in terms of years (over 20 years) is evaluated at £13,331,322; another portion of short annuities whose value in terms of years (14 years) is evaluated at £1,703,366; this comes to a total value of £15,034,688.

The terms of recoverable debt conversion are as follows: a debt bond of a nominal of £100 is exchanged for SSC share at a conversion rate of £105/SSC share. Furthermore, the government commits itself to owe SSC the par value of the converted debt.

As for the irrecoverable debt, we note that it constitutes a heavy burden for the government: the interest rates which are initially applied to it are 7% for a maturity date that goes up to 99 years for long-term annuities (after subscribing to equity shares), and 9% for a maturity date that goes up to 30 years for the short annuities (after subscribing to equity shares). It should be noted that at each new step of the conversion, the company directors changed the terms of conversion.

For example, on May 19, 1720, for the conversion of a long-term annuity with a nominal value of £100, the government acknowledges to the SSC a debt amounted to £2,000 (*i.e* valued over 20 years), while the company agrees to provide public debt creditors the amount of £3,200 (*i.e* valued over 32 years), payed in SSC shares, bonds of short maturity<sup>28</sup> and species. Note the difference between the long term annuities valued by the SSC at £3,200 and the £2,000 claim on the government may be linked to an expectation of significant gains following the conversion scheme: we record it as goodwill.

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<sup>27</sup> The interest rate applied to recoverable debt is between 4% and 5%. No maturity is determined in advance in the measure where the interest is payable up to the full payment of the principal for the debt. Despite the relatively non excessive cost of this debt, it is its heterogeneity which poses a problem for the government.

<sup>28</sup> The obligations are issued by the financial institution, the *Sword Blade Company*.

We show the variation of the SSC assessment following several different stages conversion of public debt, recoverable and irrecoverable below.

**Public Debt Conversion Steps**

<b>Cash and bonds</b>	<b>-3.134</b>	<b>Nominal capital</b>	<b>5.702</b>
<u>Irredeemable debt</u>		<u>Irredeemable debt</u>	
• 19 may	-2.618	• 19 mai	3.238
• 04 aug	-516	• 04 août	575
<u>Redeemable debt</u>		<u>Redeemable debt</u>	
•12 août	0	•12 août	1.889
<b>Government Loan</b>	<b>26.819</b>	<b>Issue premium</b>	<b>26.149</b>
<u>Irredeemable debt</u>		<u>Irredeemable debt</u>	
• 19 may	9.445	• 19 mai	8.906
• 04 aug	2.980	• 4 août	4.019
<u>Redeemable debt</u>		<u>Redeemable debt</u>	
•12 août	14.394	•12 août	13.224
<b>Goodwill</b>	<b>8.166</b>		
<u>Irredeemable debt</u>			
• 19 may	5.319		
• 4 aug	2.128		
<u>Redeemable debt</u>			
•12 août	719		
	<b>31.851</b>		<b>31.851</b>

We note that:

- 26,8 million of the 32 million of the public debt, recoverable and irrecoverable, was finally converted by the South Sea Company. To do this, the company issued £5,7 of nominal capital;
- The total *goodwill* coming from different conversion transactions was £8,2 million;
- Following different stages of conversion, the company had to pay a sum of £3,1million in and bonds and cash to different public creditors;
- Following the various conversion operations, the total share premium is valued at £26,2 millions. These premiums constituted a nominal capital reserve for the company for uses other than the conversion of public debt. Without a doubt, the issuing of shares for cash – the four money subscriptions that the company conducted in 1720 – represents an illustration of these uses<sup>29</sup>. We also note that the share premiums were

<sup>29</sup> Cf. Bentemessek (2009)



of the public debt, but using the term “circulation” instead, commonly used concerning Exchequer bills to designate what is understood as “liquidity” today. Smith distinguishes the “circulation” of Exchequer bills since 1707 from the “folly (...) knavery, and extravagance” characterizing the speculative episode in 1720. Concerning the existence of liquidity for Exchequer bills, like Hume before him, Smith highlights the advantages. However, both authors propose different analyses of these advantages. Hume and Smith diverge especially as to the existence or not of inconveniences linked to the presence of such liquid shares. Concerning the South Seas Bubble, Smith sees it as an illustration of the dangers to which the development of public debt can lead.

The approach of James Steuart, who published his *Inquiry into the Principles of Political Economy* in 1667, after Hume and before Smith, is quite different. For him, “circumstances” contributed to clouding the subject of public debt in “obscurity”<sup>31</sup>, whereas it is best to reveal the favorable role of a large liquid public debt for economic activity. Consequently, unlike Hume and Smith, Steuart is interested in the means and mechanisms which make the public debt liquid.

#### **4.1 Liquid public debt, price and interest rate**

In his essays, *Of Money* and *Of the Balance of Trade* published in 1752, Hume presents the quantity theory of money supporting his hostility regarding the power granted to the banks to issue notes<sup>32</sup>; a hostility that fades in editions after 1760<sup>33</sup>. At the same time, what is less commented upon, Hume focuses on the liquidity of public debt notes, showing that they benefit trade and accompany lower interest rates, but still present disadvantages that metallic money doesn't.

Firstly, in the essay *Of the Balance of Trade* where he exposed the “price specie flow mechanism”, Hume scoffs that “we are as careful to stuff the nation with this fine commodity of bank-bills and chequer-notes, as if we were afraid of being overburthened with the precious metal”<sup>34</sup>. The underlying analysis of his critique is known: a diminution

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<sup>31</sup> « I shall be enable to point out the extraneous circumstances which are apt to involve this subject in obscurity. » Steuart [1767, book IV, Part IV, chap.1, p.604 in the 1966 edition].

<sup>32</sup> Cf. de Boyer (2003)

<sup>33</sup> Cf. notes *d* on page 495 et *f* on page 498 of the unabridged edition of *Essais* by Gilles Robel, Éditions Universitaires de France, octobre 2001, Paris – Cf. [1972, p. 69], note \* on p. 70 and note \* on page 72

<sup>34</sup> Hume (1972, p. 69).

of bank notes and Exchequer notes, which he treats as substitutes, provokes a drop in prices, a commercial surplus and the entry of gold.

Again, in the essay *Of Public Credit*, Hume highlights the liquid character of public debt bonds – “*Public securities are with us become a kind of money, and pass a readily at the current price as gold or silver*”<sup>35</sup> – and analyzes its effects:

*“Wherever any profitable undertaking offers itself, how expensive soever, there are never wanting hands enow to embrace it; nor need a trader, who has the sums in the public stocks, fear launch ou into the most extensive trade; since he is possessed of funds, which will answer the most sudden demand that can be made upon him. No merchant thinks it necessary to keep by him any considerable cash.*

*(... ) In short, our national debts furnish merchants with a species of money, that is continually multiplying in their hands, and produces sure gain, besides the profits of their commerce.”*<sup>36</sup>

Since it is a store of value which, contrary to species, is remunerated, but is also capable of being used for possible investment, this “kind of money” favors economic growth:

*“More men, therefore, with large stocks and incomes, may naturally be supposed to continue in trade, where there are public debts; and this, it must be owned, is of some advantage to commerce, by diminishing its profits, promoting circulation, and encouraging industry.”*<sup>37</sup>

In publications before 1764, Hume adds:

*“On this head, I shall observe, without interrupting the thread of the argument, that the multiplicity of our public debts serves rather to sink the interest, and that the more the government borrows, the cheaper may they expect to borrow; contrary to the first appearance, and contrary to common opinion. The profits of trade have an influence on interest.”*<sup>38</sup>

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<sup>35</sup> Hume (1972, p. 69).

<sup>36</sup> Hume (1972, p. 93).

<sup>37</sup> Hume (1972, p. 94).

<sup>38</sup> Hume (1972, p. 94, ft.\*).

Implicitly, Hume associates the actual reduction of interest rates for public debt bonds with its liquidity. How can this be explained outside of any mercantilist interpretation? Hume offers the following causality: the decline in interest rates results in a lower rate of profit, which results from economic growth. Here the reasoning is anti-mercantilist: the interest rate is a real variable. But (real) economic growth is higher thanks to the liquidity of public debt. How can this liquidity with such exceptional qualities be explained? Hume does not. However, he emphasizes the risks:

*“(…)*Public stocks, being a kind of paper-credit, have all the disadvantages attending that species of money. They banish gold and silver from the most considerable commerce of the State, reduce them to common circulation, and by that means render all provisions and labour dearer than otherwise they would be.*”<sup>39</sup>*

These more familiar considerations are similar to those of the essay *Of the Balance of Trade*<sup>40</sup>. We know the conclusion: these kinds of money are both unnecessary and dangerous. Unnecessary because their removal is compensated by an inflow of cash and dangerous because it is a *“counterfeit money, which foreigners will not accept of in any payment, and which any disorder in the State will reduce to nothing”*<sup>41</sup>. Furthermore, Hume mentions other harm against the public debt “for the State as a political body” that he denounces, but which is not our subject.

Smith also mentions the liquid character of the public debt<sup>42</sup> and proposes to explain it. Firstly, he attributes the existence of a “certain degree of confidence in the justice of government”<sup>43</sup> to it. Secondly, he attributes it also to the Bank of England policy:

*“The bank of England, either by voluntarily discounting those bills at their current value, or by agreeing with the government for certain considerations to circulate Exchequer bills, that is, to receive them at par, paying the interest which happens to be*

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<sup>39</sup> Hume (1972, p. 95).

<sup>40</sup> In the 1768's edition, Hume adds « (...) *We may also remark , that this increase of prices, derives from paper credit, has a more durable and a more dangerous influence than it arises from a great increase of gold and silver ; where an accidental overflow of money raises the prices of labour and commodities, the evil remedies itself in a little time : The money soon flows into all the neighbouring nations : The prices fall to a level : And industry may be continued as before ; a relief, which cannot be excepted, where the circulating specie consists chiefly of paper, and has no intrinsic value.* » [1972, p. 95, fn +]

<sup>41</sup> Hume (1972, p. 35).

<sup>42</sup> Smith (1776) pp. 910-2, 917-9.

<sup>43</sup> Smith (1976, p. 910 ; 1035 of French ed.).

*due upon them, keeps up their value and facilitates their circulation, and thereby frequently enable government to contract a very large debt of this kind. In France, where there is no bank, the State bills (billets d'état) have sometimes sold at sixty and seventy per cent. discount” (Smith, 1776, p.1037)<sup>44</sup>*

Contrary to Hume, Smith does not emphasize the advantage that merchants have in having liquid assets that yield interest, though he does see it<sup>45</sup>. According to Smith, short-term financing is based on borrowing from banks issuing notes and not on the mobilization of cash investment; on the bank's cash account and not on the use of Exchequer bills. In contrast with Hume, Smith is favorable to the development of banks because the issue of notes based on real effects is not inflationist<sup>46</sup>. Moreover, he notes the process of the reduction of interest rate in use since the beginning of the century in a more precise manner than Hume.

*“During the reign of queen Anne, the market rate of interest had fallen from six to five per cent. (...) In 1712, the interest of the greater part of the publick debts was still further reduced to four per cent (...)”<sup>47</sup>*

If he perceives the historical connection between the action of the Bank of England, the increase of the liquidity of the public debt and the decrease of the interest rate, Smith does not analyze the link between these three elements any further. But can Smith connect the lower interest rate to lower liquidity and credit risks? Let us quote an extract from book 1 where Smith defines the interest rate precisely in connection with risk:

*« In a country where the ordinary rate of clear profit<sup>48</sup> is eight or ten percent., it may be reasonable that one half of it should go to interest, wherever business is carried on with borrowed money. The stock is at the risk of the borrower, who, as it were, insures it to the lender; and four or five per cent. may, in greater part of*

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<sup>44</sup> Smith (1976, p. 911-2).

<sup>45</sup> Smith (1776), p. 1046

<sup>46</sup> Cf. de Boyer (1998)

<sup>47</sup> Smith (1976, p. 911-2).

<sup>48</sup> The *clear rate of profit* is a risk-free rate. The *gross rate of profit* comprehends risk premium. This is defined in Smith (1976, p. 113): « The lowest ordinary rate of profit must always be something more than what is sufficient to compensate the occasional losses to which every employment of stock is exposed. It is this surplus only which is neat or clear profit. What is called gross profit comprehends frequently, not only this surplus, but what is retained for compensating such extraordinary losses. The interest which the borrower can afford to pay is in proportion to the clear profit only. »

*trades, be both a sufficient profit upon the risk of this insurance, and a sufficient recompence for the trouble of employing the stock.»<sup>49</sup>*

If the borrower ensures the lender against risk, then if the risk decreases, should not the interest rate increase rather than decrease? Furthermore, in book 2 dedicated to “*Of Stock lent at Interest*” Smith refers to Locke, Law, and Montesquieu, makes no mention of the bank note, refers solely to the precious metals effect on the level of interest rate, and sends us back to reconsider Hume<sup>50</sup>: economic growth leads to a lower rate of profit which then leads to a lower interest rate

## **4.2 Public Credit, Liquidity and Growth**

Contrary to Adam Smith and David Hume, Steuart thinks that public debt may be favorable to economic growth<sup>51</sup>.

*“That the effect of public borrowing, or national debt, is to augment the permanent income of the country, out of stagnating money and balances of trade.”* Steuart, IV, 104.

Provided that it is properly managed, therefore liquid, the public debt favors both bank liquidity and market liquidity. This proposition seems singular in the history of monetary thought; Steuart considers that the banking system and the financial market must operate in concert in order to provide the necessary liquidity for economic growth; the public debt contributes to this complementarity.

As we have mentioned earlier, Steuart does not employ the term “liquidity” but uses instead the term “circulation” or even “melting down” to designate this concept. Liquidity is central to Steuart’s analysis. Indeed, according to this analysis, dynamic growth is a process in which wealth is transferred from the “solid property<sup>52</sup>” owners' class – land holders or public creditors– to the tradesmen and industrialists' class, a process called

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<sup>49</sup> Smith (1976, p. 114).

<sup>50</sup> Smith (1776, p.407) et [1976, p. 354]

<sup>51</sup> Stettner (1954) emphasized the particularity of Steuart’s analysis of public liquidity relative to that of Hume (1752) et Smith (1776).

<sup>52</sup> By solid property, Steuart means certain revenues of the agents. The revenues from the land holdings or annuities paid to the public creditors by the State are thus considered as solid properties according to Steuart. [1789-1790, vol 4 : 86].

“vibration of the balance of wealth”. But these transfers of wealth cannot take place if it is not liquid. According to Steuart, liquidity is generated by banks and ~~the~~ the financial market.

The banks generate liquidity by transforming the “solid property” into bank money – or “symbolic money”<sup>53</sup> In order to consume – consumption being “*the only thing which makes the balance turn*”<sup>54</sup> –, the owning class of solid property asks for bank money, a money whose offer is elastic contrary to metallic money, and whose issuing is guaranteed by these “securities” – or “solid property. The spending of this money creates demand for the products the industrial class and allows them to obtain some profits.

At this stage, Steuart emphasizes the public debt in providing liquidity with the help of banks. By borrowing, the State creates a form of solid property available to its creditors, in the same way land is for land owners. Public debt bonds can be given as collateral when banks grant credit and, as a consequence, issue money

*“[...] from the swelling of public debts an enormous fund of personal property is created. This is formed out of the income of the whole nation. (...) The capital of the public debts is the price which has been paid for the annuities due to the creditors, and is now no more money to them than land is money to the landlord. It may be turned into money, no doubt; but so may land.”* Steuart, 640.

Thus, by transforming the solid property, including public debt, into symbolic money, the banks provide the necessary liquidity for the vibration of the balance of wealth ~~by~~. By doing so they also contribute to improve the liquidity of public debt<sup>55</sup>:

*“Stock, therefore, I consider as one great branch of solid personal property; as far as the security of government is solid and good; and such, may be melted down into money by bankers, as any other thing.”* Steuart, IV, 99.

Furthermore, Steuart attributes an important role to the financial market in the good management of the public debt, here also by allowing its liquidity. Indeed, the liquidity of bonds constitutes a necessary compensation for the non-reimbursement of the principal of the perpetual public debt by the State.

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<sup>53</sup> Diatkine et Rosier [1998].

<sup>54</sup> Steuart, II: 43

<sup>55</sup> Steuart, IV: 99.

*“In deducing the principles of public credit, we suppose [...] that an easy transfer of the capital from hand to hand [ should] be permitted, in order to indemnify every creditor for the loss of his capital, which is not demandable from the State, as is commonly the case in private securities.”* Steuart, IV, 279.

Given his particular position on the subject of sovereign debt, Steuart considers all the financial experiments seeking to improve the solvency of the State and the managing of its debt as beneficial. In this regard, he perceives the positive role that the Bank of England played in improving liquidity – “circulation”- by converting tallies and circulating the Exchequer bills.

*“This bank (the bank of England), I have said, is more useful for promoting circulation than augmenting it. It has however lent it assistance in this respect on very critical occasions. I has circulated exchequer bills; and tallies, which from discredit at the time, were as ill calculated to supply the use of money, as lands or houses are, from their unwieldy nature. The great advantage the public reaped from such operations, abundantly shews the utility of banks, which are calculated for this purpose. The principal operations of this bank are, to receive and pay away the greatest part of all the national revenue, expences, and debts; to discount bills of exchange payable at London, and to supply the country with coin.”* Steuart, VI, 267.

Without proposing a detailed analysis of the impact of the circulation of the public debt by the Bank of England on the lowering of the credit risk of the State, Steuart, before Smith, observes the consecutive reductions of the interest rate.

*«After this first operation in reducing the interest, the bank complied with a reduction to 5 per cent of what was due to them; and they began to circulate exchequer bills at a more moderate interest than formerly. »* Steuart, 620

Concerning the operations of restructuring the public debt via the conversion of bonds into shares, Steuart, contrary to David Hume and Adam Smith, is not hostile to the John Law and South Sea Company projects. In his view, these projects constituted interesting attempts to restructure the public debt with the objective of reducing its cost and of increasing its liquidity<sup>56</sup>.

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<sup>56</sup> See Bentemessek (2010)

Indeed, Steuart observed the illiquidity of the public debt before the projects of John Law and SSC were put into effect. He emphasizes notably the considerable drop of the values of State bonds on the French and English markets due to threats of insolvency<sup>57</sup>.

In this context, the project to convert the devalued and illiquid bonds of the floating public debt into shares of the South Sea Company in 1711 is considered a means to reestablish the State's solvency.

*« The incorporation, also (with Bank of England), of nine millions capital in the hands of corporation, which afterwards was called the South Sea Company, was an assistance to public credit, by increasing a monied interest, the principal view of which was to fill the government loans, on the lucrative conditions offered to them. And last of all, the strictly adhering to the public faith of engagement, without seeking, by acts of power, to indemnify the State for the losses it had been obliged to incur, from the circumstances of the times, laid the solid basis of national credit for the future.”* Steuart, 619

In summary, the operation of conversion aimed to substitute a liquid market - where shares of a company with strong trade and financial potential were exchanged - for the illiquid public debt market. For Steuart, this aims to reconstruct the foundations of the primary market of public debt.

Seen from this point of view, the financial projects of the restructuring of the public debt – the SSC in England and the John Law System in France – seems to have for initial objectives the reestablishment of confidence in the State, the reduction of its credit risk and the reconstruction of the foundation of the primary then secondary markets of its debt. Nevertheless, Steuart perceived and comments on the failure of these experiments – the meltdown of the John Law system in 1720 – which he attributes to poor money management as well as to a violation of the principles of credit and the adoption of contestable dividend and financial information policies<sup>58</sup>.

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<sup>57</sup> He puts the devaluation of the English public debt in the short term at 30-40% (Cf. Steuart, IV, 41). Furthermore, regarding the John Law system in France, he emphasizes that the issuance of 200,000 shares in June of 1717– *Mères* – in exchange for state notes served, “*To absorb 100 millions of the most discredited articles of the king's debt*” (Cf. Steuart, III, 274).

<sup>58</sup> We do not analyze this point here. Cf. Bentemessek (2010).

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