Research about financial crisis in the academic accounting literature the last 4 decades
– a review of research published in the leading journals

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Research about financial crisis in the academic accounting literature the last 4 decades – a review of research published in the leading journals

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Abstract
The world has invested much in accounting education and the number accounting scholars and academic accounting journals have increased over the last decades. Still large financial crises occur. There has actually existed 9 large national, regional or international FC during the last four decades, the current the financial crisis of 2011 un-counted. This means that there have been opportunities for the growing number of scholars to discuss accounting in a context of FC. The main purpose of this paper is to count, describe and analyze the volume of and content of research, which discuss the relation between FC and accounting and is published in leading academic accounting journals. The paper has reviewed articles published in 12 leading academic accounting journals in the period 1970-2009. The total number of articles published in the selected journals in this period of time is about 8 500. The main conclusion is: Very little research, 20 articles, or 0,02 %, of the published articles is about accounting in financial crisis in the studied period. Accounting research has consequently avoided to participating in the processes of FC, the roles, or functions, of accounting in FC. The research has primarily focused on issues within the accrual accounting paradigm and accounting within the private sector, even though cash flow issues and the public sector, especially central government level, seems to be important dimensions in order to understand the role of accounting in financial crisis.
1. Problem and purpose

According to the rhetoric of accounting the intended function of accounting is to decrease uncertainty in processes of decision-making and accountability (Mellemvik, Monsen and Olson, 1988). These functions have been unquestioned for long, even though accounting has existed before, during and after the financial crises of 2008 (FC2008).

When discussing accounting, and especially financial accounting, an often made, implicit, assumption is that financial accounting is related to the private sector. Since long accrual accounting, with national adaptions, has been the dominating paradigm in many countries. The internationalization of business and finance has lead to a more international harmonized accounting financial accounting in order to supply stakeholder in different countries with similar structural characteristics of the information. The adaption of International Financial Reporting Standards (IFRS) has in the private sector led to a strong international harmonization of accounting norms in many countries. The story doesn’t end here, the public sector in may countries has been involved on processes of translating accrual accounting principles to the public sector, Some countries actually started this process in the late 70s and early 80s. Today there is one international coordinator of this process, and it is Institute for International Public Sector Accounting Standards (IPSAS), which has the IFRS as a model. Consequently the idea of supporting stakeholder with financial accounting information has been international harmonized, both in the private sector and in the public sector.

Then international harmonization of norms for financial accounting is certainly a large process, where many accountants and accounting academics have been involved. But the monitoring idea has broader consequences than that, which Power (1997) very insightful labeled as the Audit Society.

The global society has actually invested a lot in accounting research and academic education. According to Bonner, S., E., Hesford, J., W., Van der Stede, W. and Young, M. (2006), there was about 4 700 accounting faculty member worldwide in the beginning of the 1980s and the corresponding figure was in the beginning of the
2000s about 10 500. The number of accounting academics has consequently doubled in two decades. Bonner et. al. (2006) also argue that the number of English-language academic research journals has increased with 60 journals since the early 1980’s. This means that there have been a lot of possibilities to publish accounting research for the growing faculty.

Even though accounting as practice and research has increased dramatically, financial crises occur, the FC-2008 was certainly not the first regional or international financial crisis (FC).

Anthony Hopwood wrote late 2009:

“The current economic and financial crisis has significant implications for accounting, both for practice and for the research community. In the areas of financial accounting, auditing, management accounting and the regulatory institutions that oversee accounting and auditing practices there are genuine worries that the crisis has revealed numerous problems and inadequacies. In the academic and research community it certainly has illuminated issues that are in need of serious research attention. More than that, however, the crisis also points to the rather limited focus of much current accounting research. To much intellectual inquiry in the area of accounting seems to operate within the parameters set by practice rather than questioning and challenge these, at least from time to time” (Hopwood, 2009:797).

Patricia Arnold (2009) means that “

With few expectations, academic accounting research generally failed to anticipate the crisis, or mount a substantive critique of accounting’s contribution to systemic financial instability and/or accounting firm’s involvement in securitization and structured finance” (Arnold, 2009:804).

Arnold (2009) presents two reasons why accounting academics failed to anticipate the crisis. “The first is methodological, namely the persistent gap between the world of academic research and the world of accounting in action. The second is theoretical, namely our failure to understand the linkages between micro accounting and
regulatory technologies, and the macroeconomic and political environment in which accounting operates” (Arnold 2009:803).

The world has however experienced at least 7 FC since the 1970’s, see below, and these crises may certainly be viewed as tests of the functions of accounting. The FC-2008 has had serious effects on individuals, governments and organizations in most countries of the world, and it has been discussed in literature of economics, see e.g. Schiller, (2008) and Krugman, (2009). A rough Google search in January 2010 with the keyword financial crisis and accounting gave about 9 000 000 results, the corresponding figure in May 2011 was about 10 700 000 results. These data demonstrates very clearly that many persons in the world are interested in the issue of financial crisis and accounting (FCA).

We now face a situation where the society has invested lot in accounting in order to decrease uncertainty in processes of decision-making and accountability in both the private and public sector in various countries. Still the society has faced dramatic financial crisis, which almost no scholars have anticipated. The question then is if the society has invested in, what Levitt and March (1988), in an organizational context, labels as a competence trap, which “… can occur when favorable with an inferior procedure, leads an organization to accumulate more experience with it, thus keeping experience with a superior procedure inadequate to make it rewarding to use.” (Levitt and March 1988: 322). Accepting the competence perspective and leaving the organizational perspective, but taking a social perspective, accrual accounting\(^1\) as a technology, may in the language of Levitt and March, may be understood as a technology which is becoming to be a social competency trap.

A relevant question is of course what contributions the growing number of accounting academics have made in order to develop knowledge about accounting in context of financial crisis. Such an analysis may be useful to refer to in future research about FCA, and maybe also useful to understand the processes in financial crisis. The main purpose of this paper is to count, describe and analyze the volume of and content of accounting literature, which has discussed the relation between FC and accounting in

\(^1\) Accrual accounting is the dominating accounting procedure of today, it is discussed in 3.3.
action. Dependent of the results further research may investigate into the issue of the role of accounting scholars role when accounting in actions develops into a social competency trap.

2. Research design

There are at least two time-lags between a FC and a FCA-publication. The first time-lag is between the financial crisis and the research activities and the second is between the latter and publication of the research. This means that the largest proportion of the interesting literature may be found some years after the actual FC.

The first step in the research process was to develop a frame of reference, including finding the important FC in the past and to find an appropriate time-period in which eventual FCA-research may have been published. The second step was to select appropriate academic accounting journals and the third step was to search for relevant articles in the selected journal. The fourth and final step was to analyze the found articles.

3. Frame of reference

This section is divided into three sections, which I believe are important to discuss literature about financial crisis and accounting. The first section is about FC, the second is about my perspective of accounting in action and the third section is about judgment-transactions (or accruals).

3.1 Financial crises

In the literature of economics and economic history the definition of financial crises seems to be very implicit, even though some of the well-known scholars books have
titles as “Maniacs, panics and crashes. A history of financial crises” (Kindleberger and Aliber, 2005), “The return of depression economics and the crises of 2008” (Krugman, 2009), and “The subprime solution. How today’s global financial crisis happened and what to do about it” (Shiller, 2008). The same absence of an explicit definition seems to be a reality in the Scandinavian literature, see e.g. “The financial crisis” (Ellmose, 2009) and “Financial crisis” (Røed Larsen and Mjølhus, 2009). In the fall of 2009 I also listened to presentations related to the 2008-crisis by Deirdre McCloskey (“The Financial Crisis and the Status of Economic Science”) and Paul rugman (“What can we learn from the crisis”). The titles of the above mentioned books and presentations do certainly give the impression that they deal with analyses and discussions about something well-known labeled FC, but I could not find any explicit definition of a FC, neither in the books nor in the lectures. The books do however primarily focus on bubbles in stock markets and real estate markets when they discuss financial crisis. Kindleberger and Aliber (2005), doesn’t differ from the scholars mentioned above. My interpretation of this group of scholars is that they mean that the core of the FC they discuss is a financial bubble. Characteristics for financial bubbles are that they have effect on a social level, which means that both individuals and organizations face large losses because of declining prices of assets, which often originally have been financed by loans. A financial bubble is also often coupled with cash flow problems for individuals and for both private as well as governmental organizations. The social dimension of the bubble makes that financial crisis, differs from organizational crisis, even though organizational financial crisis may be an effect of the social financial crisis. A financial crisis may certainly have consequences for national or international financial economy, and it may also be related to crisis in the real economy, but this may not always be the case (Macintosh, Shearer, Thornton and Welker, 2000) who base their conclusion on McGoun (1997).

“For example, the so-called stock market crash of October 1987 had few noticeable consequences outside the financial economy. (Macintosh et. al. 2000:39)

Kindleberger and Aliber (2005) has made a nice table of ten big financial bubbles the last 400 year. They have actually included some extraordinary social processes, which
have had important financial impact on both organizations and individuals e.g. the savings and loan crisis in the US in the 1980s, the US stock market crash in 1987. The FC-2008 had not happened when Kindleberger and Aliber published their research. The US savings and loan crisis and the US stock market crash generated financial problems, which are very similar to those the financial bubbles. I therefore include them as well as the 2008-crisis in my list of financial crises in the period 1970-2009, which then includes 9 financial crises, see table 1 below.

The surge in bank loans to Mexico and other developing countries in the 1970s
The bubble in real estate in Japan 1985-89
The 1985-89 bubble in real estate and stocks in Finland, Norway and Sweden
The bubble in real estate and stocks in Thailand, Malaysia, Indonesia and several other Asian countries 1992-97
The surge in foreign investment in Mexico 1990-93
The bubble in over the-counter stocks in the United States 1995-2000
The savings and loan crisis in the 1980s in the United States
The stock market crash 1987 in United States
The 2008 financial crisis, an international crisis

Table 1. Financial crisis 1970-2008 based on Kindleberger and Aliber (2005)

It has without no doubt existed 9 financial crises in the period 1970-2008 and each of the financial crises may have generated FCA-research.

3.2 Accounting in action

Accounting includes many sub-processes and I define accounting in action as the whole of those processes. There are three main sub-processes of accounting in action: development and adaption of accounting norms, is labeled norms of accounting, recording and reporting, often based on the norms, is labeled practice of accounting, and use of the reports which are produced by accounting practice is labeled use of accounting.
These processes will operate in many organizations. Processes of norms will especially operate in standard-setting organizations, like IASB and IPSAS. Accounting practices operates in all reporting organizations, processes of use operates both inside, e.g. management, and outside, e.g. by analysts, the reporting organization. All these processes means, in this paper, accounting in action, see figure 1 below for an illustration. Accounting in action operates not in isolation, instead within various contexts, which influence the various sub-processes and the process as a whole (Mellemvik, Monsen and Olson, 1988).

Figure 1. Illustration of accounting in action.

3.3 Judgment-transactions

The idea of accrual accounting dominates accounting norms in most countries, regardless of sector it operates in, i.e. private or public sector. The basic idea with accrual accounting is to calculate an income figure and this done by adding accruals to the cash-flow from operations (CFO). Demski (2004) means that “… accruals, however, are surely not happenstance. Rather, they are estimates that can be interpreted as expectations as well as expectations that stems from choices: choices of accounting method as well as the decision to engage in the underlying transactions themselves.” Demski (2004: 519). Ijiri (1980) argues that what here i labeled JT are
guesses and that “the user can fill it in based on his own assessment rather than incorporating it in the indicator based on the accountants judgment (which is not necessarily better than the users judgment)” Ijiri, 1980: 58). The accountant must in this context be understood as that person, who have to the power to decide about the accruals. I will below use the term Judgment-transactions (JT) instead of accruals in order to indicate the orientation towards the future, and consequently the subjectivity of the transactions, while the concept accruals indicate objectivity. Consequently I will use the following model of calculation of income (I):

\[ I = CFO + JT \]

Table 1 Calculation of income (CFO= Past Cash Flow from Operations, JT = Judgment-transactions.

4. Empirical Method

The search for FCA research has included three choices: appropriate time-period for publication, type of publication and choice of single publications.

The main part of the research was carried out in 2010 and did in 2009 choose to search for FCA-research published in the period 1970-2009, which means that I can find FCA-research related to all financial crisis included in table 1 above, and of course also eventual research about financial crisis, which occurred before the actual period.

FCA-research may have been published in different types of publications, like academic accounting journals, academic books, research reports etc. and it may be published in various languages. How to find relevant publications? I have focused my research on articles in the leading international academic accounting journals, but also in some few other academic journals, which I think may be relevant in order to find research about financial crisis and accounting. There exist some studies, which focus on the issue of finding the leading academic accounting journals. Three of these studies are Bonner, Hesford, Van der Stede and Young (2006), who summarize
research about ranking of journals and journal quality, Jones and Roberts (2005), who study origin of authors but who also make a ranking of journals, and Reinstein and Calderon (2006) who study how departments rank journals. These three studies give a good overall view of the leading journals, and I base my first choice of which journals to be included in this study on these three studies. There are 4 journals, which are included in the top of all three studies, and these four journals are Accounting Review (AR), Journal of Accounting Research (JAR), Journal of Accounting and Economics (JAE) and Accounting Organizations and Society (AOS). Bonner et. al. included also Contemporary Accounting Research (CAR) among the top-journals, and I do the same. I will however complement these 5 journals with journals, which I think will include FCA-research and which are included on the lists of Reinstein and Calderon (2006). Five such journals are included in the list of Reinstein and Calderon (2006) and the journals are: Accounting Accountability and Auditing Journal (AAAJ), ABACUS (ABA), Critical perspectives on Accounting (CPA), The European Accounting Review (EAR), Management Accounting Research (MAR), Journal of Management Accounting Research (JMAR) and Journal of Accounting Historians (JAH). This means that the group choice of journals includes the following 12 journals: AAAJ, ABA, AOS, AR, CAR, CPA, EAR, JAE, JAR, JMAR, MAR and JAH. See appendix 1 for an overview of the chosen journals and their existence on the three studies. This means that the selection journals includes journals with editorship in the US, Europe and Australia.

Only 3 of the selected journals (Abacus, The Accounting Review and Journal of Accounting Research) existed actually in 1970. The search for articles in the other journals started that year the journal published its first volume, see appendix 2 for an overview of the period studied for each chosen journal.

The search for articles is made both electronically and manually for the period 1970 to 2009. Electronically the search was made in every journal by using the key-words: accounting, combined with financial crisis/economic crisis/financial bubble. Manually the search is made by reading the titles, the abstracts of every published article and this was made by focusing on the same keywords as in the electronically search, but also by applying a broader perspective in order to open for studies which are based on paradigms outside the bubble-oriented financial crisis paradigm, which, according to
my understanding, dominates the economic literature. A record was kept for all journals, volumes and numbers.

Together 347 volumes were analyzed and about 8 500 titles and/or abstracts were manually scanned in order to find articles dealing with the FCA-issue. About 300 articles were found and the titles and abstracts of these articles were read in detail, but all of these articles did not dealt with the FCA-issue. The final result was that 20 articles, which were related to some of the financial crisis mentioned above. Three articles related to financial crisis related to the German Post-WW1 and the Great Depression was also included, and so were editorials which discussed the FCA-issue.

5. Analysis and conclusion

The reviewed articles are grouped together dependent on which FC they focus on, see appendix 4. The analysis below is divided into two parts, one is based on the structural data about the reviewed studies, and the other analysis is based on my interpretation of what is indicated as important variables in discussions about the FCA-issue. All selected articles are summarized and the summaries are in appendix 5

5.1 Structural analysis

The number of articles, which have focused on the FCA-issue is extremly sparse in the leading academic international accounting literature. It is actually only 20 articles out of about 8 500 published articles, or 0,02 %, which have focused on FCA-issues. These figures show clearly that accounting scholars in general have not been interested to explicit study accounting in action before, during, or after financial crisis. The “other” 8 480 articles includes a mixture regarding the time perspective, and there are articles, which include data about accounting in action in periods before, during and after financial crisis, but since the purpose of the articles were related to other issues than the FCA-issue discussions about the latter is absence.
The focus of the reviewed research is clearly on the private sector. None of the reviewed articles dealt with the public sector, e.g. an annual report of a central government, even though the public sector is a large part of most national economies at the same time as accrual accounting is implemented the public sector of a growing number of countries.

The focus on accounting processes was clearly oriented towards norms, see appendix 4 for details. 17 out of the 20 articles focused on norms, only norms (12), norms and practice (1), norms and use (2), norms, practice and use (2). There is much less focus on use of accounting, 2 articles were oriented towards use only and 1 article was focused on practice and use. It is interesting to not that the latter article is the article written by Poon (2009) about an un-regulated accounting device used in order to calculate a consumer risk score.

Summary: Financial crisis has been of minor interest for accounting scholars and leading accounting journals. The focus of the FCA research has been on the private sector and most studies have focused on norms or the norm-processes. It seems that that accounting academics prefer not to study accounting in action in a context of financial crisis, and definitively not use of accounting within the public sector.

5.2 Interpretative analysis

The reviewed articles includes a lot of variation, but according to my understanding they individually or together indicate three important issues to include in discussions about the FCA-issue

Accrual accounting as a powerful paradigm
Three articles discuss one alternative principle of accrual accounting (fair value) against another (historic cost) in the context of FC2008. Laux and Leuz (2009) and Barth and Landsman (2010) are defending the fair value model strongly, while Ryan (2008) has a more nuanced argumentation. Young (1995) argues that fair value was developed as what was viewed as the right accounting alternative in the Savings and Loan crisis in the US, but she is not defending that view. None of these four articles question, however, the overall structure of accruals or JT's and none of the other
reviewed articles explicitly discuss accrual accounting as a special issue related to FC. This clearly demonstrates that accrual accounting is taken for granted as the right frame of reference in the discussions about and analysis of accounting. Consequently accrual accounting is a powerful paradigm of accounting, and it is difficult to see alternatives to the accrual paradigm. The AA paradigm has probably the effect that no study has focused on the cash-flow issue, which is very strange, since most FC includes severe cash flow problems for organizations in both private and public sector.

Accounting and the market
All the studies are oriented towards accounting in the private sector in western countries. This means that the market ideology, or the capitalistic ideology, as a powerful context is taken for granted. Gallhofer and Haslam (1991) make it very clear that accounting had to be changed in the post-WWI crisis in order to avoid a situation that accounting disturbs the capitalistic, or market economy, order. Accounting of hidden reserves was therefore criticized and inflation accounting was developed. This is an example on how accounting may be related what in a political context is a market ideology. Three of the reviewed articles discuss accounting and the market from the economic theoretical perspective, namely the efficient market hypothesis. Jensen (1978:97) writes that the following:

“I believe the simplest and most general way to express it is the following: A market is efficient with respect to information set \( \Theta_t \) if it is impossible to make economic profits by trading on the basis of information set \( \Theta_t \). “

Dependent of the content of information in set \( \Theta_t \) the literature mostly make a distinction between three version of the EMH, the weak, the semi-strong and the strong version, see e.g. Jensen (1978)

Bowen et. al. (1989) explicitly test the EMH with data from the 1987 stock crash in the U.S., and their conclusion is that EMH was valid. Some articles were critical to the EMH and the metaphor of the efficient market. McSweeney (2009) he argues that
accounting reinforce the illusion of market efficiency instead of providing failure-avoiding information. He also argues that accounting has been marginalized in financial markets. Sikka (2009) argues on empirical basis that audit-opinions have little effect on the financial markets. Roberts and Jones (2009) focus on what they think is one important part of the EMH, namely the self-interest of the involved actors, and they argue that the self-interest may vary and consequently also the efficiency of the market. It is very difficult to understand how the articles relate accounting in action to the EMH, which is very theoretical construct, or an ideology of the efficient market. Consequently it seems understanding the role of accounting in action at the marketplace is a demanding research task in the future.

Non-regulated accounting practice and its use

Noon (2009) is a brilliant deviation from all the other studies, and her study is actually a good example of what Arnold (2009) proposes, namely, innovative financial accounting research. Noon (2009) studies the use of FICO. FICO is a model for measuring credit risk, and it may certainly be viewed as an accounting practice which doesn’t fit into the accounting paradigms, like accrual accounting, which dominate the accounting thought of today. But still Noon’s article was accepted in Accounting, Organizations and Society, and FICO is supposed to decrease uncertainty in processes of decision-making, e.g. credit-giving, and therefore it fits into the rhetoric of accounting. Noon argues that the use of FICO must be understood as developing order, not disorder, and this article gives therefore quite another perspective on the FC2008 than the other articles discussed in this paper.

Overall conclusion

We are living in a society, which has invested increasingly more the last decades in developing competence regarding accounting practice and accounting research. The increase depends probably on both to changed politics in some countries and on the
diffusion of private sector accounting to the public sector in many countries. Accrual accounting is the core technology in this area of accounting competence. The accounting competence has certainly increased but still the world has experienced 7 large regional or international financial crises since the 1970s. The last one has without any doubt been the largest. This happened even though the accounting competence and accounting was at the “all time high” peak, when the 2008-crisis hit both national economies and the international economy. With this as a background accrual accounting was in the introduction labeled as technology, which is becoming a social competence trap.

Without any doubt there has been opportunities for a growing number of accounting scholars to do research about financial crisis and accounting and to publish the research in a growing number of academic accounting journals. The review of the leading accounting literature has, however, clearly shown that very little research has been published in the area of financial crisis and accounting. Consequently, there has been an academic silence in times when accrual accounting in action is seriously tested by the FC-2008. It actually seems that the accounting society may learn much by trying to understand the function, or roles, accounting in action have had in the FC-2008 and has in the current financial crisis of 2011. The current crisis does certainly inform us that the public sector in many countries may influence the global economy. Together this means that when the silence is broken further research on the FCA-issue must include accounting practice and users of accounting and this in both private and public sectors.

References


Poon, M, 2009, From new deal institutions to capital markets: commercial consumer risk scores and the making of subprime mortgage finance. Accounting, Organizations and Society


Appendix 1: The top-journals according to Bonner, Hesford, Van der Stede and Young (2006), Jones and Roberts (2005) and Reinstein and Calderon (2006)

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Appendix 2: Information about journals, first volume (FV) and period searched.

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<th>Journal, FV</th>
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<td>AAAJ, 1988</td>
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<td>AR, 1925</td>
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<td>CAR, 1985</td>
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<td>CPA, 1990</td>
<td>1990-2009</td>
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<td>JAE, 1979</td>
<td>1979-2009</td>
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<td>MAR, 1979</td>
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4 1 means ranked among the top 10 journals, X means that the journal is included in their study.
5 TUK means Top UK Journals, TUS means Top US journals
6 1 means that the journal is among the top 5 academic accounting journals in the world.
Appendix 3 National characteristics about the journals and authors and research objects

<table>
<thead>
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<th>Event</th>
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<td><strong>German PostWWI, 20s:2</strong></td>
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<td>Evans (2008)</td>
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<td>Gallhofer &amp; Haslam, (1991)</td>
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<td><strong>Great Depression, 20-30s:1</strong></td>
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<td>Richardson (2006)</td>
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<td><strong>US Stock chrash, 1987:1</strong></td>
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<td><strong>US Savings and Loans crisis, 1980s: 3</strong></td>
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<td>Mezias (1994)</td>
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<td>UK</td>
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<td><strong>Japan real estate bubble, 1980s/90s: 2</strong></td>
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<td><strong>Financial crisis 08: 11</strong></td>
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<td>McSweeney (2009)</td>
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<td>AOS</td>
<td>UK</td>
<td>UK</td>
</tr>
<tr>
<td>Laux and Leuz (2009)</td>
<td></td>
<td>AOS</td>
<td>UK</td>
<td>1xUS/1xG</td>
</tr>
<tr>
<td>Roberts &amp; Jones (2009)</td>
<td></td>
<td>AOS</td>
<td>UK</td>
<td>2xAUS</td>
</tr>
<tr>
<td>Sikka (2009)</td>
<td></td>
<td>AOS</td>
<td>UK</td>
<td>UK</td>
</tr>
<tr>
<td>Barth &amp; Landsman (2010)</td>
<td></td>
<td>EAR</td>
<td>E</td>
<td>2xUS</td>
</tr>
</tbody>
</table>

Appendix 4 Structural characteristics of the chosen articles

Each article is below described in terms of in which journal it has been published (J), which FC it focused on (headings), lead-time between crisis and publication (LT), overall research method (M), Q1 id qualitative, and Qt is quantitative, and which accounting process or process it studied (P), N is norms, P is practice and U is use.

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7 JHR/C means Journal home-region/country.
8 AHR/C means Author home-region/country.
9 R/CF means Country or Region focused on.
Financial crisis/
Author J LT M P

German Post WWI, 20s :2
Evans (2008) AAAJ +50 Ql N
Gallhofer & Haslam, (1991) AOS +50 Ql U

Great Depression, 20-30s:1
Richardson (2006) AHJ +50 Ql N(Aud)

US Stock crash, 1987:1
Bowen, Johnson & Shevlin, (1989) JAE 2 Qt U

US Savings and Loans crisis, 1980s: 3
Margavio (1993) AHJ +5 Ql N+U
Mezias (1994) AOS +5 Ql N+U
Young (1995) AOS +5 Ql N

Japan real estate bubble, 1980s/90s: 2
Sawabe (2002) CPA +10 Ql N
Skinner (2008) JAE +10 Ql N

Financial crisis 08: 11
Ryan (2008) AR 0 Ql N/P/U
Editorial AOS (2009) AOS 0 Ql N/P/U
Arnold /2009) AOS 0 Ql N
Hopwood (2009) AOS 0 Ql N/P
Humphrey, Loft & Woods (2009) AOS 0 Ql N(Aud)
McSweeney (2009) AOS 0 Ql N
Laux and Leuz (2009) AOS 0 Ql N
Poon (2009) AOS 0 Ql P/U
Roberts & Jones (2009) AOS 0 Ql N
Sikka (2009) AOS 0 Ql N(Aud)
Barth & Landsman (2010) EAR 0 Ql N

Appendix 5

Accounting in the post WWI crisis (1919-1928) in Germany

The WWI ended in 1918 and Germany had financed the war to a large extent by loans and the inflation rate increased after the war dramatically. “Millions of German lost their life savings (Hughes 1982). Accounting in this crisis is discussed in 2 articles (Gallhofer and Haslam, 1991 and Evans, 2008).

Gallhofer and Haslam (1991) discuss the aura of accounting in a context of crisis of Weimar Republic, or Germany, in the period 1919-1923. “As the situation worsened for Germany, the poor were increasingly deprived and suffering. Meanwhile a capitalistic state, the management of capitalist enterprises and the owners thereof
fought with each other over war profits. A contradiction developed in this context between shareholder gain and the prospect of military victory, since distributions to shareholders were diverted from the war effort. The state seems to have encouraged management to hide the sizeable profits that were offered to capitalistic enterprises. This was so that such enterprises might retain funds for the increased production of war supplies. Management has thus extended an application of accounting practices and principles that had been generally accepted prior to the war to manipulate reported profits downward” Gallhofer and Haslam, 1991:512). This article is not explicitly coupled to a financial crisis, or a financial bubble, but it is definitely coupled to a period of time when Germany experienced hyperinflation, see e.g. Lammers (2003) in Evans (2009). The article focus however, primarily on the socio-economical “struggle between capitalist war profiteers and the workers, soldiers and the generally dis-advantaged was deepened by a draining of the resources to the war effort and a re-distribution of wealth in favor of profiteers” Gallhofer and Haslam, 1991:514). The center of this process was an account, which was labeled hidden reserves. The debate about its existence continued well into the 1930s (Gallhofer and Haslam, 1991:512) and one of the conclusions Gallhofer and Haslam makes is that accounting may disturb the capitalistic order.

Evans (2008) discusses also accounting in the Weimar and she bases her article on two German novels, which are reflections about of social and economic concerns during a time of economic and political crises, namely the Weimar Republic’s hyperinflation period. Nevertheless, it has been suggested that the inflation may not entirely have been “a politico-economic mistake of the first order (Kolb, 1995)” (Evans, 2008:174). A new temporary currency was introduced in 1923. The inflation developed the German accounting language regarding inflation by contribution of accounting scholars like Schmidt, Mahlberg and Schmalenbach (Evans, 2008). The article is not directly discussing accounting issues, its main contribution is instead to generate an understanding of the context for individuals and firms in extreme problematic periods of time. “The exceptional situation of hyperinflation provides the setting and explanation for a world which codes of ethics, of behavior and economic transaction have been distorted/perverted” (Evans, 2008:192). “The inflation period setting means that social relationships are dominated by financial considerations. It seems impossible to separate business and private transactions, impossible to talk about anything but the dollar exchange rate; all conversations are about numbers.” (Evans, 2008:192).

The financial crisis caused change of accounting norms, and the change was the development of inflation-adjusted accounting. The two studies say that the crisis led to discussions about the effect of both hidden reserves and inflation on income and equity, and further accounting may change the capitalistic order. The crisis had consequently effects on the debate about accounting norms (regarding both hidden reserves and inflation) and the norms (especially inflation) and the ideological context accounting in action existed in).

Accounting in the Great Depression (1929-early/late 1930s)

The Great Depression is often viewed as the largest depression in the last century. The financial crisis in the Weimar republic overlaps some years with the Great Depression. The Great Depression shocked the market and the investors had became
aware of the importance of credible financial information (Previts and Merino, 1979). Accounting in this crisis is only studied in 1 article (Richardson, 2006), and the article focused on auditing issues, and since auditing is about controlling how well accounting practice follow the established accounting norms, this study may be classified as a study related to accounting norms.

Richardson (2006) “explores the pattern of auditor switching in Canada before and during the Great depression … ” (Richardson, 2006:39). This chock increased the value of the audit as a signal of the quality and creditability of financial statements and, hence, provided incentives for client firms to switch to higher reputation auditors.” (Robertson, 2006:40). The study is based on a sample of 1,344 financial statements and the analysis shows that there is a significant change in the pattern of auditor switching and based on contemporary literature some ideas. One such an idea is that large international audit-firms denied services to risky clients, allowing firms with higher risk tolerance, or better knowledge of the Canadian market to benefit (Richardson, 2006:59).

**US Stock crash, 1987**

It is only one published accounting study related to the 1987 stock crash in the US and it is Bowen, Johnson & Shevlin, (1989). The article has some references to Robert Shillers’ critique of the efficient market hypothesis (EMH), which he and others criticized at the time of the market crash 1987. The Bowen et. al. article is a time series analysis of security prices and reporting of earnings, and they conclude that “for the complete sample, with the exception of those firms with earnings announcements on October 19-20, 1987, we find a significant positive association between unexpected realizations of earnings and unexpected security returns.” (Bowen et. al., 1989: 248). We interpret this evidence to broadly consistent with the joint hypothesis that markets are efficient and earnings are important in setting equilibrium security prices except during the two-day crash period, consequently the argue that EMH is valid.

**US Savings and Loans crisis, 1980s**

Three articles (Margavio (1993), Mezias (1994) and Young (1995) focus on the Savings and loan crisis in the 1980s. It was a very large national crisis. The federal expenditures “necessary to bail out the saving and loan industry from its financial debacle generally exceed €100 billion and some estimates range as high as €300 billion.” (Margavio 1993:1). Margavio (1993) discusses in the article the regulation of the industry, including accounting regulation. He certainly shows how the housing financial function is integrated into the overall capital market structure. The paper illustrates the manner in which the industry was regulated, including piecemeal and often conflicting legislation, locked the industry into long-term mortgage commitments and then urged diversification from these commitments. The extent of the crisis was obscured by accounting principles developed by regulators, and which ran contrary to GAAP.” (Margavio, 1993:1).

Mezias (1194) argues that the crisis be characterized as a normal accident, which occurred because “the system of financial institutions in the U.S. was becoming
simultaneously more complex and more tightly coupled. As a result the system became more vulnerable to even a few small errors that could interact unexpectedly – errors of operators, such as corruption of officials or unforeseen environment, such as salesmen of junk bonds.” (Mezias, 1994:187). “Beginning in late 1983, American began investing in mortgage-backed securities and presenting them on financial statements using questionable accounting techniques.” (Mezias, 1994:187). Mezias also discuss the incompetence of accountants, especially the auditors. But they were not alone, the state and the management of large enterprises were also involved. Further, Mezias discusses the advice to implement market values in a critical way, and summarizes his standpoint in the argument “If the market are efficient, then this information is already reflected in share prices. After all the false starts and mistakes of the financial regulatory system, I do not wish to entrust it with the task of calculating market values for each and every asset.” (Mezias, 1994:191). Mezias make the conclusion that the crisis was generated by a increasingly tighter coupling between institutional actors like the state and the accounting profession and also the S&L organizations.

Young (1995) focuses on the Savings and Loan crisis in the US the 1980s, which certainly is a much smaller crises than the 2008/09 crises but big enough to have effect on accounting norms and practice within the organizations within the domain of the savings and loans industry. The research object is accounting in the saving and loans organizations, not the accounting in the lenders’ organizations. Young study the crisis by dividing it into three acts. She argues that in “each acts exhibits a concern for getting accounting right” (p. 75), but what was meant with right changed between the acts, and therefore also there failure of accounting was coupled to special norms and practices, or practices in Youngs’ terms, but the failures were not coupled to accounting as a whole, and accounting as a whole was never questioned instead accounting practice of the current was criticized and right accounting for the future was developed, a good example is when the idea of market value was introduced in the third act. “ Market value accounting began to be seen as the way to get the accounting “right”. For some actors in the regulatory space, market value accounting would have revealed the poor financial condition of many savings and loan associations…. These actors claimed that market values were “true” economic numbers in contrast to the “constructed” numbers of RAP (Regulatory Accounting principles and the historical cost numbers of GAAP that had lost touch with economic “reality” (Young, 1995:72).

_Japan real estate bubble, 1980s/90s_

Two articles (Sawabe 2002 and Skinner, 2008) are related to the bubble in Japanese stock and real estate markets in the 1980/90s. New rule of deferred taxes was introduced in 1998, i.e. in the end of the crises. Skinner (2008) argues that deferred tax accounting was introduced in Japan in 1998 at least partly as a tool of regulatory forbearance to help the banks meet regulatory capital requirements by increasing the value of deferred tax assets (DTA). This interpretation is supported by the following: (1) the Japanese government (including bank regulators) could not allow any significant number of banks, especially the major banks, to fail, largely because of the central role these banks played in the economy, (2) during the period from 1989 to 1997 the banks realized large gains on their holdings of investment securities, but by
1998 this source of regulatory “slack” had largely been used up (3) deferred tax accounting was adopted by an accounting rule-making body which part of the MOF, the bank regulator at the time, (4) the Government and its regulators introduced a number of other accounting and regulatory changes at this time that enabled the banks to increase their regulatory capital, including a decision to allow the banks to include DTA in regulatory capital, a policy unique to Japan and inconsistent with how BIS rules are implemented elsewhere, because of the relatively stringent Japanese tax laws, deferred tax accounting enabled the largest DTAs, and so provided an effective way of increasing regulatory capital for the weakest banks, and (6) deferred tax accounting was introduced contemporaneously with a large capital injection from the Government into the major banks: without the increase in regulatory capital due to DTA’s, these banks would have been insolvent, complicating the politics of the Governments decision to inject capital.” (Skinner, 2008:235). Skinner makes the overall conclusion that “The evidence also illustrates how political and regulatory forces influence how accounting rules affect financial reporting practice. Consequently, the evidence reinforces concerns about whether the introduction of standardized accounting rules (such as IFRS), particular those that require significant levels of judgment (such as fair value accounting) will actually result in effective standardization of accounting practice. Sawabe (2002) discusses the role of accounting in Japanese bank regulation. “Introduction of enhanced capital regulation was a part of re-regulatory efforts to maintain orderly financial system in the changing economic environment. The subsequent regulatory failure entailed major reorganization of regulatory bodies, at the same time, once taken-for-granted accounting practices that entailed the LRR (Latent revaluation reserve of securities assets) as a byproduct was partly replaced by market value accounting The main conclusions made in the two articles is that the change of the norms were made in order to improve the reported financial position of the banks.

The 2008 financial crisis

Argumentation for more research

The editorial of AOS (2009) argues that we need to know more about the relation between accounting and finance and motivation is the 2008 financial crisis, the editorial is also an introduction to the invited articles in the special issue in the number. Hopwood (2009) focuses on what he labels as the economic crisis and accounting: it has a close coupling to the 2008 financial crises and it is primarily an argument for more research about financial crisis and accounting. Hopwood uses the label economic crisis in order to broaden the understanding to include also the economy outside the financial economy. He also argues that accounting has an important role in the financial crisis and the academic society need to do research about this role.

Fair value accounting

Three articles (Ryan, 2008; Laux and Leuz, 2009; Barth & Landsman, 2010) discuss the role of financial accounting in the 2008 financial crisis. Ryan argues that because the 2008 crisis “severity and the significant issues it raises for accounting, I deem the
crisis to be the signal researchable-teachable moment of my two decade-plus career as an academic focused on financial reporting by financial institutions for financial instruments and transactions. Because of the cost of the crisis has imposed on families, firms, and the overall economy, I believe that accounting and other academics have a responsibility to understand and employ the crisis to the benefit of our disciplines, students and society.” (Ryan, 2008:1606). Ryan discusses the problem of reporting about fair values in illiquid markets, which generates serious questions how preparers have acted and how users have interpreted the reported values. Ryan also argues that historical cost not is a serious alternative, instead the “financial statements preparers need additional guidance how to calculate fair values in illiquid markets. Users of financial reports need better disclosures about the critical level 3 inputs” In other words, more guidelines to handle for preparers and better information to the users. Laux and Leuz (2009) is fully focused on the role of fair value accounting by reviewing the debate about this model especially regarding the role of FVA in the 2008 crisis. They also include a short discussion about the historical cost model and its shortcoming. Their main conclusion seems to be that even though there has been a debate about fair value accounting and that the method has been heavily criticized in this debate there is still a lack of research regarding the role of fair value accounting in the 2008 crises, and therefore more research is needed. Barth and Landsman (2010) discuss the role of fair values in the 2008 crisis. They focus on the effects of financial reporting by banks, because these organizations played such an important role in the crisis. They base their analysis on an analogical reasoning based on studies in other financial contexts. The article concludes that fair values played a little, or no role, in the financial crisis. They however argue for the need of more disaggregated disclosures and that “it is the responsibility of the bank regulators and not accounting standard-setters to ensure the stability of the financial system” (Barth and Landsman, 2010:1). It actually seems that the financial accounting scholars who have presented research related to the 2008 financial crisis accept fair value accounting.

Auditing

Two articles, Humphrey, Loft & Woods (2009) and Sikka (2009), related to auditing and the 2008 financial crisis have been published. Humphrey, et.al. (2009) focus on how regulatory relationships have been affected by the 2008/09 crisis. The article clearly argues that there are three influential groups in the process, the International Federation of Accountants, a group of financial regulators and the large audit firms. The article demonstrates “the active nature of the responses to the crisis and the shifting and competing influences among key regulatory and professional participants in the global arena” (Humphrey et.al. 2009: 810). Sikka (2009) focuses on the fact that the “markets do not seem to have been assured by unqualified audit opinions and many financial institutions either collapsed, or had to be bailed out, within a short period of receiving unqualified audit opinions. The events fuel the suspicions that auditors lack the claimed expertise to render an independent and objective account of corporate affairs” Sikka (2009:872). The main conclusion made is that audit-opinions have little effect on financial markets. It seems actually that the influential groups regarding auditing regulation acted on the global arena at the same time as the audit-opinions had little effect on the financial markets.

Critical perspectives
Three articles (Arnold, 2009; McSweeney, 2009 and Roberts & Jones, 2009), discuss the role of accounting from a critical perspective. Arnold ( 2009), argues very strongly that accounting practice (in her terms, which corresponds to accounting in action in this paper), is deeply implicated in the current financial crisis. She also argues that accounting academics’ failed to anticipate the crises, and she has two arguments for this statement. Among other things she says that accounting research has lagged behind the world of accounting practice. One reason is the problem to obtain data, since the data on off-balance sheet entities, hedge fund derivatives are non- accessible, at least when traditional financial accounting methods are used to collect data. She therefore argues methodological innovations within financial accounting research, maybe generated by using case studies and ethnographic research methodologies like what is done in management accounting research. Arnold argues that we need research about the relation between accounting and macro economy, e.g. structured in the areas of: politics of standard setting, the role of accounting firms and rethinking transparency. Consequently there is a need of developing methods to get relevant data for the research, which in the next step may generate new paradigms in financial accounting research. McSweeney (2009) makes an analysis of the failure of the financial markets and the author argues that “Rather than providing failure-avoiding information, financial markets create information, which leads to market failure” (McSweeney, 2009:836). He also argue that this may be a consequence of the dominating efficient market hypothesis, i.e. that markets always effectively price assets. He means that accounting is certainly a part of the process, and it is not an innocent activity. “It reinforced the illusion of continuous growth and helped fuel speculation by importing upward spiraling assets valuations into balance sheets and then exporting those valuations via the multiple processes in which accounting is influential” (McSweeney, 2009: 844). “ But accounting – when shaped, employed, and analyzed in ways which rely on financial market failure denial – reinforced the conditions which created the crisis,” (McSweeney, 2009:844). McSweeney also argues that a knowledge community has been developed around market efficiency fundamentalism, in which a very strong paradigm has been constructed and that he argues in line with Hopwood (2007) that the accounting knowledge is to marginalized in order to be useful in the financial markets. Roberts and Jones (2009) argues that self interest was an important part of Alan Greenspans assumption about action and decision-making in organizations in the financial sector. Greenspan made however an important statement in 2008 in which he admitted that this was a mistake, he actually said that: “I found a flaw in the model that I perceived is the critical functioning structure that defines how the world works, so to speak” (Greenspan, 2008). The authors argue, that “accounting and associated processes have been indispensible allies for both individual and institutions” (Roberts and Jones, 2009:865). It is however not the neutral instrument some still believe it is. The authors argue that “accounting and modeling should be understood as agents in their own right – as ‘mediators’ that in their actual effect fed both the illusions of rationality (greed) that fuelled market growth, and compounded fear and panic as ‘credit risk’ escaped it profitable framing and became systemic”. (FSA, 2009 in Roberts and Jones 2009:865) Robert and Jones (2009) have no discussion about special methods or models, they argue instead that accounting is a model and this model has hade the effects on the processes in the development of the crisis because accounting has been used to feed an illusion or rationality, and one basic part in rationality is the idea of self interest, which actually was questioned by Greenspan.
Accounting practice

Poon (2009) has its origins in the 2008-crisis, but it has also a historical approach, which means that it traces the crisis back to the New Deal and the American dream about home-ownership. The article focuses on a calculating practice related to in the financial domain. The actual practice is use of what Poon label as a consumer risk score, labeled FICO. “The establishment of FICO as a common calculative tool in mortgage making lead to clear changes in lending practices. As the paper will further show, once a common interpretation of these scores was achieved, a gradual shift away from traditional, exclusionary practices of credit control-by-screening, and towards gradated practices of credit control-by risk occurred. Where subprime lending required overriding the very judgment that was central to control-by-screening, since by definition a subprime loan was a mortgage that has screened out” (Poon, 2009:656). “Before their usage in mortgage making, the FICO scores had already become a market device in the wider US consumer market”. (Poon, 2009:659). The Fico scored became increasingly more used and it became integrated both vertically and horizontally in the financial system in the US. “Coordinated by FICO a new regime of control-by-risk emerged.” An exotic mortgage products and increasingly structured securities proliferated, the ‘non-prime’ – by definition excluded from investment, was transformed into ‘the subprime’– a place of elevated return on investment. …. They calculating pured money directly into asset backed paper based on consumer real estate.”(Poon, 2009:671). Noon concludes that “misstated income is not new: what is new are the infrastructural conditions under which these misstatement have occurred” (Noon, 2009:672). She also states that her ambition is not to find the main error, instead she tries to understand the process. She means that her study has “suggested that the explosion of the subprime was not caused by a sheer increase in lending volume stemming from irrational, fraudulent, or extra-governmental activity, but by the super-coordination of market-actors’ decision-making around stabilized frames of risk provided by third party commercial consumer analytic companies” (Poon, 2009: 672). She means also that the “protracted globe-spanning credit crisis beginning in 2007 should be studied first and foremost as the temporary achievement of a tightly calculated system of financial order, not disorder” (Poon, 2009:672). The calculative device FICO was used to increase the volume of new loans.