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# Malmö diskont – a supernova<sup>1</sup> in banking

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## Abstract

In 1817, Malmö diskont, a Swedish bank, crashed. When Malmö diskont fell, it was about to be put under government control, due to mismanagement. Malmö diskont was one of three private commercial banks, who all had to close when Malmö diskont fell. An entire bank system disappeared. Although there remained an unofficial credit market in addition to some special credit institutions it took a long time after the crisis to restore confidence in private commercial banks.

This paper describes the crisis from an institutional perspective and suggests explanations why this crisis occurred. The assumption is that institutions set limits for individuals' actions and sometimes directed them towards actions. The paper describes what happened and what institutions existed and analyzes the institutions qualitatively and how they interacted with the Malmö diskont management. The results suggest that institutions both influenced and paved the way for mismanagement of the bank in its last years.

The novelty of this study is that it shows how ambiguous and conflicting institutions disturbed the banking system – 200 years ago. That the events occurred long ago does not reduce its value. On the contrary, it provides a refined picture of the conflict between actors and institutions in the run-up to a financial crisis.

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<sup>1</sup> “A **supernova** (plural **supernovae**) is a stellar explosion that is more energetic than a nova. Supernovae are extremely luminous and cause a burst of radiation that often briefly outshines an entire galaxy before fading from view over several weeks or months. “<http://en.wikipedia.org/wiki/Supernova>. The reason than this metaphor is chosen is that Malmö diskont in the province (galaxy) of Scania came from nothing in 1803 and acquired a stellar position with the apex in the mid-1810's - firmly in the center of both the economic and social development as well as in the social life of Malmö. Thereafter the diskont gradually faded during the years leading up to the final disappearance in 1817.

## 1. Introduction – the bank crisis and why the subject is interesting

“Death penalty and pillory”. Such was the harsh proposal of the prosecutor for the state vs. the three bank directors that were in court after the crash of the bank called Malmö diskont (hereinafter also called “MD”) in 1817. This bank was one of three diskont banks in Sweden at the time. As a result of MD’s collapse, there was a panic run on the other two banks and all three had to close. One of the other banks had as an important purpose to finance the cross-country canal building in Sweden, the third was mainly financing trade, forestry and mining in the west of Sweden. Only the third left a surplus for shareholders after winding up the businesses. All three banks, in their own domain, contributed in two ways to the development of the financial sector in Sweden. Firstly, they financed infrastructural changes, in the case of MD the enclosure movement in the province of Scania, in the south of Sweden. Secondly, loans from the three banks were mostly given not in specie or government money, but in certificates of deposits (assignments) with Riksbankens Ständers Bank (hereinafter called “RSB”), the parliament’s bank and effectively the central bank of Sweden. Thus, they increased the amount of means of payment and during the decade of the 1810’s until the crash accounted for around a fifth of the money supply<sup>2</sup>.

Are these events interesting? An experienced fellow scholar once asked me how I can hope to derive any wisdom from a crash of a tiny little bank two hundred years ago. The reason is as Reinhart and Rogoff put it:” We have been here before”<sup>3</sup> What one can accomplish by studying crises is to understand and hopefully be able to warn of and avoid or reduce the effects of coming crises. Crises are unique studying objects for they defy scientific modeling. The definition of a crisis is far from unanimously accepted in the scientific community. One common feature, however, seems to be the surprise that materializes when it occurs.<sup>4</sup> A crisis is a crisis because it has not been anticipated. It is thus not logically possible to pinpoint when it will occur. The analysis of the omens that a crisis will occur is a totally different research area and is often credible and correct.<sup>5</sup> If a crisis is predicted, maybe some actions can be taken to mitigate the effects of the crisis. The question then arises if there are common factors in crises that are more or less eternal and those elements preceding crises can be traced during centuries or if a current crisis theory has to be tightly connected to today’s context. As this article hopes to demonstrate, it is partly in the interdependency between institutions and actors that the typical bells and whistles preceding a

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<sup>2</sup> The remainder accounted for by money issued by RSB and the National Debt Office. Brisman (1924)

<sup>3</sup> Reinhart & Rogoff (2009), p. xxv

<sup>4</sup> Kindleberger (2000) writes about ”displacements”, i.e. sudden reversals

<sup>5</sup> Compare with the forecasts that an earthquake will occur. The forecast is usually correct, but the timing is impossible to predict

crisis can be identified and help warn of a looming crisis. Man's character has not changed materially over the last centuries even if institutions and society naturally have changed. Therefore, even if the content of the institutions change, the interactions are similar. What makes the study of financial crises in history worthwhile is that there maybe is a large set of present-day institutional concepts that can be used to analyze historic contexts, fully aware that the contents of the institutions may be different.

## **2. Purpose and research questions – what happened, what was the institutional framework like and how did it work?**

Although there unquestionably was fraudulent behavior preceding the collapse, I have chosen to explore whether there may have been institutional factors involved in governing the behavior of bank management in MD. It touches on the question whether world events are governed by structures or actors. The purpose is also to test the effect of the design, perception and enforcement of these institutions.

The research questions are as follows:

- What happened during the last years before Malmö diskont crashed?
- How the institutional framework was constituted surrounding the banking sector?
- How did the institutional framework interrelate with the relevant actors connected to Malmö diskont and how can this help explain the development of the crisis?

The article has the following parts: in section 3 I briefly present the motives for using an institutional approach. In section 4, the method and sources for the research is described. Section 5, 6 and 7 gives the facts to be considered: the background, a description of Malmö diskont and the chronology of the events leading up to the crash in 1817. Section 8 deals with the second question; the description of the institutional framework during the research period and in section 9 the third research question is addressed, i.e. how institutions and actors interrelated. Section 10 summarizes the paper and in section 11, some comments on the aftermath of the crisis are made and some suggestions for further research are given.

### 3. Theory - institutional theory with a human flavor

North defines institutions: "Institutions are the rules of the game in society or, more formally, are the humanly devised constraints that shape human interaction."<sup>6</sup> The basis laid when the first and the second research questions above are dealt with enables me to discuss the "interaction" between actor and institution, which is the chosen way to tackle the question why crises in the financial sector can occur.

The motives for choosing an institutional analysis for this study are several. Firstly, "... incorporating institutions into history allows us to tell a much better story than we otherwise could."<sup>7</sup> I agree, but the necessary condition is that the character of the institutions is also analyzed. John Commons adds to the motive for using an institutional approach: "The concept of good or bad economy is so self-evident, and its psychological equivalent, the sense of fitness or unfitness, which is 'common sense' or 'good sense' or merely habit and approved custom, is so continually present in every act that, in the history of economic thought, good economy, which is merely a good proportioning of the parts, has often been either taken for granted or erected into an entity existing outside or above the parts."<sup>8</sup> What Commons captures in this paragraph is the role of unwritten rules in society and in business. This is particularly important at a time when a larger part of rules of business was informal and not yet turned into elaborate formal banking laws or rules on audit and bank inspection as they are today. Secondly, using an institutional approach adds to the possibility of generalization if the concepts used can be identified as having their equivalents in other crises. This is not the purpose of this article but appears in section 11 as a suggestion for further research. Thirdly, in the writing of North, there are several passages that reinforce the idea of using an institutional approach: "Actors would certainly like to improve outcomes, but the information feedback may be so poor, that the actor cannot identify better alternatives."<sup>9</sup> The key word in this quote is "cannot". I dare say that regulations are sometimes so strict (or ambiguous), that they eliminate choices of actions that may have lead to a better outcome. Fourthly, it is not clear where North stands on this interrelationship between actor and institution. He maintains that institutions are: "...a mixture of informal norms, rules and enforcement characteristics [that] together defines the choice and results in outcomes."<sup>10</sup> In a different context, he claims: "Institutions form the incentive structure of a society and the political

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<sup>6</sup> North (1990), p. 3.

<sup>7</sup> North (1990), p. 131

<sup>8</sup> Commons (1924), p. 2

<sup>9</sup> North (1990), p. 24

<sup>10</sup> North (1990), p. 3

and economic institutions, in consequence, are the underlying determinant of economic performance.”<sup>11</sup> Hodgson has a similar and even more explicit view: “Thus in a subtle way, through the operation of market conventions, routines and rules, the individual in the market is to some extent ‘coerced’ into specific types of behavior.”<sup>12</sup> I will discuss their deterministic view in these statements.<sup>13</sup> It has been done by others. See Sjöstrand: “It has been suggested above that institutions influence human (inter)-actions, but this is not synonymous with a declaration of environmental determinism.”<sup>14</sup> Kindleberger refers to an even more extreme view, namely Coase’s, who maintains that: “...demand and supply call the tune and that institutions dance to it.”<sup>15</sup>

Finally, the personal conduct by the directors and the reaction to institutional change will be discussed. There may be inertia in the system by the fact that new institutions do not conform to the norms of society, but also due to the roles that the actors have assumed for themselves. Scott presents one way of looking at it: “All institutional conduct involves roles. Thus roles share in the controlling character of institutionalization.”<sup>16</sup> My reading of this is that if formal institutions conflict, not only with norms in society, but also with roles that actors have assumed, it reduces the effect of institutional change. Another dimension of the human part of the events is the perception of institutions. North: “Pattern recognition rather than abstract logical reasoning is at base the way human neural networks appear to operate.”<sup>17</sup> Or otherwise put; people believe that they see a pattern, but there is none. A final human behaviour pattern, which may have a bearing on this study, is the necessity for action. North puts it succinctly like this: “...the mental constructs individuals form to explain and interpret the world around them is partly the result of their cultural heritage, partly a result of the ‘local’ everyday problems they confront and must solve, and partly a result of non-local learning.”<sup>18</sup> I interpret the key words as: “must solve”. Inaction is not an option.

#### 4. Method and sources

Most of the literature on Malmö diskont concentrates on the criminal behavior of its directors. The reasons for the behavior are less covered. Thus, from a methodological perspective, I have

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<sup>11</sup> North (1993), p. 1

<sup>12</sup> Hodgson (1988), p. 179

<sup>13</sup> The two North proposals also contradict the first quote from North, where he uses the word “interaction”!

<sup>14</sup> Sjöstrand (...), p. 28

<sup>15</sup> Kindleberger (1984), p. 4. He refers to Coase (1937), which is his seminal article on The Nature of the Firm and (1960), which is his article on The Problem of Social Cost

<sup>16</sup> Scott (1995), p. 38

<sup>17</sup> North (2005), p. 26

<sup>18</sup> North (2005), p. 61

chosen to study contemporary sources, in the form of correspondence between important men in society, government protocols and the like. Also, the archives and accounts of MD were taken over immediately after the crash by the National Debt Office and are in reasonably good shape. Finally, there are some memoirs and accounts of not only the events, but the social and economic context which prevailed at the time period leading up to the crash.<sup>19</sup>

The categorization of institutions offered problems; not so with royal proclamations or laws, but with those institutions, which are ambiguously or narrowly defined. These comprise e.g. those concerning banking inspection and audit as well as responsibility for the banking system. The question arises whether I am looking for something that did not exist and thereby trying to impose institutions that are only present today. I will try to demonstrate that they existed although not in a form as explicit as today. This is my argument for using present-day institutional concepts.

## **5. Background – the 1810's was a turbulent decade**

The 1810's, during which the MD events occurred, was one of the most turbulent decades in Swedish history. Sweden had lost a third of its country by ceding Finland to Russia after an expensive war. A new royal dynasty and a new constitution had been instituted after a coup d'état where the king was dethroned, mainly because of the war failure. The new Bernadotte dynasty (still in place) was installed in 1810. Jean Baptiste Bernadotte had been one of Napoleon's marshals and was an experienced military and administrator. The hope was that he would regain Finland but he instead achieved a loose union with Norway. Sweden participated in the war against Napoleon and the union with Norway was a result of that war effort. Economically, Sweden had advantages of the Napoleonic wars. Transit trade through several ports in the west and south of Sweden bypassed the continental blockade. After the war, however, Sweden's economy fared badly. Merchants, devoid of their transit trade, went into bankruptcy and on top of that crops were bad during 1816 to 1818.<sup>20</sup>

## **6. Malmö diskont – a brief description**

Malmö diskont was founded in 1803. The king Gustav IV Adolf was instrumental in introducing a monetary reform that year, linking the government currency issued by RSB (the Riksdaler) to specie. In connection with this reform, it was considered desirable to encourage the establishment

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<sup>19</sup> The contemporary sources are not quoted in the text, but a summary of them is given in the list of references

<sup>20</sup> Historical statistics (1959), p. 44

of regional banks. The purpose was partly to stimulate regional development, but a side-purpose was to help promote the use of the new currency. Three banks were chartered, in Gothenburg, Malmö and Åbo(Finland). The share capital was raised by private funds and paid in silver, deposited with the RSB. The RSB would share in the profits in exchange for granting a committed credit line at an advantageous rate – 3 per cent per annum. The number of shareholders in Malmö diskont was around 200, most of them living in Scania. The bank in Finland was closed in connection with the Swedish-Russian war 1808-09. A new bank was founded in 1810 – The Göta Kanal diskont – with a purpose of assisting in financing the building of Göta Kanal, a canal linking the Baltic Sea with the North Sea. By then, the two banks in Gothenburg and Malmö had already been in existence several years and had been very profitable.

The banks were called “Diskont” banks. This name is derived from the lending practice of discounting the interest on loans and deducting the interest before paying out the loans. According to the by-laws, loans were not allowed for more than six months. Security would normally be given by two reputable citizens or by other security in shares, bonds or merchandize of the highest quality. RSB had a monopoly on lending in Stockholm and MD’s lending was almost exclusively done to the inhabitants of the Scania province. On the other hand, most of the funding for Malmö diskont was done in Stockholm, where the bank kept an agent. Against deposits made in MD, certificates of deposits carrying three per cent interest were issued. Lending was usually made at the then prevailing maximum legal lending rate at six per cent per annum. Overdraft interest was equally six per cent per annum and overdraft interest became a substantial part of income for MD in its final years.

There were three original directors in the bank; two of which from families of very high standing; Frans Suell, merchant and industrialist and Cornelius Faxé, merchant. The third, Carl Magnus Nordlindh, had had a comet career in Malmö. Born out of wedlock in a city not far from Stockholm, he had, through connections in Malmö, risen quickly to the pinnacle of the Malmö society. He was a licensed merchant, member of the town eldest and became mayor in 1805. As such, he was the host for the king and his court, when he resided in Malmö for half a year in 1806. Nordlindh was at the top of the Malmö society. In guilds, merchant societies and order societies he held prominent positions. Suell and Faxé both resigned in 1812 and 1813 respectively. They were succeeded by Suell’s half-brother Henrik Falkman, merchant and Samuel Christian Björkman, merchant.

## 7. Chronology and events – the rise and fall of Malmö diskont

### *1803 to 1812 – the good years*

MD started at a very auspicious time. The enclosure movement was under way and credits to agriculture for investments in connection with the transformation of farming in Scania were much sought after. In addition, Malmö was in this period transformed from a bastion, surrounded by high walls into a more open city. The “Demolition Company”, which was designed to take down the walls, was a large borrower as well as some other companies, involved in the development of the city, such as the one building a new theatre. All in all, Malmö diskont was credited with the increase in the social standing of the city and several landlords established themselves with large estates in the city. The business of the bank was, for the years to around 1812 extremely successful and shareholders received generous dividends. There were crises, in particular when the Åbo diskont was closed. There was then a run on the other two diskonts, which was stemmed by extra infusion of liquidity from the RSB.

### *1812 – 1814 – the foundation for crisis is laid*

The war with Russia had required large amounts of money. The monetary base increased dramatically during the period up to 1810. The convertibility of the Riksdaler was impossible to maintain and was quietly abandoned without any formal decision. The monetary expansion coincided with a dramatic increase in inflation and speculation was wide-spread in real estate. During the period from 1812 to 1814 interest rates on the unofficial credit market were much higher than in the diskont banks and the latter found it difficult both to attract deposits and to lend money at the prescribed maximum lending rate. Market rates were at times twice as high. This led to many failures among real estate speculators and the credit market was tight. A way for Malmö diskont to still generate money (to generate dividends for the shareholders) was to device new and innovative lending methods<sup>21</sup>. These methods were criticized by the auditors of the bank and the “Bancofullmäktige”<sup>22</sup>, (hereinafter called “BF”) and after MD promised to correct their behavior, BF let the matter drop. But lending did not stop during this time, which was characterized by warfare and illicit trade, breaking the continental blockade. Due to the unstable

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<sup>21</sup> One particularly ingenious way was to issue loans to needy borrowers such as farmers. The loan currency was certificates of deposit in MD, carrying three per cent interest. For the loan for six months, the borrower paid six per cent per annum. However, as the borrower needed a more exchangeable means of payment, he resold the CD's to MD at a discounted price, which effectively meant that MD did not have to pay any interest on the CD and the borrower paid interest twice. No wonder then that MD was able to pay dividends to the shareholders in the 25 – 30 percent rate on nominal share capital during the crisis years.

<sup>22</sup> Bancofullmäktige was a group of parliamentary appointed persons, who were in effect governing the central bank, Riksens Ständers Bank. A possible translation into English may be “The Board of Governors of the Riksens Ständers Bank”



times, however, lending became riskier and riskier. In the case of MD, the risky lending became concentrated on three merchants, Jonas Ståhle, Jacob Kock and Haqvin Malmros. Ståhle in particular became heavily involved in some failed transactions, which put him in a liquidity squeeze. For example, he bought a large amount of supplies for the war on Norway in 1814. However, Bernadotte finished the war quickly and the supplies became virtually worthless. Also, Ståhle had a barter trade with Denmark, which was stopped in Scania by the local Governor General, due to his suspicions that infiltrators might exploit this opportunity to extract strategic information valuable in the then ongoing hostilities with Denmark. Thus, goods that had been used as collateral for loans from MD became worthless. The loans given to these three merchants were way outside the authority given in the by-laws, both as concerns size of loans and as these credits were rolled-over also against the rules of maximum maturity.

#### *1815 – the turning point?*

This year was eventful in several respects for MD. An extraordinary parliamentary session was held during the year. One of the items on the agenda was to debate the possible extension of two of the three diskont banks' charters. Both the diskont in Gothenburg and that in Malmö had charters that would expire after 15 years i.e. in 1818. It was decided that the diskont in Gothenburg would merge into Göta Kanaldiskonten. The charter for MD would be extended by two years to 1820. RSB had a lending subsidiary, partly owned by private owners, which would become wholly owned by the state.

During the parliamentary session, in the spring, there arose a debate about the construction of the Göta Kanal. The costs had been running over budget and there were strong voices to end the project. This led to a run on Göta Kanaldiskonten (with deposits transferred mainly to the other two diskont banks) and it did not subside until a clear go ahead was issued for the canal project. MD had not fulfilled its promises in 1814 to comply with the rules of the by-laws and was in August subjected to a new set of stringent operational demands from BF to bring its operation back in order as soon as practicable.

November became a crucial month for MD. Many merchants went bankrupt after the continental wars ended. It started in Stockholm and continued in Gothenburg and to a lesser extent in Malmö. However, the effects on MD from its depositors in Stockholm became violent. A run on the bank – and the Gothenburg diskont – would have brought both banks down, were it not for the efforts of the then acting finance Minister Hans Järta, who worked in tandem with the crown prince

Bernadotte. Unswervingly, they used state funds to provide liquidity to MD. About 700 000 Riksdaler was extended to MD, to meet redemption of MD assignments and CD's. Thus, the run abated in a few weeks. Negotiations between the government and MD, however, after the crisis resulted in draconian terms for the activity of MD. Not only were the three bank directors required to enter a general and unconditional personal guarantee for the money extended, but additional collateral, some of which in real estate and some in shares were put up to the government. On top of that, stringent rules for the lending activity were introduced in the agreement and a harsh repayment schedule for the 700 000 Riksdaler.

Unknown to the government, the loans to the three merchants Ståhle, Kock and Malmros had reached substantial proportions and a management meeting in Malmö diskont decided to consolidate the loans and to keep them secret. In addition, access to the cashbox was restricted to one of the directors only.

#### *1816 – deeper into the morass*

During this year, MD went further into the morass. Although the government loan was amortized in good order, there were other things happening. First, Ståhle proposed early in the year (to Nordlindh) that he would admit his precarious financial position and go into bankruptcy, but Nordlindh had the hope that things would straighten out in the end and managed to convince him to keep quiet. Ståhle was one of the biggest merchants in Malmö and his reputation was not yet tainted. The effects on MD were judged by Nordlindh to become disastrous if Ståhle's condition was revealed. Secondly, at the annual general meeting, the RSB-appointed auditor found that MD had still not abided by the by-laws and wanted the Chancellor of Justice to investigate and possibly prosecute the directors of MD. The government turned down this request. Thirdly, the guarantors for the three major borrowers must have got wind of their wobbly financial positions and started to withdraw their sureties. This in turn led the three borrowers in complicity with the directors to start issuing guarantees among each other and even to falsify signatures on guarantees. Also, lending practices included "rehypothecation", i.e. that you use clients' collateral as a means to borrow more in the name of the bank. At the time, crops were failing and there was a large demand for credit in the country, not the least in Scania. Thus, the directors were caught in a conflict. On the one hand, they wanted to continue the lending to farmers, craftsmen and industry. On the other they wanted to cover up the excessive loans to the three major borrowers and hopefully recover what they could, so that the business could carry on.

### *1817 – Cover-up and crash*

The conditions described above continued into 1817, but by then the government had become suspicious and appointed the county governor in Malmö to make a full investigation of the financial condition of MD. In the meantime, the annual general meeting was held and the government decided to order the management of the bank and bank's auditors to issue a "clean" audit report for the activities of 1816. This extraordinary measure was taken in order not to rock the financial system, at least not until all cards were on the table. In September the County Governor's report was finished and it turned out that the three main borrowers had bad or fragile loans amounting to around one third of the total outstanding loans. In late September therefore, the government decided that the directors of MD would have to go and that management would be taken over by the government. To protect the bank from another run, they had available funds amounting to 500 000 Riksdaler. The immediate reaction was violent from the public and the bank was subjected to a massive run. The government never used the full available amount to protect MD, but only 200 000 Riksdaler. Instead, in early October, it was decided that MD would be taken over by the state. This in turn led to massive runs on the two other diskonts and they both had to close their doors to the public, never to open again.

Another extraordinary session of parliament was convened in November, wholly devoted to the fate of the diskont banks. It continued into 1818 and the outcome was that the National Debt Office would take over the assets of MD and dismantle it. The ultimate loss on Malmö diskont to the government was around 400 000 Riksdaler, but on the Göta Kanaldiskont it was more than twice as high. The diskont in Gothenburg left a certain surplus to its shareholders. Holders of assignments in MD were paid in full and holders of CD's were also paid in full, but only after a time delay of five years (with interest). Shareholders received nothing in the winding-up of Malmö diskont.

## **8. Institutional framework**

### *Introduction*

The first question: "What happened" was answered in section 7. The second question was how the institutional framework was constituted in MD's time and will be dealt with in this section. I will divide the institutions into formal and informal. Formal institutions are those that originate from a directive from the authorities; laws, royal proclamations (including the charter for MD, which also contained the by-laws for the bank), but also those directives that were issued by BF in 1815 and

the government in early 1816, after the November crisis of 1815. In the group of formal institutions, I also discuss the question of audit and bank inspection as well as the question of what government or parliamentary entity was responsible for the structure of the financial system in the country. Among the formal institutions, I bring up the institution of Lender of Last Resort, which as a concept is a much later phenomenon, but in effect existed in Sweden at the time. Among informal institutions, “Best banking practice” and “Social structure” are the most distinguishable. This latter institution ties in with what today would be called “Reputation” or “Trust”.

#### *Formal institutions*

Concerning the **legal system** there was a new constitutional framework from 1809 and succeeding years, which contained acts on the running of the government and the parliament, the rules of royal succession and the freedom of speech. The application of this constitution was not clear from the beginning. In § 72 of the Government Act, the central bank (RSB) was named as the only entity entitled to issue notes, valid as legal tender. Nothing explicitly forbade other entities to issue means of payments. This paved the way for the diskont banks to “create money”.<sup>23</sup> The moneys, as indicated above, were mainly in the form of “assignments” that were effectively certificates of deposits on the MD account with RSB. They were at any time exchangeable for Riksdaler. This could for example occur at the time of tax payments, when Riksdaler was the only legal tender. The diskont banks also created money in another way. The certificates of deposit in the diskont itself were also accepted as means of payment. Conceptually, these CD’s should have corresponded to an actual deposit, but that was not always the case, at least not in MD. They were for example used by them as loan currency in the schemes described in note 21. The denominations of the assignments were low and they were therefore accepted and useful in everyday trade in Scania. The incentive to redeem them against RSB money was therefore also low.

The other main legal complex was the comprehensive Law of 1734. It contained *inter alia* Acts dealing with marriage, inheritance, trade, real estate, ill deeds and legal procedures. It was under this law that the directors of the bank were tried after the fall of MD. The business rules were laid

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<sup>23</sup> They were not alone. For example, in the area surrounding the forestry and mining company Stora Kopparberg in the province of Dalecarlia, notes issued by the company was used as local tender. Similarly, the industrial company Höganäs in the province of Scania issued tokens, which were used as local money.

down in the Trade Act in the law. Finally, there was a Bankruptcy law from the late 18<sup>th</sup> century, but it was not invoked when the diskont banks fell.<sup>24</sup>

The **by-laws** of Malmö diskont were included in its charter. It was in all operational respects similar to the by-laws for earlier diskont banks during the late 18<sup>th</sup> century. Apart from rules about the subscription procedure it contained certain governance rules which are worth commenting upon. Credit rules have been mentioned with maximum loan interest rate (6 p.c.) overdraft rate (an additional 6 p.c.) maximum tenor on the loans (6 months) and maximum size of loans to one borrower (5 000 Riksdaler). Exception from this maximum amount could be made for loans secured by certain shares, public bonds and merchandize, of good value and kept securely in escrow for MD. Concerning credit worthiness, the by-laws stipulated that credit could be extended (or guarantee accepted) only by those having a recognized fortune or generally well-accepted credit. This was in essence the merchant credit custom that was adopted in the banks.

**BF's rules of 1815 ("BF 1815") and the Government's loan conditions of 1816 ("Gov 1816")** were two important sets of rules that influenced Malmö diskont. BF 1815 was instituted in answer to one of the reasons for the parliamentary session of 1815. It concerned the extension of the charter and as a corollary included special operating rules that would be followed. Thus, BF 1815 concerned all three diskont banks, whereas Gov 1816 only applied to the two banks where there had been runs. The conditions for MD in Gov 1816 were tailor-made.

The main points in BF 1815 were four. Firstly, it stipulated that the charters for the diskont in Malmö would be extended by two years, to 1820. Göta Kanaldiskonten would merge into the diskont of Gothenburg and the latter would cease its business. Secondly, Malmö diskont would receive an increased committed facility from the RSB. As a compensation for that, a larger part of the future profits in Malmö diskont would be allocated to the RSB. Also, the committed facility was not intended to be used for on-lending, but should be used to strengthen the capital base of MD. A third decision was that the minimum denomination for assignments and CD's would be raised.<sup>25</sup> As a further move in that direction, it was decided that the CD's without coverage, which had been used as loan currency in the years before 1815 would also be withdrawn. Finally, the total

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<sup>24</sup> This is a research project in itself. Although the 1734 Law clearly state that owners of companies – banks no exception – were jointly, severally and unconditionally responsible for the liabilities of a company, this clause was never exercised when MD was wound up. It may have been judged that the effects of such a toll on the fortunes of the populace of Scania may have created even larger problems than those that arrived anyway.

<sup>25</sup> This method to strengthen the power of the central bank was also discussed in Scotland, where the one-pound note issued by the Scottish banks after all managed to remain in circulation

loan assets would be limited to the amount which was outstanding at the end of 1814. The concern for the financial system – and the fact that Sweden was at the time in dear need of capital necessitated a soft transition. However, there is evidence that the practice of issuing “non-covered CD’s” was resumed already in the fall of 1815.<sup>26</sup>

If the BF 1815 restricted Malmö diskont’s freedom of action, the rules following the November crisis in 1815 – Gov 1816 -were almost “strait-jacketing”. Apart from security given, as described above, several operational rules were also introduced; of loans repaid, only a third was allowed to be re-lent, nobody was able to borrow more than 1 000 Riksdaler (as opposed to 5 000 in the by-laws) except if collateralized as described before. All loans should unconditionally be repaid at maturity, with possible extension of six months, after which the collateral would be assumed by the bank and sold. Those loans exceeding the earlier prescribed maximum should be brought down to the maximum amount and not renewed. In addition to this, the cash support from the state, amounting to 700 000 Riksdaler should as soon as possible be repaid.<sup>27</sup>

**Responsibility for the banking system, bank inspection and audit** are modern institutional concepts but tempting to introduce into history and regard the existence or non-existence as a sign of the functioning of the financial system in the historic context. Take bank inspection as an example. In Sweden the Bank inspectorate was introduced in 1907. However, already in the 1860’s there was a bureau in government, which was designed to follow developments in the financial system.<sup>28</sup> The conventional wisdom is that there was no bank inspection before then. I argue that there was bank inspection as a function already in the 1810’s although it was not formalized as it became later in the century.<sup>29</sup> So, even if not formalized as it would later be, I find it rewarding to discuss these three institutions – responsibility for the banks, bank inspection and audit - from a functional point of view.

Responsibility for the banking system was unclear. Parliament was at the time responsible for RSB and the National Debt Office. The government, on the other hand, was responsible for economic affairs. A conflict between parliament and government during the 19<sup>th</sup> century impregnated the policy of the financial system management where both strived for more control. As the above shows, Parliament had issued rules for the diskont banks, but after the November crisis in 1815,

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<sup>26</sup> Andersson (1985), p. 37

<sup>27</sup> It is worth noting that this actually happened and that MD repaid it in full before the crash

<sup>28</sup> Sommarin (1927), p. 6

<sup>29</sup> Compare with the discussion of the institution ”Lender of Last Resort” later in this paper, which I argue was present in the November 1815 crisis. Wetterberg (2009) even argues that there was a LoLR function in the 1760’s.

the government was clearly at the helm. It remained that way through the denial of government to perform an investigation of MD after the 1816 annual general meeting and particularly through the cover-up by a clean audit report after the annual general meeting in 1817. When MD collapsed, it was the government that directed the process. But in the crisis during the fall of MD, the government immediately dropped the responsibility – as a hot potato - back in parliament’s lap by calling an extraordinary session to decide what should be done.

Bank inspection was not regulated but it was performed *ad hoc* three times from 1815 by special investigators. It is interesting to note that monthly statements about the diskont’s condition were to be sent after the 1815 crisis – to the government. Only in 1817, the reports were sent to BF.

Audit is a form of inspection. MD had four auditors, three of which were elected among its shareholders. The fourth was appointed by RSB. The internally appointed auditors were most often both shareholders and borrowers in the diskont. Auditors were responsible for the disclosure after 1812 of the practice of issuing non-covered CD’s, but it did not lead to any sanctions, only that management should correct the malpractice, which they did not.

A formalized **Lender of Last Resort** (“LoLR”) did not exist in Sweden during the 19<sup>th</sup> century. However, on a couple of occasions, notably in 1857 and 1879, the state performed actions, that could be characterized as “lending as a last resort”. In 1815 the lending of last resort was direct. Through the use of various funds, available to the government, legal tender was extended to two banks that were under the siege of depositors and holders of assignments. There was remarkable strength and seemingly bottomless sources of money and the commitment to helping the two troubled banks was forceful. The reason for the state’s intervention was mainly the fear for the stability of the financial system. The state had already come to the help of the diskont banks several times before, with cash infusions (in 1805, 1809) and support for the Göta Kanal project (1815), so whatever the formal structure, the market was accustomed to state support. This help was also forthcoming in late 1817, when MD had problems, but the execution of the LoLR support was tamer than and not as focused as before.

#### *Informal institutions*

**Best practice in banking** was not something that was formalized in Sweden at the time. There were several reasons. Most of the lending occurred outside the banking system. Predominantly, lending was conducted by and between merchants, mostly in connection with trade, but they also

lent to the general public; mostly to other business partners and to relatives. In addition, the church and other institutions lent money. The latter included financial institutions that catered to the iron trade, crafts and textile manufacturing. But the dominant part of credits was performed under what can be described as best practice among merchants. Although often collateralized by merchandize, lending based on a good name was common. In Malmö diskont, the by-laws stipulated that lending could be made to persons that were “considered” to be wealthy or were persons of good standing.<sup>30</sup> The merchant credit system was built on networks. In these networks credit worthiness was tested. Ståhle was, when the credit spiral began, considered to be one of the leading merchants in Scania, Kock was married to Nordlindh’s sister and Malmros came from a prestigious family. All three directors of Malmö diskont and the three major borrowers were licensed merchants and members of the merchant guild of Malmö. It is thus likely that they employed the merchant best practice when they extended credit from MD.

**Social networks and reputation** was an important facet of the life of Malmö diskont. In Malmö existed several groups, to which all three directors of MD belonged or in which they held high positions. Society life revolved around in particular The Order of the Amaranth and the Guild of St Knut. Professional groups were for example the Merchant Society and the Agricultural Society. Even the shareholder group of MD could be considered as a group, which reinforced the social network. Membership in the groups was to a large degree over-lapping, comprising merchants, estate owners (mostly nobility) and craftsmen. At the time, there were few industrialists in Malmö and those who were, belonged to the above groups as well.

## 9. Discussion about the structure and influence of institutions

### *Introduction*

The second question, about the structure of the institutional framework was dealt with in the preceding section. In this section I will try to qualitatively assess how the institutional framework interrelated with the actors concerned, in particular the three directors of Malmö diskont, i.e. to deal with the third question: “How did the institutional framework interrelate with the relevant actors connected to Malmö diskont and how can this help explain the development of the crisis?”

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<sup>30</sup> Financial analysis as a basis for the extension of credits was not introduced formally before the beginning of the 20<sup>th</sup> century. Marcus Wallenberg of Stockholms Enskilda Bank is said to be among the first ones to require financial statements from the companies if they were borrowing from the bank



When discussing institutions, in particular in connection with financial crises, the design, perception and enforcement of institutions are crucial. This is true for two reasons. Firstly, crises most often occur at times when there is a hectic activity in the economy, usually accompanied or supported by bulging credit volumes. The wheels turn fast and the effect of an ambiguous or misconstrued institutional rule will have drastic consequences. Secondly, formal and informal institutions have different life-cycles, at least *ex ante*. A formal institution can be changed over-night, whereas informal institutions usually grow out of a long history. Thus, they are not necessarily congruent; i.e. a formal institution may conflict with an informal. The reverse is also true, that a formal institution can be removed over-night, but if it was firmly anchored in a commonly accepted informal behavior, two things may happen: nothing happens – the rule was unnecessary or the removal appears as a license or even an encouragement to behave differently by certain actors than the norms prescribe.<sup>31</sup> Ideally, of course, formal institutions should reflect informal institutions and there is an end in itself to create laws that are consistent with the majority's norms and behavior.

#### *Formal institutions' influence*

The legal structure was in principle constraining on the activity of MD. That they committed crimes are beyond doubt. The legal requirements as stated in the Law of 1734 should not have been too difficult to comply with or too constraining. There is one ambiguity, however, which merits discussion. The law was explicit on the matter of general responsibility for the shareholders. In spite of that, there was no sign of going through the bankruptcy procedure at the time of the crash. And, more importantly, did the government put this law out of place when they introduced the personal responsibility of the three directors in MD for the 700 000 Riksdaler in connection with the crisis in 1815? Did the directors suddenly perceive a personal commitment for MD's business instead of a collective responsibility?

It is also easy to argue that the law was too old and thus incomplete. Eighty years had passed since it came into force. Agriculture had gone through two enclosure movements and trade and industry had developed, not the least industry, which was in a proto-industrial phase. With all the merits of a stable legal framework, the events described herein argue for the necessity to adapt laws to reality.

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<sup>31</sup> One example that springs to mind is the pre-ambule to the financial crisis in Sweden in the early 1990's. This crisis was preceded in the 80's by a removal of virtually all long-lived quantitative barriers to lending that led to a massive lending spree, which was neither the norm nor what the system was ready to handle

The by-laws were the source of and could even have encouraged mismanagement. That applies particularly to credit extension, which should be granted to people of “good standing” and “assumed fortune”. Admittedly, this practice had its roots in the merchant business and on the whole it had worked well. Similar clauses had also been present in earlier banks during the 18<sup>th</sup> century and had not led to any major calamities. But the rules did not work in the troubled times during the Napoleonic wars. In turbulent times, one can argue that regulations for banks (as well as laws) should be analyzed and redone if necessary. Another tension-building clause in the by-laws refers to the fact that big loans should not be extended if they crowd out smaller and better borrowers. This is a conservative rule, but on the other hand impossible to follow, for example in 1816, when credit was tight and there were some big borrowers in MD already crowding-out smaller.

Rules that can be circumvented easily should never be put into place, because it provides an easy way to solve a problem the wrong way.<sup>32</sup> BF1815 and Gov 1816 were unambiguous in their design but tough on the diskonts and MD in particular. The economic situation in Sweden was weak and crops were bad. Given the situation for MD, with Ståhle as major borrower, to follow the directives to the extreme would have been impossible, without drastic consequences for the other borrowers and the province of Scania. The rules were consequently not followed – and they were easy to circumvent. Moreover, referring to the theory section, these regulations did not conform to the norms that the directors had established during more than a decade. Nor did they conform to the “roles” (cf. Scott in section 3) that the directors had established for themselves.

Worse, when the directors broke the rules and were discovered, they were not sanctioned but were given clean audit reports. The moral effect was that if directors only promised to correct their behavior – but not necessarily do it – there would be no sanctions. The rules were thus perceived as less severe than they were intended to be. The enforcement was lax.

Who was responsible for the banks – the government, parliament or maybe the governors of the RSB – was another sign of ambiguous governance. Until the crisis of 1815, the diskont directors must have felt that they were subordinated to parliament and RSB, but in 1815 the government took firm control of affairs for the diskonts. Only a few months earlier, there had been no question of who set the rules – and Nordlindh, as an MP had been lobbying for MD with his

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<sup>32</sup> An example is the 1930's Regulation Q in the United States that forbade banks to pay interest on current accounts. In the late 1970's, when interest rates soared, the banks were compelled – or forced – to find a way around this regulation and the solution was offshore money market funds, which functioned as a way to offer clients interest on current accounts

peers at the parliamentary session – a situation which was turned on its head by Gov 1816. Audit continued to be the concern of RSB but on several occasions by the government. The monthly statements for MD were sent to the government. Only in late 1816 the governors of the RSB became privy to these reports. Thus, the question of who was the bank's principal was not clear, the inspections were present but *ad hoc* and audit was directed by the government – at least in the last few years.

The diskont banks had been supported several times over the time of their existence in a fashion similar to how a Lender of Last Resort would act. There had been very quick responses to when the diskonts had liquidity problems. They had also very efficiently repaid the cash support on every occasion. Thus, a logical perception was that they would get help in dire situations.<sup>33</sup> Admittedly, the situation was different in 1817. At that time, the lending to the three major borrowers was around six times the share capital and the loans were for the most part considered unsecure. The rest of the bank was, however, in retrospect sound and losses became “only” four times equity. Thus, if the government wanted, it could have continued the business. A logical thought that the directors may have had is that even if their behavior was not going to be left unpunished, at least the government would consider Malmö diskont an important financial institution worth maintaining.<sup>34</sup>

#### *Informal institutions' influence*

The diskont's lending practice and how it was (initially) executed leaves small room for criticism. All three major borrowers fulfilled the formal and informal requirements for credits. Admittedly, the size of the loans exceeded all boundaries; however, at least in the case of Ståhle, the directors believed that they had good collateral for their loans, at least when the loans were extended. The question then is: what could they have done? The eternal habit of throwing good money after bad, hoping that conditions will at least return to the situation when the investment – or lending – was made plays a role. But even more interesting is that evidence points in the direction that they only turned criminal after Gov 1816 i.e. after they freedom of action was severely curtailed.

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<sup>33</sup> The situation was similar in the 1990's in the US, when the concept of the “Greenspan put” was coined (see for example Ferguson (2009), pp169-170). In essence, the Greenspan put was a consensus in the market that the then head of the Federal Reserve, Alan Greenspan, would help out in case of a malfunctioning financial market and not less important that people believed that he could do it!

<sup>34</sup> This was also the opinion of the County Governor, Vilhelm af Klinteberg, who in a letter dated January 8<sup>th</sup>, 1818 to a person close to the government, Gustaf Fredrik af Wirsén, clearly assumes that this would be the case

It is difficult to escape the conclusion that the social network had a great impact on the directors' behavior. From an organizational perspective in banking, unless you have your depositors' trust, the bank cannot fund their assets. Trust from the public attracts depositors, creditors, note-holders and shareholders. Trust is an important condition for the reputation, which also encompasses other elements, such as *inter alia* prestige and an aura of commitment. The prestige in the case of MD emanated from the shareholder structure and that the directors were part of high society as well as members in governance of the city. Commitment was evidenced by the bank's contribution to agricultural development, but also in the construction of the new theatre, rebuilding of the city, institution of a horse and carriage company, new lighting and renovation of the town council house just to mention a few cases. But the reputation would not be protected by the latter components if the bank would have severe financial problems. It is interesting to note that trust was complete in Malmö up to the day that it was announced in Malmö that the government would take over the bank and that the directors would be prosecuted.<sup>35</sup>

For the directors, losing their social status meant that they were stripped of their possibility to do business and participate in the social life of Malmö.<sup>36</sup> The question is if this incentive for the directors to do right was binary – either you have social status or you do not or if the “status effect” could have been different if the directors would have committed “slightly lesser” crimes or would only have been judged on bad management of the diskont. This is a contra factual discussion and in the case of the diskont, the directors had been elevated to such heights, that the fall would probably have been hard, even if they had voluntarily involved the state earlier than they did.<sup>37</sup> Summing up, the conservation of reputation was imperative for management and provided an incentive to cover-up.

In addition, in the MD events there is a panoply of moral hazards which are hard to categorize; conflict of interest (why would internal auditors leak about the bad condition of a creditor which might have to call the loan and why would an appointee from the RSB kill its hen which is laying golden eggs?), an unclear definition of collateral in merchandize, the concentration of control

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<sup>35</sup> On the other hand, this may be what characterizes trust (or confidence): “The very meaning of trust is that we go beyond the rational. Indeed the truly trusting person often discards or discounts certain information.” “But then, when the confidence disappears, the tide goes out. The madness of their decisions stands revealed.” Akerlof & Shiller (2009), pp. 12 and 13

<sup>36</sup> Possibly with the exception of Henrik Falkman, who was considered to have been a person that was not very involved in the shady business of the other two directors

<sup>37</sup> In talks with historians (with no scientific purpose) in Scania, several have claimed that Nordlindh is far from considered a villain. On the contrary, for what he accomplished in Malmö and with the enclosure movement, he is rather a hero and has a street named after him in the south of the city. Thus, the fall from grace may shift with time. An interesting comparison is with Ivar Kreuger, who was for a long time considered a villain, but lately have become recognized for his entrepreneurial acumen as well as his financial engineering skills

eliminated as only one director had access to the cash box and why should clients' collateral be able to be used as a basis for further borrowing by the bank? One could say that these are "institutional flaws". They appear on the border line between best practice and formal rules.

## 10. Conclusion

Based on the above, the following statements about the interaction between the institutional framework and the actors in the prelude to the 1817 crisis could be:

- Formal institutions were not adapted to the then prevailing situation
- The design of the formal institutions was incomplete or ambiguous
- The perception of formal institutions by the actors was different than intended
- Too constraining formal institutions encouraged circumventing them
- Enforcement of formal institutions was weak and sent the wrong signals
- Informal institutions that may have worked well in the past, did not work as well in a new context
- It is not necessarily positive with a strong link between financial actors and the surrounding society

The above suggest that it is possible to find examples of institutional – actor interaction in many crises over time using today's concepts. The first contribution then that this essay has made is that financial history can be a rewarding field to look for common institutional features in financial crises. Much of existing financial crises research stop at the Great Depression during the 30's but there are crises during several centuries to explore. This also suggests that the solution to describing the anatomy of crises lies not in the top-down (macro) analysis, but in the bottom-up (micro) analysis - case studies. The second contribution is that an institutional approach is possible to employ for the analysis of financial crises. In this essay one set of institutions has been used and an analytical tool has been suggested for further use and refinement. The importance is the holistic property of this tool. Thirdly, the proposal on page 5 that there is a deterministic function between the institutional framework and the actors has been put in doubt. Instead, there is a complicated interplay between actors and institutions in the build-up of crises. In particular, in crisis research, the enforcement of institutions should be analyzed. This will illuminate the "height of the thresholds" between staying inside the rules of an institution or outside. Fourthly, institutions are often considered to be positive, because they lay down the rules and reduce uncertainty in business. But if, as in this case, the institutions are ill-designed, ambiguous, incomplete or

perceived wrongly, they become moral hazards in that they guide the actors in undesired directions. Lastly, one could speculate that there is a “point-of-no-return”, which if passed leads to a crisis. In the case of Malmö diskont that would probably have been either when then exceeded the lending limits for Ståhle (or realized that the collateral was worthless) or when Gov 1816 came into effect, placing directors between a rock and a hard place or when Nordlindh decided to make Ståhle abstain from going into bankruptcy. In any case, there were after all these events a long incubation time before the crisis materialized. The suggestion is that if Points-of-no-return can be detected earlier, it may mean that the effects of coming crises may be contained although not prevented entirely.

To conclude the conclusion, Ferguson suggests a recurring pattern, in which the three diskont banks fits well: “The Great Depression of the 1930s and the Great Inflation of the 1970s stand out as times of major discontinuity, with ‘*mass extinctions*’ [*my italics*] such as the bank panics of the 1930s and the Savings and Loans failures of the 1980s.”<sup>38</sup> The disappearance of the diskont banks was an extinction of a bank system, but they left a long memory in society and hopefully some contribution to why crises occur.

## 11. Epilogue and suggestions for further research

After the trial following the crash, the directors were not executed, nor were they pilloried, but Nordlindh, Björkman and Falkman all served prison sentences. Two of the three major borrowers served prison sentences. None of them returned to business. The unwinding of Malmö diskont took thirty years. The province of Scania suffered an economic downturn until around 1830. New banks - a branch of the RSB and a couple of savings banks - were established in Scania during the ten years following the crash but not until 1831 was a commercial bank – an Enskilda bank – established and then it was set up in Ystad, some 100 km from Malmö, where the memory of the diskont’s fate was still livid.

As for further research, I divide this in two parts. The first concerns the object of study and the second the subject of study. The purpose in the first instance is to collect new case studies that can confirm or reject the applicability of the method of analysis and the validity of the chosen concepts, paving the way for future generalizations and theory-building. The second is

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<sup>38</sup> Ferguson (2009), p. 355

interdisciplinary and concerns whether new disciplines can provide elements that can deepen the analysis of financial crises, but maintaining the character of an institutional study.

A suitable object of the next study with the method used in this paper is the City of Glasgow Bank crash in 1878. It bears many resemblances to Malmö diskont. Both banks collapsed, their directors were important citizens in their respective city, there evolved a concentration in lending and good money was thrown after bad, there was secrecy concerning these clients and their business and interestingly enough, both banks are considered in retrospect to have been performing a lot of social good. It is exciting to read what S.G. Checkland wrote: “There is a sense in which the manager and directors of the two<sup>39</sup> failed banks were victims of their situation.”<sup>40</sup> Could “the situation” be replaced with “the institutional framework”?

A subject (discipline) that can be used as a complement to the analysis of financial crises with an institutional approach is Behavioral Economics. As indicated in Section 3, human factors play a large role. Implementing behavioral theories such as for example Prospect Theory<sup>41</sup> is not too far-fetched. When Nordlindh abstained from calling Ståhle’s cards in 1816 and letting him go bankrupt, wasn’t that an example of not taking a (small) loss with certainty as opposed to risking a much higher loss under uncertainty? Another important concept in Behavioral Economics is “Fairness” Fairness expresses itself in many ways. It could either be unilateral, i.e. that an owner of assets decides to equalize or even out the distribution of assets among players (Bolton and Ockenfels, 2000) (Charness and Rabin, 2002) but it could also be bilateral (or multilateral) where there enters the element of reciprocity. That means that players can retaliate against what is conceived as intended unfair behaviour. In the case of Malmö diskont there seems to have been a major unfair behaviour by Malmö diskont, when they covered up the true financial position of the bank in the midst of the run on the bank in 1815 and the support from government. Was this in any way related to the feeble defence of Malmö diskont in its next crisis in October 1817? “The theory of reciprocity as developed by Rabin [1993] rests on the idea that people are willing to reward fair intentions and to punish unfair intentions.”<sup>42</sup>

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<sup>39</sup> The other bank was Caledonian Bank

<sup>40</sup> Checkland (1975), p. 473

<sup>41</sup> Kahneman & Tversky (1979)

<sup>42</sup> Fehr & Schmidt (1999), p. 852.

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### Unprinted and contemporary material

There are a number of unprinted sources that form the basis for the narrative of this article. They can be divided into official sources, unofficial sources (mostly correspondence) and printed narratives from people participating in or close to the events of Malmö diskont. Even if they are sometimes coloured by personal bias, they form a rich source on describing the events and also rebuilding the institutional structure

The first group of sources includes government meeting protocols, meetings of the governors of the central bank (Rikets Ständers Bank), royal proclamations (kungörelser) and official writings of various entities of the state. The second group includes mainly correspondence between, from and to men of the state such as for example Carl David Skogman (gray eminence during the crisis), Gustaf Fredrik Wirsén (former finance minister<sup>43</sup>), Lars von Engeström (Foreign minister, see note 44), Vilhelm af Klinteberg (county governor) and Johan Christopher Toll (former general governor of Scania and field marshal). In this group one can also include the accounts of Malmö diskont. They amount to over 12 meter's shelf space.

The third group includes mainly three works:

- Carl Christian Halling's memoirs. Halling was secretary at the last annual general meetings up to the crisis in 1817 and subsequently became mayor of Malmö
- Anders Wollmar's memoirs. Wollmar was the son of the main competitor to Nordlindh in the election for mayor in Malmö (which Nordlindh won). The text is both critical and respectful to the diskont bank and its directors
- Carl Mengel's relation of what ( he thought) actually happened in Malmö diskont all through its existence. Mengel was the "chief financial officer" of Malmö diskont during its whole life.

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<sup>43</sup> The term is somewhat misleading, as there were no ministries at the time, but the function that e.g. Wirsén held was similar to that of a finance minister



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