The Adam Smith’s Banking System:
The sources of the analysis of modern banking governance

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Abstract:
While in this twenty-first Century (XXIe), questions are rising about the banking system governance and the "post-crisis governance reforms", it is useful to revisit the founding debates of the governance of the twentieth century (XXe). In this area, traditionally, we follow Berle and Means (1932) by tracing separation between shareholders and managers. However, Adam Smith’s banking system view already highlighted the importance of strategic choice of bank executives (risk) in the emergence of crisis phenomena. These strategic choices refer to the relationship between shareholders and managers. From his analysis, one can safely conclude that the way in which ‘Ayr’ bank is managed, that is the role of its governance, constitutes a key determinant of the excessive risk and the fragility of this bank. Specifically, we show that the dispersed Ayr bank’s ownership structure, the asymmetric information between Board and Shareholders and the lack of directors expertise and independence for inuring transparency increased both the bank’s risk taking and its fragility.

The regulation issue of the banks activity is at the heart of Smith’s banking theory. It finds an echo in controversies over reports of credit and currency issues in the 19th century. Smith’s support to banking regulation seems to have been in response to the 1772 Scottish bank crisis understood as the first modern banking crisis. In Smith’s opinion, the banks should be regulated to ensure the correct reflux of credit currency and avoiding an excessive transformation risk.

JEL: B1, B12, B26, G21, G3.

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0. Introduction

After the 2008-2010 international bank crisis and the still current threat of new crisis, coming back to the Adam Smith’s banking system, initiated in «An Inquiry into the Nature and Causes of the Wealth of Nations», (Adam Smith (1996-1776)), brings new lights about the importance of banks’ governance in the outbreak of crisis and the necessity of having a close control on it. Hence, beyond the historical perspective, A. Smith’s contribution deserves to be read (or re-read) as rising issues related to risk and bank governance. This presents the advantage of giving a historical basis for banking governance analysis and clarifying the building foundation of contemporary thinking. Choosing Smith’s conception explains by the clear and very up-to-date analysis he brought to the comprehension of financial fragility, governance structure, and banking regulation in the emergence of bank crises.

Smith is the founding father of the modern banking theory, indeed, from Smith’s writings (1996-1776), literature showed that contemporary debates are rooted in classical texts, for instance, David Glasner (1992), Laidler (1981), Mints (1945), Perlman (1989) or still Santiago-Valiente (1988), and Selgin (1988), Selgin (1989). A depth reading of the Smith’s contribution strikes by his full understanding of the roots of modern banking systems. Indeed, the "Smithian" banking system has all the characteristics of a modern banking one. His analysis revealed some deep proximity with the contemporaneous banking crises. More precisely, Smith’s analysis focused on the “Ayr Bank” failure which is the first modern banking crisis faced by the Bank of England (Andreades (1966, 157)). Indeed, in several respects, this bankruptcy looks like the 2007-2008 World crisis (Rockoff (2009)). This failure is an illustration of a bank imbalance, where the risk governance played an obvious key role. This is the point on which we will particularly focus.
Hence, following Smith, the way in which banks are managed (closely related to the governance of banks) is a key factor in the development of currency and banking crises. Although Smith does not explicitly use the term, the banks’ governance appears as the determinant factor in excessive risk-taking and the correlated banks’ fragility. To show this, Smith opposes two types of banks: the first ones which adopt sound management practices and the second ones that accept more risky management practices (as the Ayr bank that he makes his case study).

At the time of Smith’s writings, the banking system already knew the fundamentals sound management rules. Mainly, these are the maturity rules (inflows and outflows synchronization), prudential regulations (including those of the real bills) and the financing Rule that should not exceed the circulating capital value. However, fully aware, some banks deliberately violated them by taking excessive risks. In this regard, the above factors motivate a new reading of Smith’s writings. To our knowledge this is the first research that showed the role of banks governance, which is a new theme in the bankruptcy of the bank “Ayr” in 1772.

The paper is divided into five sections. A first section shows that his bank credit approach is relatively autonomous from his monetary views exposed in the chapter IV of book one on the “Origine and Use of money”. This highlights the importance of the credit system in the process of emergence of crises. Afterwards, we set out the steps of the Ayr bank failure in a section 2. We analyses the behavior of the Ayr bank’s governance as a crisis factor in section 3. Smith’s analysis of the failure of the bank "Ayr" is understood as an illustration of the non-neutrality of the banking system. From his analysis, one can safely conclude that the way in which ‘Ayr’ bank is managed, that is the role of its governance, constitutes a key determinant of the excessive risk and the fragility of this bank. In section 4, we examine the modernity of the Smith’s banking principle. Section five establishes the relationships between the micro and the macro level: in Smith’s opinion, the banks should be regulated to ensure the correct reflux of credit currency and avoiding an excessive transformation risk. From the whole paper, it’s concluded that, already, in his time Smith had a clear idea about the causes of crises by putting into evidence the role of governance as a main risk factor.
1. The “Smithian” banking system from neutrality to non-neutrality

Smith distinguishes two antagonistic views on monetary and credit theories. Each one illustrates a particular design of the banking system and its role in the money creation process.

- The first approach is related to Smith’s value theory and it intended to explain the prices formation. This is a classic approach in which money plays no role (the so-called “veil role”). It is the way that follows the quantitative theory of money and credit. It insists on the neutrality of money which role is reduced making easier the real exchanges. The result of this first approach is that the banks’ governance (if following the rules of good management), plays no role and cannot present any kind of risk factor. Good management involves respecting mainly the “rule of convertibility” that guarantees the banking system neutrality. Hence, the banks should respect the equality between their issue of paper currency and the value of gold and silver money. Consequently, the notes holders must be sure that their notes are convertible into gold and silver money at any time. He highlights the risks of non-compliance with the rule of convertibility by banks and illustrates this by referring to the behavior of banks (excess emission) which created problems that had to be regulated by the Scottish Parliament.

On the contrary, banks have contributed a great deal to the economic growth: “Whether the trade, either of Scotland in general, or of the city of Glasgow in particular, has really increased in such a proportion, during so short a period, I do not pretend to know. If either of them has increased in this proportion, it seems to be an effect too great to be accounted for by the sole operation (i.e. banking operations) of this cause.” (Adam Smith (1996-1776, op.cit., P.297)

- On the contrary, in the chapter II of book II of the Wealth of Nations, he develops a quite opposite view about the role of the banking system as a potential source of currency instability. Here, the currency is based on the private creation of bank credit. The emergence of crises is a consequence of the lack of control of this private money

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1 Smith distinguishes two types of value; the use value and exchange value. The use value of something is its usefulness; the exchange value is its price A. Smith (1996-1776, Book one, chapters 1 to 7).
2 Smith value theory necessitates that long term price formation be governed by the relative cost of production of metals and final commodities.
3 For substantially all classic economists (Smith, Ricardo, Say..), except Malthus, currency plays a neutral role in the economy (“currency is a veil,” according to Jean-Baptiste Say). This means that since it is useless by itself, there is no advantage in keeping it; its only interest is to be exchanged against other good (purchase of consumer goods) or investment.
emission (the Scottish banking crisis of 1772). Hence, the banking system is not neutral.

While the first approach illustrates the neutrality of the banking system, the second emphasizes the importance of the credit system in the growing risks and the emergence of crises. Smith's analysis of the failure of the bank "Ayr" is an illustration of non-neutrality of the banking system. “In the long-run, therefore, the operations of this bank increased the real distress of the country, which it meant to relieve; and effectually relieved, from a very great distress, those rivals whom it meant to supplant.” (Adam Smith (1996-1776, op.cit., p.315)

This approach shows that Smith changed his mind about the dangers of currency and bank-notes. Indeed, many modifications have affected the Scottish banking sector between 1763 and 1772. These structural changes could have influenced the Smith’s thinking about the risk of emergence of a banking crisis. Furthermore, the 1772’s crisis associated to the bankruptcy of the Ayr’s bank remains the most convincing factor that explains Smith’s change of opinion (see for instance Checkland (1975b) and Gherity (1994)). The optimistic view of the bank that Smith defends has been modified by a series of shocks that hit the Scottish banking system in the past decade: “...the decisive event in reshaping Smith’s thinking about banking, I believe, was the failure of the Ayr Bank (Douglas, Heron, and Company) and more generally what became known as the Crisis of 1772.” Rockoff (2009)

The present paper inspires from these works, however, it specifically focus on the role of the erratic governance of this bank as an explanation factor in the emergence of the crisis. It underlines that Smith’s analysis of the 1772 crisis insisted on the role of shareholders and the risk taking position as a determinant factor in the crunch occurrence. This point constitutes our added value to the current analysis of the Smith’s views on the Banking system.

Currently, the question of the role of the banking system in the macroeconomic balance is at the heart of our concerns. This corresponds to abandon the paradigm of a neutral financial system, which has no effect on the real sector as for instance exemplified it the Modigliani-Miller’s theorem (1958). At this stage, it should be noted that this issue is not

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5 Ayr crisis was international in scope, effecting London, Edinburgh, Europe, and the Americas.
6 The Modigliani and Miller (1958) theorem is one of the fundamental theorems of modern corporate finance. It was the starting point for the analysis of the company's financial structure. It stipulates that in the absence of taxes and in the presence of efficient financial system, the financial structure has no influence on the company's value.
new and it dates back to the eighteenth and nineteenth. At this time, the debate focused on the role of the banking system and the link between bank money and credit and its effect on economic cycles.

According to Smith, the supply of bank credit, as private money emission, plays an essential role in the economy enrichment process. However, the safety of exchange involves that, at any time, the banks should select and monitor the borrowers' credit risk. Thanks to their ability to assess the risks or bad speculations (if well managed), the banks lie in the very heart of the mechanism that allows both the regulation of the quantity of money and the efficient capital allocation at the macro level. However, both of them may be subject to external shocks and may be unable reducing information asymmetries.

In this regard, the banks should not be mere financial intermediaries: loans create deposits. He opposes thus the classic banking theory, which limits the activity of banks just to those deposit banks, granting loans from the deposits received from savings agents. This view deeply influenced the founder of the “Banking Principle”, Thomas Tooke. Indeed, the link between money and credit is also analyzed in the writings of T. Tooke, one of the proponents of the school of banking (Tooke (1838-1857), Tooke (1844), Viner (1937), and Mondello (1985). Tooke has a broad view of monetary instruments. He takes into account all forms of "paper credit". “Why distinguish between notes and other forms of credit money, all of which perform the functions of payment instruments”, T. Tooke. Hence, Tooke said that all movements of capital do not require effective payments in coins or notes, but melt by bank credit operations. According to Tooke, it is not in the power of banks to directly add notes to the amount flowing. There can be no excess emission of money because the money supply is determined by the demand for credit and notes that economic agents did not want to hold returned to the banks. Thus, for Tooke, credit supply is the causal variable of currency issue and various payments instruments and best accounts of the banks activities. Consequently, banking crises are not due to the excess emission and non-compliance with the rule of reserves, but rather due to non-respect of the rule of risk-taking that is the root cause, i.e. the degree of safety and liquidity offered by the securities serve as collateral in bank loans.

But in any monetary system, even with full convertibility and reserve ratio to 100 per cent, the

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7 The relationship between the bank money and credit brings out the contrast between two conceptions of the bank; either a bank that transforms existing reserves in bank money or a bank that creates money from bank credit.

8 In the assets of a bank, there is an information asymmetry between banks and their borrowers. They do not have all the information on the risks related to such borrower, which may lead to mechanisms of adverse selection and credit rationing.
credit may be granted recklessly, it is not guaranteed against illusory expectations and
reversals that follow, creating insolvency of borrowers and banks.

All monetary circulation disorders are the result of issuer default or illiquidity of their
assets, in any case of their mismanagement. If banks are reckless and misjudge the credit risk,
there will be no reflux, no loan reimbursement, and therefore probably excess emission of
currency related to excess credit. The insolvency of a bank and its failure can cause doubts
among depositors of other banks, and a liquidity crisis can be added to a solvency crisis. Thus,
the causes of banking crises seem to be related to other mechanisms and cannot be avoided
only by the rule concerning the volume of reserves. Because banking crises are related to the
activity of credit in the form of multiplication of deposits.

Previous developments of subsequent authors to Smith illustrate how this author was a
pioneer in the study of banking risks.

2. The Steps of the Ayr Bank Failure

According to Tyler Beck Goodspeed (2014): “The 1772 financial crisis should concern
us because it was not simply a minor, run-of-the-mill regional banking panic, but rather a
full-blown global financial crisis”. The bankruptcy of Ayr Bank (real name Douglas, Heron
Co.) is famous for two reasons, on the one hand, it inaugurated the first financial crisis of the
modern era and, on the other hand, it is the cause of the drastic revision of the Smith’s
monetary theory as mentioned in the first part of our contribution. Numerous contributions
analyzed this banking, financial and economic crisis. For instance, it includes the relatively
old studies of Kerr (1908), Hamilton (1956), Munn (1981), Checkland (1975) and the more
recent ones as Rockoff (2011), (2009) and (2013). Then how, in few words, do we capture the
importance of the Ayr Bank collapse for Smith’s thought? In fact, unlike the commentators,
Smith is much more focused on an analysis of the causes of the failure of Douglas, Heron &
Co than to give a factual description of the steps that lead the bank to bankruptcy (see
Hueckel (2009)). Kosmetatos (2014) and previously Hamilton (1956) and Saville (1996)
accurately describe the bankruptcy process. Hamilton (1956, p.408) (as Smith), said that the
Ayr Bank was founded in 1769 to remedy a lack of ‘working capital’ and not for speculative
reasons. The banking crisis of which Ayr was the victim results from endogenous causes
related to economic development as its governance did not reveal able to control and not, as
was the case previously and later, to exogenous causes related to continental conflicts (Seven
Years War (1756-1763), revolutionary and Napoleonic Wars). It seems that two root causes
are responsible for this failure. On the one hand the bank made too many commitments by funding long-term activities without ensuring a correct short term hedging and, on the other hand, some of its customers, ventured into speculative activities.

If the purpose of the Ayr Bank creation was to secure activities in the long run, it is necessary to say that the immediate behavior of its directors led to miss the goal. Indeed, as Saville mentioned it (Saville 1996, p.156), they “attracted persons primarily interested in speculation and bill discounts”. More precisely, the Ayr bank’s directors involved themselves in the commercial activities of specialized firms in foreign and domestic trade. As Saville (1996, p.155), Rockoff (2009) mentioned it, the directors granted each other cash accounts and guarantees. Furthermore, they organized a bill trade that promoted mutual credit. This involved the creation of private credit money that needed periodical clearing for guaranteeing the solvency of the emitted bills and the cash account of the owners. A first warning appeared during the 1769-1770 year, indeed, facing the huge amount of Ayr’s credit money, the Bank of Scotland withdrew its caution and refused to draw bank notes against Ayr’s bills (particularly to the Earl of Dumfries). To replenish its reserves, Ayr began to draw bills of exchange on London at 8% making the Bank of London, a lender of last resort. However, these loans were made at the rate of 5%: it can be described as a machine that generates losses. “... it was paying, in the way of interest and commission, upwards of eight per cent. and was consequently losing more than three per cent. upon more than three fourths of all its dealings ‘. (Adam Smith (1996-1776, op.cit., p. 314)).However, in 1771, the necessity to develop the Scottish activity involved the Bank of Scotland to renew its confidence in the Ayr bank and allowed its further emission by again accepting its bills. It followed a tremendous increase of Ayr’s note at fifty days payable to Bank of Scotland due both the bank itself but also to some of its local partners. The Bank of Scotland at the time offered to accept the notes of the three largest Glasgow banks. The Scottish notes presented the specificity of a very short term schedule and the debtor that was reluctant to honor the payment was induced to pay a 5% interest charge. Douglas & Heron increased still its debt to the Bank of Scotland by borrowing it gold species (£15,000). This increased the fragility of the Scottish payment system. Hence, in spite of emission facilities offered to London, on 10 June as Saville(1996, p.156) reports it, the merchant Alexander Fordyce saw its bills on Heron rejected. The speculative mechanism was the following. Fordyce created the Neal, James, Fordyce and Down was a London bank that short sold huge amount of commodities in East India Company and this bank was heavily indebted near Douglas and Heron. The Bank of England
refused a bill drawn on Amsterdam. Then, this involved a chain of default banking. In a few days, 22 Scottish banks failed and the bank run spread all over Europe generating illiquidity for more than one year.

On June 22 of this year, the Ayr Bank was forced to stop payment on its notes. In a letter to Adam Smith on June 27, David Hume wrote that “We are here in a very melancholy Situation: Continual Bankruptcies, universal Loss of Credit, and endless Suspicions... The Carron Company is reeling, which is one of the greatest Calamities of the whole, as they gave Employment to near 10,000 People”.

Goodspeed (2014) shows that, in both 1772 and 1773, the total number of British bankruptcies highly exceeds the average rate of usual failures of the eighteenth century. The following figure drawn from Goodspeed illustrates it.

![Figure 1.3. British Bankruptcies, 1700-1780](image)

Figure 1: Evolution of the rate of British bankruptcies from 1700 to 1780 (sources Goodspeed op. cit. p. 23).

In spite of the promise to pay notes in full and the reopening of the bank, and the help of the Bank of England on January 1773, the bank Ayr’s owners decided to wind it up on August 1773.

3. **Features of the Ayr Bank’s “bad” governance**

This section examines the impact of weaknesses and failures of corporate governance mechanisms in the Ayr bank which have led to the 1772 crisis. The Ayr bank crisis presents a poignant illustration of what happens when corporate governance is weak and when the checks and balance are ineffective. Indeed, in our opinion, the failure of corporate governance mechanisms in Ayr bank is the main factor inducing excessive risk taking and the bank
bankruptcy. Smith has been intimately involved in the AYR Bank’s bankruptcy. The young Duke of Buccleuch with who Smith traveled with as a consultant and his tutor, was a Bank Ayr’s director. The Duke was probably one of the people who Smith was trying to get out of the mess (Ross 1995, 242). The behavior of the Ayr BANK’s leaders is an illustration of what Smith defines as "an accident that users of paper money are exposed due to the awkwardness of the conductors (bank officers)." (Rockoff, H 2009).

Following Smith, the Ayr bank specific management mainly explains the bank’s failure. Obviously, Smith does not use the terms of “management” or “bank governance”, however, his description of how the bank’s board run it to bankruptcy clearly corresponds to its involvement in the bank brittleness or fragility. To show this, Smith opposes two types of banks: the first ones adopt safe (low risky) practices while the other ones accept more risky management practices. “All the dealers in circulating bills of exchange, which those other banks had become so backward in discounting, had recourse to this new bank, where they were received with open arms. Those other banks, therefore, were enabled to get very easily out of that fatal circle, from which they could not otherwise have disengaged themselves without incurring a considerable loss, and perhaps, too, even some degree of discredit’". (Adam Smith (1996-1776, op.cit., p.315)).

Smith analyzes the consequences for the economy of a widespread indiscriminating funding. In fact, he considers an informational asymmetry situation characterized by adverse selection effects. Indeed, it shows that if the bank decides not to discriminate projects that are submitted for funding, then the bad projects (risky projects) would divert funds from less risky projects and more assured of a refund.

This section provides a case study focusing on the Ayr crisis as an example of corporate governance failure. The most noteworthy fact is that Adam Smith pointed out in almost modern terms the importance of governance errors as the origin of the so-called bank Ayr’s crisis. The corporate governance mechanisms such as the function of board of directors, ownership structure, shareholder engagement, transparency made strong mistakes in certain respects. The chief executives’ unfettered power is an obvious problem that characterized Ayr’s management. “At the time of failure, fully £400,000 of £694,175 in loans at the Ayr, Dumfries, and Edinburgh branches were to the directors themselves and a handful of other partners.” (Goodspeed (2014) p 145) The opportunistic behavior of Ayr bank chief executives’ can be attributed to several factors namely a diffuse ownership structure, a board
of directors that lack of influence, independence which are the criteria of an effective board and lack of engagement of shareholders.

Within the Ayr bank, there are numerous illustrations of unethical activity. The board of directors was composed of a number of people who showed to be of “poor moral character” and willing to conduct fraudulent activity. Saville (1996, p.156), Goodspeed (2014, page 145) noted that “More troubling still was the fact that many of the complicit directors acted as cosignatories for one another”.

Similarly, the current global financial crisis has been attributed partly to corporate governance weaknesses such as inappropriate remuneration structures and inadequate systems of risk management and internal control, Blinder (2009). In the following, we gather several facts that Smith and the modern commentators noted and we challenge them to the modern theoretical contributions. These elements are liable to increase the bank’s fragility.

**a. The dispersed Ayr bank’s ownership structure**

The dispersal of the bank Ayr’s ownership structure led to excessive risk taking. Indeed, as, already Kerr (1908) showed it: “The number of shareholders, shortly before the crisis, was 241”. Considering this period, the number of owners is considerable, because on average, for equivalent banks, the partnership amounted to forty. The relevance of firms’ ownership structure has been extensively explored in the theoretical literature. Jensen, M. and Meckling, W. (1976), Agrawal and Mandelker (1990) et Agrawal and Knoeber (1996) consider that the ownership concentration is an essential ingredient for exerting an effective managers control by the shareholders board. Following the signaling theory, Ross (1977) proves that the ownership’s concentration helps solving the problem of information asymmetry between shareholders and managers. Furthermore, Holderness and Sheehan (1988) show that this concentration lead the managers to be more efficient because of both accrued bargaining power in front of managers and incentive to monitor the actions of managers. More accurately, concerning the bank sector, Sironi et al (2006) show that the level of concentration involves an improved quality of loans, low insolvency risk and low risk assets.

Goodspeed (2014) noted “This diffuse ownership effectively spread risk over a larger and more diverse set of shareholders; in fact, of the sixteen banks that failed in 1772, all but Douglas, Heron & Co. had fewer than six partners. Of the three banks that failed in 1772 and inflicted losses on creditors, all three had fewer than six partners. On the other hand, Douglas, Heron & Co., with 226 partners, seems to have struggled to enforce managerial accountability, and suffered from serious deficits in shareholder oversight of elected directors.” Goodspeed, (2014, p.110)
b. The asymmetric information between Board and Shareholders

In the aim at ensuring efficient decisions, the directors’ board has to fulfill certain criteria about the size, the independence and the expertise of his members. Recently, following the recent financial crisis and other financial scandals, banks, regulators and society became more aware of the potential consequences of weaknesses in board function. The 1772 Ayr crisis has exposed egregious failures of board of directors’ function due to unconsciousness of his member of the extent of the risks facing their businesses and their inability ("Indeed, throughout 1771 at the Edinburgh office, affairs were generally conducted by just three directors; two short of the required quorum for approving such transactions". Goodspeed (2014, p.141) of challenging dominant executives. Another factor that seems to favor the inefficiency of Ayr bank’s Board of Directors is that there is not a sufficient control by shareholders as noted by Goods (2014, p.111) “On the other hand, Douglas, Heron & Co., with 226 partners, seems to have struggled to enforce managerial accountability, and suffered from serious deficits in shareholder oversight of elected directors”.

Or, still,

“the company’s two annual general meetings were in any event clearly insufficient for effective oversight of an enterprise with three branches, a £1.3 million balance sheet, and an increasingly complex web of London liabilities”. Goodspeed (2014, p.142)

and

« Six days later, a meeting of directors “was pretended to be held at Edinburgh,” comprised of just two directors, John Campbell and Archibald Cockburn, and a third extraordinary director. Though such a meeting, under the contract of copartnery, had no power to accede to such settlements as were under consideration from Fordyce, Malcolm &Co. and Charles Fergusson & Co., the three directors nonetheless resolved to instruct the firm’s London representatives to accept the offers of 6s. 6d. and 5s.in the pound ». Goodspeed (2014, p.118)

In addition, the bank made governance mistakes consisting mainly in some preferential treatment granted to shareholders regardless of their projects quality. Consequently, instead of increasing the total capital amount, the bank generously lent money to its shareholders:

“A great part of the proprietors, when they paid in their first instalment, opened a cash-account with the bank; and the directors, thinking themselves obliged to treat their own
proprietors with the same liberality with which they treated all other men, allowed many of them to borrow upon this cash-account what they paid in upon all their subsequent instalments”. (Adam Smith (1996-1776, op.cit., p. 313)).

We should consider also:

“But a bank which lends money, perhaps to five hundred different people, the greater part of whom its directors can know very little about, is not likely to be more judicious in the choice of its debtors than a private person who lends out his money among a few people whom he knows, and in whose sober and frugal conduct he thinks he has good reason to confide”. (Adam Smith (1996-1776, op.cit., p. 316)).

c. A lack of director's independance

It seems that deficiencies in the non-executive director have contributed to the collapse of Ayr bank. The Ayr crisis focused attention on problems that can occur when the independence of members of the Board is compromised through the conflicts of interest. In terms of the disciplinary approach, independent directors should reduce conflicts of interest between the managers and shareholders. “Though company bylaws also prohibited more than one director at any office from simultaneously being a current member of any trading company, at Ayr that rule was violated from the start, with most of the directors, and even the cashier, being “deeply connected with, and concerned in” one or more Ayr trading companies, on whom they lavished generous credits”. Goodspeed (2014, p.141)

An independent board (dominated by outside directors) is able to handle board responsibilities, help to protect shareholders from CEOs’ opportunism and remove the influence of CEO power (Fama and Jensen, 1983), Horstmeyer (2014).

d. A lack of directors expertise for inuring transparency

Another feature of Ayr bank board that promoted high-risk practices is the lack of competence of those directors as described Goodspeed (2014,p.142) “As the bank's balance sheet rapidly ballooned, directors at one office were hence frequently called upon to approve transactions at other offices about which they often had little or no direct knowledge”.

In this sense, Hashagen et al. (2009) noted that the risk of poor governance and lack of risk management expertise in the boards are the main determinants of the recent crisis. The weak disclosure of information is an obvious problem that characterized Ayr’s management. Shareholders do not have access to information to assess their risk taken by the bank and which are not active in the bank's strategy. Following Solomon (2010) “transparency is an essential ingredient for a sound system of corporate governance”.
In the aftermath of the financial crisis, the Turner Review (2009) focused on the causal factors arising within banks and raised a series of issues where it was felt that banks needed to improve their risk management and governance including the need for shareholders to make a more active and effective and effective interest in corporate strategy. “The flow of information from directors to the proprietors of the company, especially, appears to have been wholly inadequate for the scale and risk of transactions undertaken”. Goodspeed (2014, p.141)

“And, having “no opportunity of being informed about their affairs, from any other quarter than the report of their Directors,” nor possibility of making “any useful investigation at a general meeting,” the proprietors were thus largely reduced to a rubber stamp body”. Goodspeed (2014, p.142)

“While Lamoreaux has demonstrated that insider lending can mitigate the problem of asymmetric information by clarifying the enterprises with which particular banks were especially involved, in the case of Douglas, Heron & Co. both the nature and extent of insider lending was wholly unknown to the majority of the company’s shareholders” Goodspeed (2014, p.142)

Meanwhile the capital had been increased beyond the originally designed £150,000, the old directors were regularly re-elected, and affairs went on in the usual way”. Kerr (1908, chap. 9).

In terms of the modern governance theory, this is understood as an essentially shareholder focus vision. In other words, the new bank’s commitments were excessively high compared to its own resources.

"From the beginning, this bank cash was badly provided. Capital shareholders set by two different subscriptions would be increased to the sum of 160,000 books; but, funds effectively did not exceed 80% of that amount; their level was higher than these shareholders’ resources (though significant) to found themselves mortgaged quickly” (Adam Smith (1996-1776, tII,op.cit., p. 550)).

4. The modernity of the Smith’s "bankingprinciple"

A few years before the publication of the “Inquiry into the Nature and Causes of the Wealth of Nations”, Adam Smith witnessed a financial bubble bursting. This last one decimated the Edinburgh banking system: amongst three banks survived among the genuine thirty regional ones. According him, left to the market forces alone, finance created by private banks may cause grave risk to society. Adam Smith expressly states that the free and competitive market
logic should not extend to the financial sphere (Carlson (1999, p.8)) notified it. Smith justifies the conflict between his support of bank regulation and his principle of natural liberty through the fact that fully free banking system can jeopardize monetary stability. Thus, he advocates a financial exception to the principle of natural liberty and the need for strict regulatory framework. According to Smith, controlling the banks activity is a means of protecting society from the risks that the unwise running of banks could generate. Smith advocated four restrictions on the free banking:

1. The necessity to adopt a reasonable usury law,
2. The prohibition of the option clause in the bank notes emission,
3. The adoption of the real bills doctrine as part of the culture of banking, and,
4. The prohibition of notes in denominations below £5.

Hence, following Pichet (2003), Adam Smith supports a kind of supervision or control of banks. Hence, competitive market logic cannot extend to the financial sector because its complete freedom will result in economic and social crises. The question asked by Smith is how banks can avoid making excess credits. To do this, against all odds, Smith does not suggest proportioning credits to the amount of gold and silver held by the bank (rule which fully stressed), but Smith rather pictures a commitment system very close in its feature to modern practice.

Indeed, the banks play a central role at the micro level when managing the solvency risk. This role consists in assessing the creditworthiness of debtors who are the main link of a kind of mechanism that allows both regulating the quantity of money and the efficient allocation of capital at the macro level. In fact, he considers that over time, the loans granted are not greater than the repayments made. He pictures it by the example of a basin that only empties or fills keeping the same level in so far as the quantity of water that fills the basin is equal to the outflow. Putting it otherwise, over time, the loans are no more important than the repayments. In this regard, the Bank is required to properly manage the risk of solvency by checking, whether at short term, the borrower’s refunds amount equals the cash in advances that the bank supplied. It is a flux and reflux conception of credit bank money. Smith favors the rule of short-term loan. Hence, he excludes thus, the time delays risk factor that could involve a transformation risk from short terms loans to long run commitments. After having granted the short-term loan, the bank can observe the movements of the account and retrieve information on their ability to repay and on the creditworthiness of its borrowers. The fundamental banks life purpose is jointly producing credits and currency and, by their
expertise, reducing information asymmetries. This point is echoed by contemporary authors such as Fama (Fama, 1985, p. 37).

The above considerations join the proposals of contemporary banking reforms⁹ that consider the necessity of removing the transformation risk that consists in converting short term loans into long term credits. The objective of these reforms is to reduce the liquidity risk of banks, the most radical way to solve this problem is to act directly on the risk of maturity transformation and consideration might be given to prohibiting the banks who manage the deposits of grant long-term credits. This involves dividing the banking sector between banks whose activities that only manage the means of payment and short duration loans, while the others would finance long term investments. The former’s issue would be done by deposits (liabilities) covered only by securities or short-term loans. While, concerning the latter, the long-term loans would be the mission of different banks issuing long-term securities.

Currently, following the recent financial crisis, several arguments are in favor of the separation of activities. The first argument is based on the idea that the bank market activity undermines those banks and thus greatly increases the instability of the banking system (Hervé, A, 2013). A second argument states that combining activities exacerbate moral hazard created by deposit insurance and lender of last resort (IMF, 2011) because it is easier to take excessive risk in market activities than in the credit activities. This separation is also justified by the fact that it allows the investment banks to fail. (See Dumontaux and Pop (2011)).

Hence, Smith defines a prudential rule that consists in making frequent and regular discount operations that allow the banks to assess the debtors’ solvency. Furthermore, the banks would observe with the greatest attention the amount of repayments compared to the level of advances that they previously made.

“The frequency, regularity, and amount of his repayments, would sufficiently demonstrate that the amount of their advances had at no time exceeded that part of his capital which he would otherwise have been obliged to keep by him unemployed, and in ready money,

⁹In line with international debate, as at European level (committee "Vickers" Report "Liikanen"), the Law No. 2013-672 of 26 July 2013 of separation and regulation of banking, Official Journal of the French Republic of 31 July 2013 reformer regulatory framework of the financial and banking sector, following others reforms already undertaken in the United States and Great Britain, to separate banking called speculative (or linked to speculation or market) from deposit activities and credit.
for answering occasional demands; that is, for the purpose of keeping the rest of his capital in constant employment” (Adam Smith (1996-1776, op.cit., p.306)).

So the banking system finances the short-term economic activities (working capital) and excludes the fixed capital operations. Smith considers that the circulating capital determines the amount of circulating money in the economy. This view is very different from the traditional quantitative theory of money. Thus, Smith develops an awfully modern scenario in which bankers and their borrowers are reciprocally dependent\textsuperscript{10}. Indeed, by strategically playing with asymmetric information, by successively discounting the bank’s capital for financing their highly risky operations, the bank managers could cause bankruptcy by unintentionally violating the above prudential rules.

These borrowers believed that the bank should provide them all the capital they needed for their activities: “The banks, they seem to have thought, were in honour bound to supply the deficiency and to provide them with all the capital which they wanted to trade with”. (Adam Smith (1996-1776, op.cit., p. 308). However, the banks denied doing so because they are submitted to the restrictive rule of funding only the circulating capital and not the whole project’s one. However, the speculators adapted to this constraint by using the practice that consists in renewing the discounting of by drawing exchange bills one upon the other one.

“This expedient was no other than the well-known shift of drawing and redrawing; the shift to which unfortunate traders have sometimes recourse, when they are upon the brink of bankruptcy”. Adam Smith (1996-1996-1776, op.cit., p.308).

This highly risky practice, referred by Smith as a specious device to increase the circulation of private money leads to banks failure. Indeed, private bank emission can exceed the absorptive capacity of the economy involves an increased demand for conversion of private debts into money from the indebted banks that will impact their reserves in gold and silver. Hence, these project makers or rather speculators drive the bank to bear increased liquidity risks. Even if not designed as such, Smith clearly refers to an information asymmetry that can induce banks in error. “It was a capital which those projectors had very artfully contrived to draw from those banks, not only without their knowledge or deliberate consent, but for some time, perhaps, without their having the most distant suspicion that they had really advanced it”. (Adam Smith (1996-1996-1776, op.cit., p.311)).

\textsuperscript{10}Smith distinguishes between two types of borrowers; the ‘cautious' men who borrow to finance their encaise of transaction and the ‘project-makers or speculators' with reckless projects.
He also pointed out that making correction is not easy because even when these banks realize that their commitment is too large, it is often too late. They are forced to continue to fund the borrower for some time. One remedy would be, if they have time, to get gradually rid of risky borrowers by tightening their lending conditions. Smith was aware of the shortfall of the convertibility rule as a guarantee against emission excess. Consequently, Smith provided an additional good conduct rule for banks for both maintaining their solvency and liquidity. This rule is referred to as "the real bills doctrine". Lloyd Mints (1945, 25) identified Smith as its founder by his deep understanding. However, the "real bill doctrine" is considered in the literature as a minor component of the Smith's monetary theory (Perlman 1989 Gherity 1993 and 1994), while, in the opposite, this rule constitutes a major component. Indeed, compliance with this rule by bank governance is a factor of stability of the payments system based on credit. Some authors such as Vickers (1975), Checkland (1975) and Santiago-Valiente (1988) share the idea that Smith has focused on respect for the rule of "the real bills doctrine" as an important tool against the excess emission. This rule is considered by Smith as a good bank business rule. It involves discounting only one type of bills, the "real" drafts as opposed to the "shadow" drafts.

5. Why overseeing the banks governance?

The main criticism that Smith addresses the governance of Ayr, and beyond, concerns its will not choosing between long term capital financing and supporting the short duration monetary activities. Hence, Smith defines fundamental rules which restrict banks to their strict payment transactions. However, formulating this rule assumes theoretical foundations based on a new conception of the movement of means of payment. This one is both micro and macro.

- **The micro-economic foundations of the banks’ governance constraints**

For Smith, the modern view of money creation is the possibility for bankers to help the increasing of national wealth on the basis of short-term loans (cash in advance deposits) allocated to producers. This approach is due to the innovation of Scottish bankers who put in place a system of advances by crediting the dealer’s cash account from which he can withdraw money to pay achieve its production.

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11 According to Smith, even with full convertibility, banks are not omniscient (Gherity, 1994) and therefore over-issue could still occur.
“They invented, therefore, another method of issuing their promissory notes; by granting what they call cash accounts, that is, by giving credit, to the extent of a certain sum (two or three thousand pounds for example), to any individual who could procure two persons of undoubted credit and good landed estate to become surety for him, that whatever money should be advanced to him, within the sum for which the credit had been given, should be repaid upon demand, together with the legal interest.” Adam Smith (1996-1776, op.cit.,299)

In orderto continue,this process involves the repayment of advances(reflux). The circuit is described very accurately by Smith:

“The banks, when their customers apply to them for money, generally advance it to them in their own promissory notes. These the merchants pay away to the manufacturers for goods, the manufacturers to the farmers for materials and provisions, the farmers to their landlords for rent; the landlords repay them to the merchants for the conveniencies and luxuries with which they supply them, and the merchants again return them to the banks, in order to balance their cash accounts, or to replace what they may have borrowed of them; and thus almost the whole money business of the country is transacted by means of them. Hence, the great trade of those companies." Adam Smith (1996-1776, op.cit., p.299).

It follows that the main problem for banks is to ensure the payment system sustainability and, consequently, the economy as a whole. The bankers’ envisaged solution wasto require their customersa permanent reimbursement of loans(short-term reflux). According to Smith, this solution has two advantages: the first one is to reduce the consequences of asymmetric information between bankers and borrowers. Indeed, as Smith points out, the bank must be able to gather the necessary information and ensuring a sure continuous reflux. Hence, lendingshort termis a way to guarantee the borrowers ‘ solvency:

« But a banking company, which lends money to perhaps five hundred different people, and of which the attention is continually occupied by objects of a very different kind, can have no regular information concerning the conduct and circumstances of the greater part of its debtors, beyond what its own books afford it. In requiring frequent and regular repayments from all their customers, the banking companies of Scotland had probably this advantage in view. » Adam Smith (1996-1776, op.cit., 306)

The second benefitis ensuring the bank solvencyitself against credit in excess.Smith combines the payments security to the meansof his time, that is to say, he considers that the frequent reflux of issued credits guarantees a strict equivalence between the means of payment which extinguished debt (the amounts of gold and silver), and the credit commitment from borrowers. It follows that the banking system cannot engage in long-
term lending transactions which, as mentioned above, must be made by other institutions or other funding systems (bonds or loans from individuals (Adam Smith (1996-1776, op.cit., 307).

The need to avoid excessive credit is not associated to the will of avoiding some rise in nominal prices as shows it the classical quantitative theory of money. Smith’s purpose is related to the need to avoid the emergence of crises payments related to the inability to meet claims. It should be noted that, following Smith, the reflux rule should be imposed to the banks’ governance. Scottish banks had adopted it to lessen the bankruptcy risk but, the Ayr bank, despite its innovative designs, blurred the message.

- Constraining the bank’s governance for macroeconomic reasons

Considering the microeconomic relationships does not allow understanding the deep roots that led Smith compelling the bank’s governance. At the macroeconomic level, the monetary circulation is not a compact unit as described by the quantitative monetary theory. This circulation is divided into two sets: a first set concerns the consumer relationships with the producers (purchase-sale of consumer goods). A second set bears on the relationship of dealers among them and their exchange of intermediate production goods in the chain leading to consumption goods from production means.

« The circulation of every country may be considered as divided into two different branches; the circulation of the dealers with one another, and the circulation between the dealers and the consumers.” Adam Smith (1996-1776, op.cit., 322)

Since the purpose of production is consumption, at the global level, the value of consumption goods limits the amount of capital goods traded between producers.

“The value of the goods circulated between the different dealers never can exceed the value of those circulated between the dealers and the consumers; whatever is bought by the dealers being ultimately destined to be sold to the consumers. The circulation between the dealers, as it is carried on by wholesale, requires generally a pretty large sum for every particular transaction. “Adam Smith (1996-1776, op.cit., 322)

This distinction allows Smith distinguishing between final payments from consumers to producers and deferred payments between producers. The payment of consumption goods allows the producers to emerge from their credit from banks and suppliers. It follows that consumers hold the instrument to pay the debts permanently: money. Consumer spending is the reflux of advances made by the banks to producers. It follows that, for a given period, concerning the relationship between producers, trade value cannot exceed the value of consumption goods. Thus, Smith explains the need to require from banks behavioral rules on loans that cannot exceed the level of reimbursement that they can legitimately expect.
“If bankers are restrained from issuing any circulating bank notes, or notes payable to the bearer, for less than a certain sum; and if they are subjected to the obligation of an immediate and unconditional payment of such bank notes as soon as presented, their trade may, with safety to the public, be rendered in all other respects perfectly free.” Adam Smith (1996-1776, op.cit.,329).

These rules cannot be applied without limiting the capacity for action of the banks’ governance that must meet specific legislation.

6. Conclusion

In spite of the rising of new financial and monetary technologies, the combination of financial innovation and deregulation that brought about rapid changes in the financial systems working, the necessity of prudential rules that should be adopted by any banking system have ever been defined three centuries ago by Adam Smith. Obviously, these rules must reflect the new technology specificity; however, in spirit, they do not change in spirit.

Smith intrinsically associated the bank governance behavior and the respect of prudential rules. This means that no automatic rule, as for instance the strict observance of a ratio can prevent the failure of a bank. The banks’ safety depends on the will and skill of their management team and their dependency from the shareholders tastes.

Furthermore, Smith did not only define a microanalysis of the banks behavior. He related it to macroeconomics concerns. Hence, bounding the governance economic freedom by law is a necessity to avoid the global failure of the whole payment system. Indeed, unthoughtful behaviors from the bank governance always end in increasing the transformation risks. Modern banking theory and, above all practice, did not follow this obvious result. As a consequence, in spite of the succession of international agreement as Bale I, II and, now, III, the security of the global banking system is always at stake. Adopting the simple rule of checking the necessity of reflux of short term credit as already mentioned it Adam Smith could constitute a safe regulatory rule.
7. References


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