Chapter One

Research Issues

In this chapter specific research issues are formulated, operationalized, and delimited. Based on the empirical background provided in the Introduction, broad research issues are developed in Section 1.1. Section 1.2 indicates the research aims behind studying these issues. Concepts used in the formulation of the issues, as well as research operationalizations of the issues, are discussed in Section 1.3. That is followed by limitations of the study (Section 1.4), and a structural outline of the dissertation (Section 1.5).

1.1. Broad Research Issues

The specific research issues are motivated by both empirical observations and by the literature. The empirical background is noted in the Introduction, where a few main points are discernible. There is the increasing importance of stock markets, and the growth in international activity on these markets. Accounting, which is a source of information on stock markets, is affected by developments on those markets. Accounting historically has a national character and basis, and while attempts are made at harmonizing accounting, differences remain between accounting in different countries.

Given the assumption that accounting is a *useful* source of information on the stock market, negative effects are likely to follow from the combination of international stock markets, and national accounting systems. Such effects are possible both for companies and investors. Companies may be faced with having to adapt their annual reports to the requirements of investors in different countries. Investors, on the other hand, are faced with analyzing and comparing annual reports produced according to different accounting frameworks.

Issues for research include to what extent, and how, companies and investors are affected by international accounting diversity. Little is known to what extent coping with such diversity is a real problem, and consequently it is difficult to make statements about how much resources should be spent on overcoming the problem.

The relevance of studying this issue is also indicated in the literature. Choi and Levich (1990), in a global study, indicate that both companies and investors perceive that they are affected by international accounting diversity. They conclude their study by pointing out that further research is needed, however. Gray (1989) lists international financial statement analysis as one important area for future research in international accounting. Issues relating to such analysis potentially affects both companies and investors. Haller et al (1998) point out that 'curiously' little formal research has been done to date to corroborate the generally held assumption that international accounting diversity actually constitutes a problem for companies and investors.

In order to study effects of international accounting diversity it is advantageous to obtain knowledge about *how* accounting is used in practice on stock markets. Due to the increasing importance of stock markets, the usage of accounting is also an important issue in its own right. This is an issue that has received substantial interest in the literature, a fact that does not preclude the need for additional knowledge on the topic. Lev (1989), for example, indicates that much of the research on stock market usefulness of accounting is unable to pick up a high level of usefulness. He therefore suggests the undertaking of further research, for example on how investors cope with perceived deficiencies in accounting information. Schipper (1991) suggests that further micro-level research is needed on how accounting information is used in practice.

Based on the items discussed above, the first two research issues of this dissertation are therefore formulated as:

> **1:** *How is accounting used by stock market users?*

> **2:** *Does international accounting diversity have an impact on the stock market activities of companies and accounting users?*

If answers can be found to these two research issues, the following related issues will be studied in order to attain a broader understanding:

> **3:** *Why is there an impact/no impact from international accounting diversity on the stock market activities of companies and accounting users?*

> **4:** *If there is an impact, what forms does it take?*

> **5:** *If there is an impact, is it quantifiable?*

Issues 2-5 relate to effects of international accounting diversity, while issue 1 is more general in that it covers the relationship between accounting and stock markets. There is an interaction between the two groups of issues. On the one hand, an answer to issue 1 is helpful in finding answers to issues 2-5. On the other hand, obtaining answers to the latter issues is likely to shed light on the former issue.

1.2. Research Aims

A research study may have relevance in several different ways, including expansion of empirical knowledge, and conceptual or theoretical development. In this dissertation, the research issues are clearly empirically based, but conceptual development is also undertaken in the mapping of empirical structures. This gives the following research aims:

1: *Develop a structure for the use of accounting by stock market users, and empirically test this structure.*

2: *Develop a research framework for the empirical testing of effects of international accounting diversity.*

3: *Empirically examine how and to what extent companies and investors are affected by international accounting diversity.*

Aim number 1 is about the general relationship between accounting and stock market users, while aims 2 and 3 are more specific. As with the research issues, there is an interaction between the two groups of research aims. The structure mentioned in 1 is helpful in carrying out aims 2 and 3. At the same time, accomplishing aims 2 and 3 is helpful for aim number 1.

The reasons behind achieving aim 1 is to increase our knowledge about why and to what extent accounting is a useful source of information for stock market users. This, in turn, will provide input into the evaluation of the effectiveness of accounting as a provider of information, and to what forms accounting should take. This is important, given the substantial economic resources that are currently being spent on accounting, and the fact that stock markets are increasingly important.

The primary reason behind aim number 2 is function as an aid in accomplishing aim 3. However, development of such a framework may not only be useful in this dissertation, but may also be beneficial for future research.

Achieving aim 3 is helpful for the evaluation of how much resources should be spent on trying to overcome international accounting diversity. Currently, a process of accounting harmonization is occurring in response to the growing internationalization of capital markets. There is, however, incomplete knowledge about the extent to which the resources spent on harmonization are cost effective, as well as which types of harmonization are most essential for the functioning of international stock markets. Increasing knowledge in this field is helpful to investors, companies, and accounting standard-setters involved with harmonization.

1.3. Operationalizations and Concepts

The purpose of this section is to more precisely state the research issues. The issues given in Section 1.1 are stated in general terms, and further operationalization is necessary in order to enable the study of the issues. In addition, concepts used in the research issues - and their operationalizations - need more precise definitions.

To begin with, it should be noted that the dissertation involves the role of accounting on stock markets. Accounting is produced by companies listed on stock markets, and it is used by investors on such markets. Some properties of stock markets make them especially interesting from an accounting perspective. The actors on stock markets are often anonymous, in that listed companies and their investors never communicate directly, except for the intermittent issuance of accounting reports. Direct, two-way communication is often impossible due to the large number of actors on these markets, and private communication is often restricted by regulators (Beaver, 1989, pp. 176-178). Therefore, accounting has the potential of being an important source of information in stock market transactions.

The interrelationship between companies sending accounting, and investors receiving accounting, can be modeled further using ideas from linguistics. A model is developed for precise operationalizations of the research issues, and the model is inspired by Moore and Carling (1982). The model is depicted in Figure 1.1. A largely identical model is applied to accounting in Jönsson (1997, p. 13).

Moore and Carling are linguists, and the model is based on a framework for communication in general, but may also be applied to accounting. Senders in Figure 1.1 are companies listed on stock markets, who are providers of accounting information. Receivers are actual and potential investors, who receive accounting information from companies. It should be noted that the

term 'receiver' encompasses everyone on the receiver side, that is various types of advisors to investors are included. Content is the actual accounting data that is being transmitted, which in this dissertation is defined as the entire content of annual and interim reports. Context, finally, is the environment in which stock market actors operate. In this study, the contextual focus is on the structure of accounting systems and stock markets, and the aspect of interest is international variation of this structure.

The model is developed based on Moore and Carling's (1982) distinction between the container view and the epiphenomenalist view. They criticize the container view (ibid., pp. 150-151), in which it is assumed that messages (or annual reports) contain well-defined meanings. The meanings are sent to the receiver, and are possible to relate directly to an objective world, with a minimum of an interpretative process. On pages 161-162, Moore and Carling suggest the epiphenomenalist view as an alternative to the container view. In this, messages (annual reports) are seen as catalysts that trigger processing in the minds of receivers. In a stock market setting, it is difficult to see how annual reports could be directly related to objectively defined investment choices. Instead, the epiphenomenalist view provides a more reasonable model for investors' information processing and the role of accounting data.

From the epiphenomenalist view follows that it is relevant what the context of receivers are, which leads to inclusion of the context box in Figure 1.1. It also follows that content is separated from users. Content may be studied objectively. The content is pure data, and it only becomes information when interpreted by a receiver.
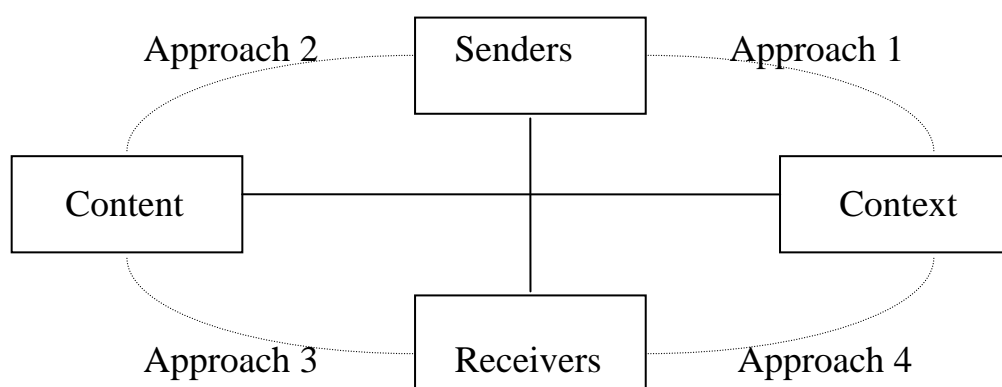

Figure 1.1. Overall framework for the operationalizations of research issues.

An important aspect of Figure 1.1 is that content and context are separated from the two types of actors, namely sender and receiver. Both content and context can be described separately from the actual communication process

between sender and receiver. For this study, however, any relevant research analysis involves the interaction between either content or context and one of the actors, as indicated by the four approaches to the operationalization in the figure. Thus, after the separate descriptions of content and context are produced, the descriptions are used to enhance the understanding of the communication process.

It should be noted that analysis of accounting information has additional layers of complexity when compared to at least some types of language. There is not only the issue that accounting is used to inform receivers about the current state of the company (this level of complexity is similar to that of language in Moore and Carling's view). In addition, there is the fact that accounting about the past, is used to estimate information about the future, which is discussed further below.

The model presented in Figure 1.1 helps in developing detail operationalizations of the research issues. This is done through the four analysis approaches. Each approach is focused on a relationship between two of the boxes in the model, and in each case a group of actors (sender or receiver) and an aspect of the surrounding world (content or context) are included.

These relationships can be directly related to the overall research issues in Section 1.1. Thus, the model helps by structuring a consecutive focus on various objects or subjects for study. Each of the four approaches vary in terms of what is assumed to vary, and what is assumed to be constant. For instance, in Approach 1, variation in context is focused, whereas content is assumed to be constant. In Approach 3, on the other hand, content is assumed to vary, whereas context is assumed to be constant.

Before providing more detailed operationalizations of the research issues, concepts that are essential to the study will be discussed. Important concepts stated in the research issues include accounting, international accounting diversity, stock market activity, impact, and stock market users.

Accounting is defined in this dissertation as annual and interim reports issued by companies, and this is what constitutes content in Figure 1.1. Consequently, accounting is used in the sense of financial reporting, while managerial accounting is not of interest in this dissertation. Accounting is used to denote both the annual and interim reports. If only one of these types of reports is discussed, then that will be noted in the text. Also, while accounting relates to the entire reports, the term financial statements includes only in-

come statement, balance sheet, statement of cash flows, and notes. Other parts of the reports include, for example, management discussion.

International accounting diversity connotes the existence of differences in accounting between countries. Such differences can exist on several levels, from reporting practice to system level differences. Diversity in reporting practice exists in content in Figure 1.1, and is thus related to diversity in annual and interim reports. On a higher level, diversity can exist in the functioning of the accounting systems, including by whom, and for whom, accounting is regulated, as well as which underlying principles are emphasized. Such high-level accounting diversity is not part of content, but is rather described as context in Figure 1.1.

Continuing our discussion of the context box in Figure 1.1, it should be noted that it is broader than just high-level accounting diversity. In this dissertation, it is also interesting to note that there may be international differences in stock markets and their functioning, and that this is also included in context. Thus, the classification of contexts is based on countries, so that each country constitutes a unique context. Of course, there are an almost infinite number of dimensions along which countries can vary, but here the focus is on accounting systems and stock markets.

Other important concepts as noted above are stock market activity, impact, and stock market users. The former concept has to do with both senders and receivers. Stock market activity by senders includes, for example, listing and de-listing of stock, stock offerings, and the provision of information to stock market actors. Activity by receivers includes, for example, making investment choices, communicating with listed companies, and analyzing information about listed companies.

Another important concept is *impact* on stock market activity, which is defined as impact on any of the activities mentioned above. For example, impact would be if international accounting diversity affected listing decisions of companies, or how they provide information to stock market actors. For receivers, it would be, for example, if investment choices are affected, or if accounting diversity affects the way information is analyzed. Ideally, the term impact connotes that the senders and receiver in some way act differently in the existing world, than they would in a world where accounting diversity did not exist.

Impact is understood in terms of costs of some sort, that is for an impact to exist it should result in costs for receivers or senders. For senders, costs in-

clude more resources being spent on adapting financial statements to different accounting practices, and impediments to listing on foreign stock markets, potentially leading to higher capital costs. For receivers, more time being spent on company analysis and restrictions on investment choices constitute costs, which may lead to a less than optimal portfolio. Impact is discussed further below, as part of the more precise operationalization of the research issue.

The last concept to be covered - stock market users - merits a thorough discussion. Stock market users are actual and potential receivers of accounting data. This includes actual and potential investors in listed companies, as well as advisors to investors. The reason for a focus on users in the research issues - even though both senders and receivers (users) are included in the model in Figure 1.1 - is that the usage by receivers is central in the whole framework. Senders produce accounting with the users in mind, i.e. the usefulness of accounting is evaluated based on whether the receivers find it useful.

With this in mind, an initial model of how accounting is used by the receivers is constructed[4]. First, it should be noted that investors and their advisors are interested in evaluating alternative investment opportunities. On stock markets this is done by estimating values of stocks. This, in turn, is dependent on expected future value creation of companies, combined with the estimated risk in the value creation. Value creation is measured by accounting earnings, so forecasting value creation entails forecasting earnings.

So, what is the role of accounting in company valuation? According to FASB (1993, pp. 27-28) accounting can be relevant by having either predictive value or feedback value. A potential problem with accounting is that it covers past periods, while receivers are interested in the future. If accounting has feedback value, this is not a problem since reported accounting earnings are used then to evaluate past forecasts. For accounting to have predictive value, it is helpful to make some assumptions. If accounting is used as a *basis* for forecasts about the future, accounting can be used to enhance the quality of forecasts by providing a reliable base. If receivers have insufficient information about the present or near past it is difficult to make forecasts.

The reliability of accounting as a bearer of information about the present leads into another concept, namely accounting risk. Accounting risk is the actual or perceived risk that accounting does not reflect the 'true' value

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[4] The background to the model is further discussed and supported in later chapters, especially Chapters Eight and Ten. For now, the background to the model given in this paragraph is stated as exogenous facts.

creation[5] in the company. Actual accounting risk is defined as the variability of accounting earnings in relation to 'true' value creation. Perceived accounting risk is defined as risk related to perceived lack of reliability of accounting measures, i.e. it is a risk that is specific to, and dependent on, each individual receiver of accounting[6].

Following this discussion of concepts used, the operationalizations of the research issues will be performed, which follows the four approaches indicated in Figure 1.1. In Approach 1, the relationship between sender and context is analyzed. Context is defined in terms of national stock market environment. Thus, the following specific research issue can be formulated based on this approach:

> **1.** *Does international accounting diversity affect senders' choices on which stock market contexts[7] to be present on?*

In Approach 2, the focus is on the relationship between sender and content. Senders can provide content according to different national standards. The issue in this approach is to study whether such choices by senders have any relevance for users. If international accounting diversity has an impact, we would expect to see differences in relevance. Thus, the following issue is formulated:

> **2.** *Do senders' choices on content affect the relevance of accounting for company valuation?*

In Approach 3 the relationship between content and receivers is analyzed. The focus is on variability in content, while receivers are assumed to be constant across national contexts. The issue is that receivers have to compare annual reports from different countries in their company valuation. This could be difficult, if the annual reports are prepared according to different accounting rules. The specific research issue is:

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[5] True value creation is not an unproblematic concept, since it assumes an objectively existing measure of value creation, which is independent of people's attempts to describe this value creation. These issues are discussed further in Chapter Ten.

[6] In practice, receivers cannot distinguish between actual and perceived accounting risk. Rather, they will see both types of risk as a type of estimation risk. For research, however, it is relevant to make the distinction, since ex post the two types of risk are distinguishable.

[7] The concept of stock market context is further discussed in Chapter Six. Suffice it here to note that the most obvious method of entering a new stock market context is by a foreign stock listing, but such a listing is not necessary for entering a new context.

    3. *Does international accounting diversity impede receivers' ability to compare investment alternatives (i.e. in company valuation)?*

Approach 4, finally, covers the relationship between receivers and context. The issue is whether receivers are affected by the context they operate in. Context is defined here as high-level accounting diversity. In this approach, the focus is on variability in context, while variability in content is ignored. The research issue is stated as:

    4. *Are there differences in receivers' usage of accounting that can be related to the context the receivers operate in?*

When compared to the broad research issues in Section 1.1, one notes that the issues provided here mostly specify issue number 2. Issue 3-5 are follow-up issues to number 2, and by studying the issues given here it is likely that input to issues 3-5 will be provided. Further, it is posited that the study of issue number 2 will shed light on research issue number 1.

The four approaches may appear disparate, but an integration is possible using the concept of accounting risk[8]. In Approach 1, the issue is to what extent senders are affected by adapting to a context with a different level of accounting risk than in their home country. Approach 2 focuses on the difference in accounting risk between different contents. In Approach 3, the issue is whether differences in accounting risk affect receivers. Approach 4, finally, will shed light on why receivers in different contexts perceive different levels of accounting risk.

1.4. Scope and Limitations

Following the formulation and specification of research issues and aims, this section covers the scope and limitations of this dissertation.

As noted in the previous section, the dissertation is limited to only studying stock markets, which involves a focus on corporate equities. Transactions in non-corporate securities (such as government securities) are not considered, since financial reporting is not used in those cases. Neither are investments in any type of bonds (government or corporate) included, since they rarely involve a direct use of financial statements. Equity and bond investments have different risk structures. The return on bonds is more stable since it is fixed by contractual agreement, whereas the return on equity varies directly with

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[8] The integration of the dissertation is mentioned here. For a more comprehensive discussion, see Section 10.2.3.

corporate performance. The two main risks in bond investing is interest rate risk, and default risk. The evaluation of interest risk does not involve any company-specific analysis, and the risk of default is to a large extent evaluated by rating agencies instead of individual investment firms.

Many companies issue stock, not only those that are listed on stock markets. The focus on markets, however, is related to the expected role of accounting on such markets, where the number of equityholders is large. It is likely that private or governmental majority-owners, or owners in closely held corporations, are less dependent on accounting, since they normally have direct representation on company boards. Thus, the dissertation is limited to the study of publicly listed corporations as senders of accounting.

Receivers of accounting include different types of investors, and their advisors. These are the only types of users considered relevant, rather than seeing society at large as a user. This is consistent with the research issues given above. The investors and their advisors considered in this study are all informed users, i.e. they are well-equipped to interpret accounting information (Kam, 1990). Consequently, only professional investors and their professional advisors are considered, and they tend to be employed by banks and other financial institutions. Small, private investors are not studied in this dissertation.

The distinction between producers and users of accounting may be important, since the two tend to emphasize different aspects of accounting (Johansson and Östman, 1992). Thus, even though accounting is studied in this dissertation in terms of its use on stock markets, it should be noted that other areas of use may come in play. This is especially an issue for senders of information, since it is likely that receivers have a narrower scope than senders. Whereas receivers focus on how to use accounting to predict future value creation, senders probably consider other effects. Examples of other effects include how much information should be dispersed to competitors and unions, as well as tax effects of accounting choices.

The focus of this research is the impact of *international accounting diversity* on stock market activities. Other factors possibly affecting such activities - especially for receivers - including for example national political concerns, trade issues and the protection of property, are not studied directly. Neither is there a thorough study of how currency risk influences investing activities. The dissertation may touch upon this subject, although it will not constitute a major part of the study. There are potentially a host of factors that are relevant in international investing. Each of these could form its own strain of

research. It would be too unwieldy to attempt to cover them all in one study. The countries included in the study (see below) are all advanced free market economies. Therefore, political risk is most likely not a major concern for investors. Currency risk, on the other hand, is a relevant concern.

The concept of culture has sometimes been used as an explanation for accounting diversity. Perera and Mathews (1990) use a general cultural framework developed by Hofstede (further described in Hofstede, 1991) to explain differences in national accounting systems. A similar approach is used by Fechner and Kilgore (1993). In this dissertation, however, the focus is on the effect from accounting diversity on the senders and receivers of accounting information, not on explaining why the diversity exists. Thus, the study does not entail an analysis of general cultural differences between countries. Nor are high-level political or economic structures studied, which are other potential explanatory factors behind accounting diversity (Nobes and Parker, 1995).

The relationship between accounting and stock markets, and international accounting diversity are issues on a worldwide scale. The dissertation, however, is limited to the study of Swedish accounting, and non-Swedish users. The user interviews and report studies are limited to users from three countries, namely the United States, the United Kingdom, and Germany. This, however, does not mean that potential results of the study are necessarily applicable only to Swedish accounting. Rather, Sweden should be seen as a *case study* of the general research issues stated in Section 1.1.

Finally, it should be noted that the dissertation is not intended to evaluate whether stock markets are beneficial or harmful on a societal level. The functioning of global and national stock markets has been the subject of some debate, see for example Porter (1992) and Nichols (1993). Here, however, stock markets and the way they function are seen as given, and the issue studied is the role of accounting on those markets.

1.5. Dissertation Outline

In this section, an outline of the remainder of the dissertation is provided. The four research approaches shown in Figure 1.1 form the basis for parallel studies, while the beginning and end of the dissertation are kept as a joint discussion.

As shown in Figure 1.2, the dissertation begins with the research issues (Chapter One), prior research (Chapter Two), and a methodological discus-

sion (Chapter Three). Thus, the first three chapters outline the research design. Chapters Four and Five include empirical descriptions. Chapters Six through Nine cover the analysis of the empirical material, according to each of the four analysis approaches (Section 1.3). In Chapter Ten, finally, the four approaches are tied together in a conclusion and summary.
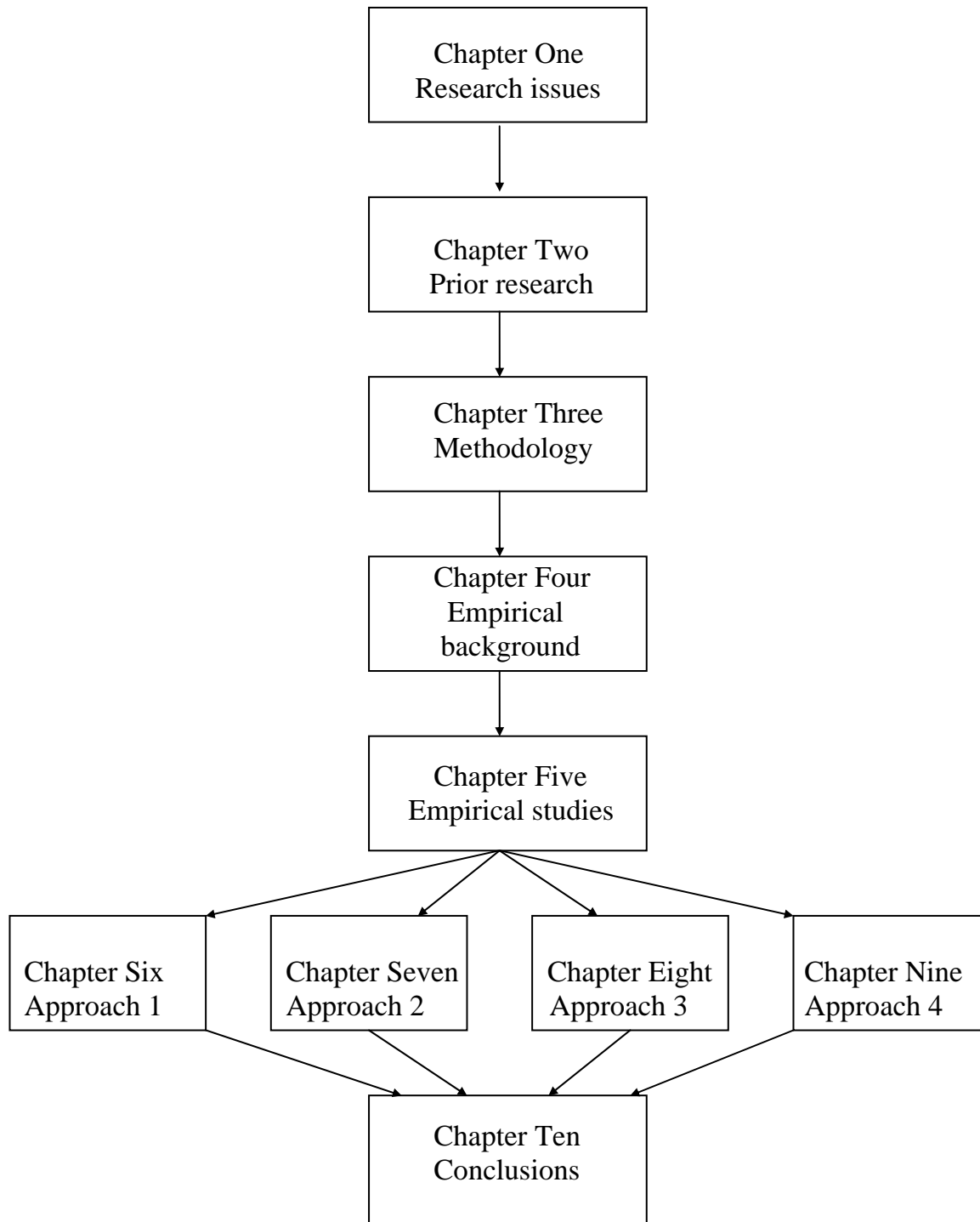
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Figure 1.2. Structural overview of the dissertation by chapter.

It should be noted that the four 'boxes' in Figure 1.1 are covered in Chapter Four, that is senders, receivers, content, and context are each discussed in that

chapter. In addition, the connection between the structure shown in Figure 1.2 and the model in Figure 1.1 is examined further in Figure 1.3. Figure 1.3 shows the complete model, including the consolidation of the four approaches into one research summary in Chapter Ten. Thus, the integration of the approaches, as indicated in Figure 1.3, is performed in Chapter Ten. Figure 1.3 shows the complete version of the model that is initially presented in Figure 1.1.
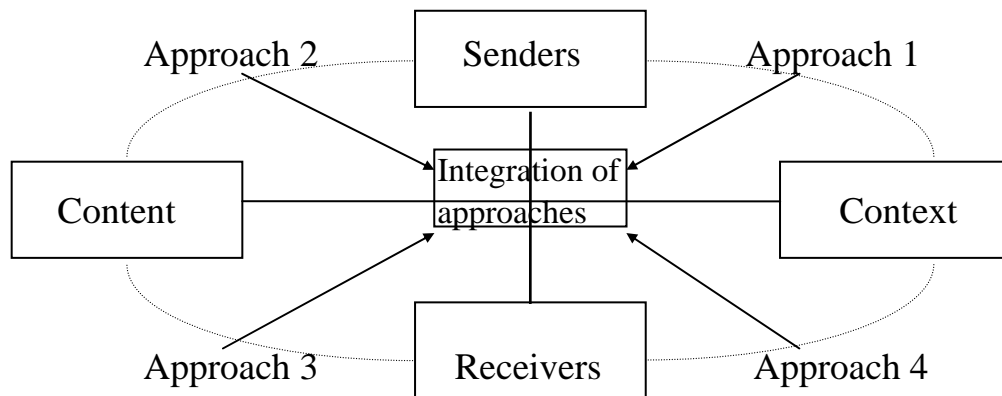

Figure 1.3. Overall framework, including the integration of the dissertation.