2 Description of approach and scope

2.1 Introduction

When I started my research on the questions mentioned in the previous chapter by undertaking a preliminary literature review and raising queries with my extensive international network of insurance experts, it soon became clear that I was in uncharted territory. There were no examples available of comparable historical studies focusing on the insurance industry, and literature describing financial or prudential reporting requirements either covered only a (small) part of the period or only part of the topics I wanted to review, or did not include any specifics about the insurance industry at all. The same applied to books written about several Dutch insurance groups, which described their history, but, in general, did not include specific information on reporting developments.

These findings created a need to develop my own approach. As indicated in chapter 1, I have been intensively involved in the history of and debates on the reporting practices of Dutch insurers since the 1980s. During this period, I have dealt, in numerous occasions, with the consequences of the Dutch single-track reporting approach (as defined at that time) and have actively participated in discussions on this topic. So it was clear to me that this should be an important point of reference in reviewing past events and developments. Apart from that, I believed that it was important to adopt, as much as possible, an open-minded, inductive-/empirical-based approach, with the primary emphasis on describing and analysing the developments as they occurred, and to put them in their own historical perspective. This means that I had to avoid, as much as possible, to use present norms in assessing the past: instead, it was important to describe and analyse the developments in a neutral way, if possible, and not to come to a judgement of ‘good’ or ‘bad’ reporting practices. My first task was, therefore, to collect and review existing historical studies and research methodologies in order to identify the relevant elements to consider in a description and analysis of financial reporting practices.

My initial research revealed that there was much more literature available on financial reporting developments than on prudential reporting developments. For this reason, I decided to use the first type of developments in establishing my own approach. Therefore, this chapter starts with an overview of approaches to historical financial reporting research, describing several studies on accounting classification and research methodologies, and presenting an overview of other studies relevant for this dissertation. Based on the knowledge obtained by this overview, the next section presents my research approach and the underlying arguments. It is followed by an explanation of the choice of the selected period and its subdivision of time slots, the selected companies and the use of a uniform terminology to describe technical insurance and accounting concepts. Finally, the chapter explains the scope of this dissertation in terms of the selected elements of financial reporting and the related accounting issues.

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1 For instance, as is described in the next chapters, I have found publications on accounting policies or on the tension between financial and prudential reporting requirements, but none of these covered these topics comprehensively over the full or a major part of the period reviewed in this dissertation.
2.2 Approaches to historical research on financial reporting developments

2.2.1 Introduction
When searching for a theoretical framework to describe and analyse financial reporting developments over a long period of time, it seemed logical to start with a study of the literature on international accounting classifications, since these studies tried to identify, at a rather high level, the factors that had influenced such developments by comparing accounting systems in different countries or regions. By looking at what was already available, it might be possible to identify factors or methodologies that could be relevant in developing my own approach. For this reason, the next section describes a number of such studies, identifies the differences, and presents an overview of (potentially) important factors to take into consideration. Subsequently, an overview is provided of the development in accounting research methodologies in general, giving further input for my approach.

2.2.2 Accounting classification studies
One of the earliest authors of accounting classification studies was Mueller, who first published on this issue in 1967. According to him, the source of existing differences in accounting concepts and practices was not simple or readily obtainable. It had to do primarily with national or regional patterns of accounting development. Various social, economic, and legal influences had affected accounting evolution and thereby caused different directions of accounting development.

In addition to environmental relationships, the development process itself had caused outcome variations. The degree of influence of the practicing auditing profession certainly explained part of prevailing concepts and practices. The same held true for the relative influence of academic interest groups or pieces of tax or corporate legislation. Therefore, the identity of innovators in accounting developments and the sequences in the development process were also important variables in development patterns.

Mueller differentiated between a ‘macroeconomics-oriented’ and a ‘microeconomics-oriented’ model of accounting. The macroeconomics-oriented model necessarily allowed, in his view, little or no differences between tax accounting and financial accounting. If accounting should focus on the implications of national economic policies, it followed that tax requirements were simply one of the elements of such policies. Hence, tax accounting rules became valid for financial accounting and vice versa.

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3 Microeconomics was sometimes translated as ‘business economics’. In Mueller’s view, this model was best represented in the Netherlands (ibid, p. 33).
Under the microeconomics-oriented model of accounting, financial statements were prepared on the basis of generally accepted accounting principles, which term was usually interchangeably with the term ‘accounting practices’ or simply ‘sound business practices’. In these instances, auditors in conjunction with each national business community at large determined what seemed to be a reasonable pattern of accounting practices. Professional institutes of auditors made recommendations on particular accounting problems and organisations such as major stock exchanges or securities commissions set minimum standards for accounting practices acceptable to them. This process was characterised by interaction and change and it eventually produced results that were generally useful to all those with an interest in financial statements.

A somewhat different approach was provided by Parker in 1977. He tried to explain national differences in consolidated accounts, focusing on France, Germany, the Netherlands, the UK, and the US. He identified three kinds of differences: the rate of adoption of consolidated accounts, what was published, and consolidation techniques. In his view, harmonisation could only be achieved through, what sociologists called, ‘change agents’ and ‘recipients’, and he provided the following overview of such change agents:

- Individual auditors, transferred from one country to another (as had happened at the end of the 19th century, when British auditors moved to the US);
- International audit firms;
- International organisations of auditors such as the IASC and the ‘Union Européenne des Experts Comptables Economiques et Financiers’ (henceforth, the ‘UEC’);
- Governmental agencies;
- Multinational companies; and
- Teachers and their textbooks.

Choi and Mueller provided in 1984 a number of different classifications of financial reporting practices, found in contemporary literature. Listings and overviews had been prepared by Mueller (1968), the American Accounting Association (1977), Nobes (1980), DaCosta, Bourgeois and Lawson (1978), Frank (1979), and Nair and Frank (1980). Since all authors used different criteria, the classifications were not (fully) comparable, but the overall picture clearly showed that the financial reporting practices in the Netherlands were much more comparable to those in the UK and the US, than to those adopted in most of the other continental European countries. This was confirmed by a schedule prepared by Choi and Bavishi, based on Nobes and presented in figure 2.1 hereafter, comparing accounting practices in a number of countries.

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5 In practice, also the term ‘accounting policies’ was used. In this dissertation, ‘accounting principles’ and ‘accounting policies’ are used interchangeable.
7 Parker (1977).
8 See sections 6.3.3 and 5.3.1.3.2, respectively.
According to Nobes, accounting systems in the Netherlands, the UK and the US were similar because they were all based on business concepts, in theory or in practice, and in that sense differed from (other) countries in continental Europe whose systems were more based on tax and legal considerations.

Given this common background, my conclusion was that it could be very well possible that developments in these three countries had impacted each other and that an analysis of the history of the UK and US systems, despite possible differences between business economics theory and business practice, would reveal factors that had impacted the Dutch developments.

For this reason, this dissertation includes a description of the development of UK GAAP and US GAAP, as far as relevant for insurance companies. However, given the goal to assess the interaction between financial reporting developments, prudential reporting developments, and actual reporting practices, this meant that prudential reporting developments in these countries need to be studied as well.

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10 Choi and Mueller noted that this figure was reproduced from the following publication:

11 This choice does not mean that studying the developments in other countries could not provide additional insight and interesting research findings. For this reason, it is identified as a component of potential further research (see section 9.6). However, to keep the scope and size of this already extensive dissertation manageable, these other countries are not covered.

12 This focus on the UK and the US means that only very limited attention is given to developments in other (European) countries: this occurs only when it is especially relevant to explain or comment on certain events or developments.
In addition, I noted that the articles on accounting classification cited above took no account of the roles of the European Union and/or the IASC/IASB. As it is evident that these organisations were very significant to the developments of Dutch financial reporting requirements, their activities are described and analysed as well.\textsuperscript{13}

International classification of financial reporting, and the schedule presented earlier in figure 2.1, were discussed by Nobes himself in 1992.\textsuperscript{14} He identified six factors, which might be seen as important causes of international differences between financial reporting systems:

- Legal systems (to be discussed hereafter);
- Business organisations and ownership;
- Stock exchanges;
- Taxation;
- The audit profession, for instance by introducing the concepts of ‘true and fair view’ or ‘present fairly’, and of ‘substance over form’; and
- Other influences, such as an economic crisis (for instance, the one in the US in the late 1920s), European directives, IAS, and theory (for instance, in the Netherlands).

In his analysis, these factors resulted in differences related to the level of conservatism, the historical cost or fair value convention, the distinction between provisions and reserves, the prevalence of consolidation, and uniformity and accounting plans.

Regarding legal systems, Nobes explained that some countries (such as the UK and the US) had a legal system which relied upon a limited amount of statute law, which was then interpreted by courts which built up large amounts of case law to supplement the statutes. Such a system of ‘common law’ was less abstract than ‘codified’ law; a common law rule sought to provide an answer to a specific case rather than to formulate a general rule for the future. To a large extent, accounting within such a context was not dependent upon law. Other countries (such as the Netherlands and the other European continental countries) had Romano-Germanic law which was based on the Roman ‘ius civile’. Here rules were linked to ideas of justice and morality, they became doctrine. In his analysis, this difference had the important effect that company law or commercial codes needed to make detailed rules for accounting and financial reporting.\textsuperscript{15} To capture this effect, he developed a classification by rule making, presented in figure 2.2 hereafter.

\textsuperscript{13} See sections 5.3.1.2 and 6.3.3, respectively.
\textsuperscript{14} Nobes (1992b).
\textsuperscript{15} Whether or not this analysis was applicable to insurance company reporting when comparing the Dutch, the UK and the US developments, is discussed in chapters 4 to 8 of this dissertation.
Based on the analysis by Nobes, I identified a number of internal and external factors having an impact on accounting developments. Next to the legal system, these were:

- The structure of the business organisation and its ownership;
- The role of a stock exchange, tax authorities, and the audit profession; and
- The developments on European and global level.

Since some of these factors could also have played a role in prudential reporting developments, it was, in my approach, necessary to take them into consideration.

In 1997, Radebaugh and Gray expanded and built upon the earlier work performed by other authors, such as Nobes, and presented another overview of factors influencing the accounting systems. In particular, they provided a much more detailed categorisation of external factors, which is presented hereafter.

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16 Radebaugh and Gray (1997).
Compared to the previous figures presented in this section, figure 2.3 includes additional elements which I found relevant in developing my own research approach. Next to prudential legislation, which could be considered to be included in the legal system or in economical/political independence, the following elements in this figure needed, in my view, to be taken into account:

- Multinational corporate strategy, because the companies reviewed in this dissertation all had expanded their activities internationally;
- International financial markets, to capture the influence of, in particular, the US ‘New York Stock Exchange’ (henceforth, the ‘NYSE’), on which two of the three companies were listed;
- International regulatory requirements, since these, directly or indirectly, had influenced the Dutch developments. In this respect, certainly the developments of directives at a European level should be included in this analysis; and
- Economic, social and demographic developments, which could have impacted the insurance industry in general.

But also the elements societal values and accounting values were, in my view, important components to include, since these were (potentially) related to accounting choices, a topic which is discussed later in this chapter.
2.2.3 Accounting history research methodologies

The analysis of the literature on accounting classification studies presented in the previous section made it clear to me that accounting developments should not be assessed in isolation, but had to be set in the context of many interactive developments. But it failed to provide insights about how such a context should be considered. In particular, the question whether accounting was influenced by the context, whether it was the other way around, or whether both were true, was not yet answered. It was therefore necessary to ensure that my approach addressed this issue.

To collect further input thereon and to identify additional elements for my approach, I next reviewed the literature discussing accounting history research methodologies.

One of the important contributors to historical accounting research was Hopwood, who advocated that such research was only delivering value if accounting was placed in its (historic) context. After having already published on this view in the second half of the 1970s, he argued in 1983 that historical research on accounting developments had to include the impact of accounting on the organisation in which it operated, but also the impact of the organisation on accounting. Accounting could not be isolated from the underlying processes, the technological developments within the company, and the tasks and management structures. In my view, this provided further evidence of the validity of the categorisation of elements provided by Radebaugh and Gray, presented in figure 2.3, which included these processes, technological developments, and internal structures.

The ideas of Hopwood were also found in a publication by Ball and Foster, who carried out a methodological review of contemporary empirical research in the corporate financial reporting area. They noted that the literature contained a bewildering assortment of methods, with little coherence across topic areas or (sometimes) within them. They classified the literature into four topic areas: corporate disclosure, accounting method choice, time-series analysis, and financial distress analysis. They noted that all empirical research in accounting faced two common problems:

- Financial statements should be reviewed in the institutional environment in which these reports were produced or used, such as the context provided by financial, corporate, and governmental institutions; and
- Motivations to empirical research could be classified into five categories, each having an impact on the methodologies applied. The categories related to: the importance of the topic to external parties, the importance to a research community, the availability of a theoretical structure, the availability of data bases, and the availability of econometric or statistical techniques to analyse the data.

Given the differences in motivations, they found it impossible to recommend one or more specific approaches to empirical research on financial statements.

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17 Hopwood (1983).
18 Ball and Foster (1982).
19 The article included a detailed overview of available literature, classified into these categories.
However, in developing my own approach, I found in particular the statement that “financial statements should be reviewed in the institutional environment in which these reports were produced or used, such as the context provided by financial, corporate, and governmental institutions” appealing, since it warned against the use of hindsight, in other words, in using the norms of today to judge the past. This approach was aligned with the limitation described in the introduction to this chapter. Furthermore, the article pointed at the necessity to have access to historical data on the developments being researched, since without such data any proper research would be impossible.

Arnold and McCartney provided further insight in research approaches in accounting history.\(^{20}\) They described the division between ‘old’ and ‘new’ accounting historians, and their debate on the appropriate methodologies to analyse, interpret and explain past developments. Of these two groups, the new historians often criticised the old for a narrow focus on the (assumed) evolution of the technical practices of accounting, divorced from any social context. On the other hand, some old historians had been equally critical of the failure of the new to approach historical records with sufficient “rigor and reverence”. In Arnold and McCartney’s view, such a debate could be explained by the fact that accounting history was very much a new subdiscipline when compared with many areas of the social sciences, such as economic or political history. Subsequently, they reviewed a number of publications on the history of British railway companies to assess the validity of the accusations from both camps, and concluded that, in a number of cases, the authors of these publications uncritically relied upon the work of others without undertaking the more arduous task of returning to the original materials.\(^{21}\)

From the presentation of the different points of view described above, it was clear to me that there was not just one answer on the question of the relationship between ‘accounting’ and ‘context’. Therefore, a choice had to be made.

Since the focus of this dissertation is to describe and analyse the actual reporting developments and the factors influencing them in an industry for which such an exercise was not done before, based on this article I considered it necessary to go back, as much as possible, to the original data (for instance, the actual accounts of the companies reviewed), describe what has actually happened, and explain developments in practice by describing and analysing the relevant internal and external factors that (should have) had an influence on reporting practices of these companies. In other words, an inductive-/empirical-based approach starting from the ‘facts’ (i.e. the annual accounts and prudential returns), and not from any theoretical concept. But it also meant looking, as much as possible and practicable, at the ‘primary’ literature (e.g., the actual (draft) legislation and the debates in Parliament) instead of relying on the descriptions and analyses which were subsequently published by external commentators (the ‘secondary’ literature). In this approach, secondary literature was used to identify developments and primary literature, but it did not form the basis for my own description and interpretation of the history.

\(^{20}\) Arnold and McCartney (2003). The division was later described by Napier as the battle between the ‘traditional’ and the ‘new’ approach, where the first group, generalising, took a number of external factors as a ‘given’, while the second group considered them also as a trigger for change. See Napier (2006), p. 445-507.

\(^{21}\) This was already mentioned by Lee and Parker (see Lee and Parker (1979), p. 3). They analysed the papers in this book, noting that the authors had been able to describe the progress of financial reporting by a study of the published financial reports of major companies. In their view, contemporary accounting historians paid too little attention to such original source material.
2.3 Overview of other studies

2.3.1 Introduction
Based on the decision to start from the facts, I decided to look next for publications regarding the accounting development within specific companies or industries, which could also provide relevant information to determine my own approach. Since this dissertation focuses on reporting developments and companies within one specific industry (insurance), in particular studies of industry developments were of interest. For this reason, this section includes – next to company studies – a description of articles on UK and US railway company accounts. As these industries were subject to certain systems of government supervision, there are some parallels with the developments in the insurance industry. Finally, the studies of practical cases could provide guidance to determine the method to report the results of my findings.

2.3.2 Publications on Dutch companies or industries
For the Netherlands, an extensive review of the accounting magazines produced only one article describing the evolution of a company’s financial reporting practices. This concerned ‘Philips’ and was published by H.L. Brink.22 The article described the development of, and the changes in, Philips’ accounting policies for the period 1912 (the year of its incorporation) to 1991. The article divided this period into three time slots, which were determined on the basis of the business developments of the company. Within each time slot, Brink analysed and explained the changes in relation to these and other developments and, finally, tested the changes against contemporary regulations and practice. In this analysis, external factors such as changes in accounting laws or the application of certain non-Dutch accounting standards (such as the US and international standards on pensions) by international companies were included.

This article clearly showed the need to divide a long period into individual time slots, and to identify specific internal or external factors determining these slots. Without such a split, it would not be possible to properly describe, but in particular analyse, the developments in practice.

2.3.3 Publications on UK railway company accounts
The number of publications on the accounts of UK railway companies was quite large compared to those on other industries. For the purpose of this dissertation, I selected two publications, each focusing on a different element in the annual accounts.

The first article was written in 1986 by Edwards, who discussed the impact of the ‘Regulation of railways act 1868’23 on the annual accounts of British railway companies in respect of the accounting treatment of fixed assets.24 He analysed existing practices before the introduction of the act (as far as this was possible, since, in general, the accounts did not include a description of accounting principles), based on a review of a number of published accounts.

23 To eliminate the differences in spelling the names of such acts or other legislative or standard setting documents between countries, I have chosen to consistently use non-capital letters in this dissertation (apart from the beginning of the first word), irrespective of the original spelling of these documents.
Furthermore, Edwards discussed the findings of a so-called ‘select committee’ (the ‘Monteagle committee’),25 and the origins of the act (a dreadful financial collapse in 1866, partly by railway companies defaulting on debts advanced on the basis of misleading accounts). Finally, he presented the changes in practice as a result of the act.

The second article on this topic was published by McCartney and Arnold in 2002.26 They performed, based on published annual accounts, a systematic analysis of the financial accounting practices of the major railway companies from 1840 until 1855, to test suggestions in the literature that these companies voluntarily made both quantitative and qualitative changes to their published financial statements, in response to a crisis in shareholder confidence. In their assessment, they included adopted railway acts as well as accounting acts, such as the ‘Companies clauses consolidation act 1845’,27 and recommendations from the already mentioned Monteagle committee. Their conclusion was that the information presented in the accounts was insufficient to form final conclusions, because, as was also explained by Edwards, of the absence of a description of accounting policies.

The publications showed that, in order to understand the developments in practice, it was necessary to take a detailed look into the accounting principles, including the changes therein. Part of such changes could be caused by regulatory developments, but other parts might be the result of accounting policy choices by management. However, the articles also warned that information on these principles and changes therein might not always be available.

2.3.4 Publications on US railway company accounts

The accounting history of US railway companies was also the subject of much research, resulting in a large number of publications. As in the case of the UK, for the purpose of this dissertation, those articles were selected that were relevant in defining my own research approach.

A first element of interest that was discussed in the Dutch technical literature concerned the introduction of the first mandatory accounting and reporting system for this industry.28 The article described the establishment of the ‘Interstate Commerce Commission’ (henceforth, the ‘ICC’) in 1906, to promote interstate trade.29 One of its tasks was supervising the railway companies and improving their financial reporting practices. Based on this assignment, the ICC issued a uniform chart of accounts. Simultaneously, it introduced mandatory depreciation of rolling equipment, including accounting rules for replacement, maintenance and renewals of such assets.

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25 For an explanation of the role of such committees, see section 4.3.1.2.
26 McCartney and Arnold (2002).
27 See section 4.3.1.2.
28 Maandblad boekhouden (1908).
29 The ICC was created under the ‘1887 Act to regulate interstate commerce’, passed by US Congress in response to rulings of the US Supreme Court in 1886 that state commissioners could not regulate interstate traffic. After a series of 1890s decisions by the Supreme Court negating ICC's power, the ‘1906 Hepburn act’ re-established its power to set a “just and reasonable” maximum rate upon complaint.
The importance of accounting principles was also discussed by Boockholdt, who focused on the development of US railway accounting in the period 1830 to 1926. He described the link between state supervision and accounting. Since most states had set maximum rates of return, measured as a percentage of investments in capital assets, they had created incentives for railway companies to maximise the asset basis and minimise the net result. As a consequence, most companies charged new investments directly to the profit and loss account, or applied some combination of revaluation and depreciation accounting. Only after the ICC started issuing its requirements in respect of depreciation accounting, such practices ended.

This impact of external regulation on accounting rules was further researched by Sivakumar and Waymire, who assessed the extent to which income measurement by major early 20th century US railway companies showed evidence of income-smoothing or increased conservatism following new fixed asset accounting rules issued by the ICC in 1907 and 1908 and concurrent shifts in the regime of rate regulation. They concluded that the results were more consistent with increased conservatism than with income-smoothing, and that these effects were more pronounced for companies subject to stricter rate regulation by this new supervisor. This was primarily explained by the fact that the accounting rules (still) gave management quite some flexibility, and that the rate-setting mechanism was based on published financial statements.

Another approach was deployed by Previts and Samson in their article of the contents of the annual accounts of one of the earliest US railway companies. They based their approach on earlier work by Claire in 1945, who presented a single-company content analysis, in the form of a model for measuring progress. The authors analysed the annual accounts in terms of a number of fundamental attributes such as the length, the size, and the contents of the reports, identifying, for example, the step-by-step development of a profit and loss account and a balance sheet. The changes were compared to developments in the economy and technological context of the railway company.

Finally, Flesher et al. described the origin and early accounting developments of three US railway companies established in the first half of the 19th century. Since there was little guidance upon which financial statements could be based, the companies had to develop their own accounting and reporting practices. The authors showed that the different levels of quasi-public, quasi-private activities of the companies (because of the large amount of financing needed to build the railways) had a distinct impact on the composition of the financial statements, but, in particular, on the amount and type of disclosures.

With respect to developing my own approach, the articles above identified elements such as the introduction of mandatory reporting formats, and the (potential) impact of prescribed accounting principles on management’ behaviour, including accounting policy choices. Such choices, and the underlying arguments, were also issues in times where there was no legislation or other guidance.

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30 Boockholdt (1978).
31 Sivakumar and Waymire (2003).
34 Flesher et al. (2003).
For this reason, these issues are further analysed later in this chapter. Finally, the publications provided some insight in the problems of analysing the development of a company’s reporting practice over time, versus company-by-company comparison at a given point in time. Elements to be considered in such an analysis were the contents of the annual accounts, as well as the length and the size.

2.3.5 Publications on other companies and industries

An example of a description of financial reporting developments by an individual company was presented by the Dutch accounting professor Kees Camfferman and his US colleague Stephen A. Zeff in their analysis of reporting innovations from the 1920s to the 1940s by ‘Unilever’.\(^{35}\) They described the steps of disclosing segment information on a voluntary basis, long before this was required by the UK ‘Companies act 1947’\(^\text{36}\) and the cautious trend to providing annual accounts on a consolidated basis. However, they also noted that, in the early years, such information was not part of the accounts of the parent company, but presented at the annual shareholders meetings as additional information: inclusion in the annual accounts would not happen until in the early 1940s. Finally, they provided much background information on these developments, including the roles of specific individuals, not just within the company, but also as members of governmental or accounting technical committees.

Another study focusing on a specific company was written by Pearcy, who described the accounting history of ‘ICI’ for the period 1926-1976.\(^\text{37}\) It first presented a brief history of the company, continuing with an overview of the developments in its organisation, including the accounting department. It then showed the gradual improvements in the financial accounting systems, and in the structure and components of the annual accounts. An overview of important accounting policies followed, with reference to important developments in legislation, i.e. the UK companies acts. Finally, it discussed some specific accounting issues during the period and closed with appendices, including a limited number of key annual figures extracted from the annual accounts.

A study focusing on a specific industry (apart from railways) was published by Capie and Billings.\(^\text{38}\) They attempted to compare profitability for a number of English banks during the period 1920-1968 and encountered the problem that, until 1969, such banks did not publish their ‘true profits’. Although banks were subject to the ‘Companies act 1948’,\(^\text{39}\) this act gave them various exemptions, in particular in respect of the treatment of undisclosed reserves.\(^\text{40}\) Furthermore, they were not obliged to show the market value of investments, permitted to make undisclosed transfers to and from reserves before arriving at published profits, and not required to disclose methods of valuation and depreciation of fixed assets. Nor were they obliged to show the tax charge as a deduction from published profits, and to distinguish between reserves, provisions, and other liabilities in the balance sheet.

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\(^{35}\) Camfferman and Zeff (2003).

\(^{36}\) See section 5.3.2.5.

\(^{37}\) Pearcy (2001).

\(^{38}\) Capie and Billings (2001).

\(^{39}\) See section 5.3.2.5.

\(^{40}\) In line with general terminology (see Hageman (1974)), a distinction is made between:

- Secret reserves, if their presence cannot be noticed from the balance sheet; and
- Undisclosed reserves, if the balance sheet indicates their presence, but not their size.
As a result, accounting practices used over time and by different banks varied considerably, and the annual accounts showed several items taken directly into or from reserves or presented ‘below the line’. Only in the year 1969, the banks dropped their opposition to full disclosure.

The above articles highlighted that it was not only important to look for mandatory changes in reporting practices, as a result of new or amended legislation, but also for voluntary changes and the role that key individuals within a company performed in the outside world. Furthermore, that it should be considered to include key financial data in appendices, instead of in the main text. And, finally, that there were industries which were partially exempted from general requirements.

2.3.6 Publications on accounting policy choices and changes
The literature analysis presented in the previous sections shows that one important aspect of historical accounting research deals with the choice of accounting policies. It also notes that Nobes argued, as is shown in figure 2.2, that accounting rules in the Netherlands were not established by the government, but through professional creation and enforcement. Furthermore, Radebaugh and Gray made it clear in figure 2.3 that, in their view, accounting systems and rules were influenced by a number of internal and external forces, which should be considered when describing and analysing financial reporting developments. However, since these analyses did not specifically refer to Dutch insurance companies, further research was necessary to analyse whether these assertions were also relevant for this industry. And this is one of the topics covered in this dissertation.

A preliminary analysis of the literature on actual Dutch accounting rules revealed that the first (full) act on the annual accounts was only introduced in 1970, and that, as R. Burget (a professor in business economics and accountancy) noted, the legislator deliberately refrained from giving specific rules for measuring assets and liabilities. This act was the ‘Wet op de jaarrekening van ondernemingen’, henceforth, the ‘companies’ annual accounts act’. Instead, the act introduced an open formula, which clearly gave room for multiple accounting principles: “The principles used in valuing the assets and the liabilities and the determination of income shall satisfy criteria that are considered to be acceptable in the economic and social climate.”

This raised the question of whether this legislative approach applied to insurance companies as well, or whether the legislator had prescribed more specific accounting rules for this industry. Before the 1970 act was introduced, accounting legislation in the Netherlands was only very limited, and did not include any requirements regarding accounting principles at all. Under this liberal regime, before and after 1970, a company had a certain amount of freedom to choose the accounting policies to reflect its financial position and performance in the way management thought it should be done. But this environment also opened the door for earnings-management or income-smoothing, and the question became to what extent the availability of choices influenced the reporting practices of the companies reviewed in this dissertation, for instance in the years shortly before or after the listing on a stock exchange.

41 Burget (1971).
42 This translation is taken from Zeff at al. (1992), p. 172, where the term “economic and social climate” was introduced as a translation of the Dutch term “maatschappelijk verkeer”.
43 As is described later in this chapter, all three groups reviewed in this dissertation were listed in the 1960s.
Building on a vast amount of available literature, the economist Chris Knoops provided the following motives for earnings-management or income-smoothing in his dissertation:

- Motives related to the capital market;
- Contractual motives;
- Motives related to preventing regulation or a (too) large political visibility;
- Motives related to maintaining good relationships with stakeholders;
- Personal motives of management; and
- Motives related to the interest of the company.\textsuperscript{44}

The auditor M.N. Hoogendoorn explained that income-smoothing could be achieved in two different ways: by executing real transactions earlier or later in time (‘real smoothing’), or by administrative choices and procedures (‘accounting smoothing’).\textsuperscript{45} Regarding the second category, Vander Bauwhede presented a number of methods to apply earnings-management:

- Choosing the accounting principles;
- Introducing changes in accounting principles;
- Using provisions, allowances for impairment, and revaluations;
- Using discretionary accruals;
- Breaking down the net profit figure into several components; and
- Rounding off the net profit figure.\textsuperscript{46}

The above analysis of motives and techniques for earnings-management, in particular through accounting smoothing, confirmed, in my view, the need to study the accounting principles applied and any changes therein. Furthermore, it pointed at the importance of identifying, describing and analysing specific assets and liabilities in the annual accounts as well as presentational items.

### 2.4 Description of my approach

As the focus of this dissertation is on the development of financial and prudential reporting requirements and their impact on the actual reporting practices, it describes and analyses the developments in these two sets of requirements, as well as the developments in practice. Based on the earlier identification of relevant elements, the following approach is adopted:

- The dissertation discusses a predefined period, in which the following topics are described:
  - The developments in financial and prudential reporting requirements in the Netherlands, but also in the European Community, the UK and the US, as well as on a global level, since these non-Dutch developments have influenced Dutch reporting requirements and/or practices.\textsuperscript{47} They include the activities of legislators, supervisors, stock exchanges, the audit and other relevant professions (such as actuaries), accounting standard setters (created in the 20\textsuperscript{th} century), and, potentially, tax authorities.

\textsuperscript{44} Knoops (2010), p. 143-144.
\textsuperscript{45} Hoogendoorn (1985).
\textsuperscript{46} Vander Bauwhede (2003).
\textsuperscript{47} Although the UK is part of the European Community since 1972 (see section 6.3.2.1), for the reasons described earlier in this chapter, when discussing the accounting classification studies, the developments in this country are presented and analysed separately from those on the European level.
Where possible and relevant, the background of specific individuals who played a role in these developments is explained. The analysis of the relationship between financial and prudential reporting requirements and practices is presented in terms of the question to what extent a single-track reporting approach was adopted, what the meaning of this term was, and of its implications;

- These developments are put in the context of the evolutions in the Dutch economy, the demographic situation, the social security systems, and the insurance industry in general, since these factors had an impact on the competitive environment and business opportunities for Dutch insurers;

- Furthermore, also specific company developments are taken into account, since these generally impact the choice of accounting policies, presentational issues and disclosures. The focus is on the following relevant events:
  - Changes in the legal structure (e.g., a demutualisation, i.e. changing the legal structure from a mutual insurance company into a joint stock company);
  - Changes in the organisational structure (e.g., the introduction of a matrix organisation);
  - Changes in ownership (e.g., a listing on a domestic or foreign stock exchange); or
  - Changes in the (multinational) corporate strategy (e.g., a substantial expansion of international activities), resulting in mergers, acquisitions and divestments;

- The research focuses as much as possible on original source material, such as the actual annual accounts and prudential returns (if they were different: for all reviewed insurance subsidiaries, they were the same) prepared by the selected companies, actual legislation and regulations, and the like. I have not attempted to supplement this already voluminous material by systematically researching internal company documents such as management or auditors’ reports. Given that these sources are scattered, fragmentary, and partially inaccessible, a thorough treatment of such sources would have required a significant extension of the research. For similar reasons, no attempt has been made to systematically use interviews as a source. Occasionally, though, I have complemented the information from my sources with comments from my own recollection of the developments and debates in which I was personally involved. These instances are all clearly marked;

- I have also reviewed, as secondary literature, the available Dutch insurance magazines and the Dutch, European, UK and US accountancy magazines and other available relevant literature during the full period covered in this dissertation in a number of libraries and archives;

- The dissertation covers the period 1880 to 2005, and is divided into specific time slots. This enables me to describe and analyse developments in practice in their institutional environment. The reasons for the choice of these years and the division in periods are described in the next section;

- The selected companies are AEGON, Fortis, and ING. The reasons for this choice are explained later in this chapter; and, finally,
It is necessary to identify the scope of the research, since it is not possible – but, given the objective of the study, also not necessary – to look at each individual aspect of the annual accounts. Instead, the focus is on those topics which are particularly relevant or even unique for insurance companies. An overview of the selected topics, the underlying arguments, and the accounting issues related to these topics are described later in this chapter.

Furthermore, to address the apparent flexibility in the term ‘single-track reporting approach’ noted in chapter 1, I have developed a categorisation of various meanings attached to this term. I propose, and provide support in the descriptive section of this dissertation, that most of the variety in the use of the term ‘single-track reporting approach’ can be captured by first distinguishing between reporting at the level of the individual insurance company and by holdings of insurance companies. At the level of the individual insurance company, three relevant variables can be identified: the leading regime (financial reporting or prudential reporting); whether additional information is required to complement the leading reporting regime; and whether prudential filters are applied and disclosed to determine the solvency position for prudential purposes. At the consolidated level, where (in the context of this dissertation) prudential requirements do not directly apply, two variables are of interest: whether consolidated financial statements use the same models for the balance sheet and the profit and loss account as the insurance subsidiaries; and whether the same accounting principles are applied in the consolidated financial statements as in the insurance subsidiary financial statements.

Table 2.1: Types of single-track reporting approaches

<table>
<thead>
<tr>
<th>Individual insurance company</th>
<th>Type</th>
<th>Leading reporting regime in respect of the accounting principles</th>
<th>Additional information required to complement the leading reporting regime</th>
<th>Prudential filters required to determine the solvency position and disclosed in the statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Prudential</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Prudential</td>
<td>No</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Prudential</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Prudential</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Financial</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Financial</td>
<td>No</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Financial</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Financial</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Holdings of insurance companies</th>
<th>Type</th>
<th>Similar models for the balance sheet and profit and loss account as their insurance subsidiaries</th>
<th>Similar accounting principles as their insurance subsidiaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>No</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

Table 2.1 shows that, with these variables, there are, in theory, 12 different possible meanings of the same term. This dissertation describes which of these actually played a role in practice of in the regulatory debate in each period and how the meaning of single-track reporting evolved over time. Regarding the individual insurance companies, the variable ‘models for the balance sheet and the profit and loss account’ is not relevant, as insurers were obliged to apply the models under the prudential reporting requirements.
Since it is possible that there were periods in which both the prudential and the financial reporting regimes played an important role, I realised that, in these cases, I had to apply judgement to determine the type of single-track reporting approach that was in place. Where this is the case, this judgement call is clearly identified and explained.

To present the findings in a consistent manner throughout this dissertation, the next five chapters each discuss the developments in a specific period, all following a similar structure:

- The chapter starts with a general introduction of its contents;
- Subsequently, an overview of the general developments impacting the Dutch insurance industry is presented. After a short introduction, this section includes the developments in the Dutch society and economy, the Dutch social security system, the Dutch tax system for companies, and the Dutch insurance industry. It ends with a summary and overview of conclusions;
- Next, the chapter discusses the financial and prudential reporting developments in the UK, the US, and the Netherlands, as well as within the ‘European Union’ (henceforth, the ‘EU’) and its predecessors and on a global level, if applicable in the period. The order and sequence of the descriptions in this part vary and depend on the level of importance of certain developments in comparison with others. Generally, each chapter starts with the financial reporting developments, as insurance companies are a subset of the total population of companies. As a consequence, unless they are specifically exempted, they are subject to the general financial reporting requirements. Again, each section starts with an introduction and ends with a summary and overview of conclusions;
- The one-but-last section in each chapter presents the actual reporting practices of the three groups of companies reviewed in this dissertation, including their predecessors. This section, generally, follows the sequence of the topics selected, as is presented later in this chapter; and
- Each chapter closes with a summary and overview of conclusions for the period.

Within each chapter, specific findings in an individual section are linked to others. Furthermore, in each chapter, references are provided by way of footnotes to discussions in earlier or subsequent chapters, indicating the number of the section in which the reference material is presented. In contrast, references within a chapter are not numbered, to avoid an overload of footnotes.

Background material and specific details, including the key financial data and statistics are presented in a number of annexes.\(^{48}\)

Since, as is seen in the descriptions of developments and findings, the number of organisations having an influence on financial and/or prudential reporting varied over time, it is necessary to make a distinction between ‘primary’ and ‘secondary’ players.\(^{49}\) The distinction is made based on my assessment of the level of impact on the described developments (with primary players being more important than secondary players), and influences the way the activities of these organisations are described:

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\(^{48}\) Annexes 3 and 4 present a list of figures and tables, respectively.

\(^{49}\) A list of these organisations and its classification is included in annex 5.
• For primary players, the history and activities are included briefly in the first period of their existence, but the details are allocated to the individual time slots. Furthermore, any specific input they provided to the activities of other organisations (such as commenting on discussion papers or exposure drafts) is described when discussing these activities; and
• For secondary players, all information is, generally, included in the first period in which they are mentioned, although in some cases the information is also divided over the time slots to improve the understandability of the developments.

2.5 Selection of time slots
As is explained in the previous section, it is necessary to describe several external developments to understand reporting developments in practice. These external developments drive the selection of time slots in this dissertation, based on the identification of those factors that have – potentially – the biggest impact on reporting practices. They are described in the subsequent chapters. The following split is made:

1. The period 1880-1922. As is explained in a subsequent chapter, the year 1880 is selected because it was in this year that the Dutch ‘Hoge Raad’ (henceforth, the ‘Supreme Court’) ruled the then existing life insurance supervisory regime unconstitutional, creating a vacuum in the supervisory requirements for this specific industry. This ended in 1923, when the first insurance supervisory act came into force. This was the ‘Wet op het levensverzekering-bedrijf’, henceforth, the ‘life insurance business act’. Among others, this act introduced mandatory detailed reporting formats for life insurance companies, and, therefore, had a big impact on practice. In other words, (domestic) developments in respect of insurance supervision were the main drivers for change;

2. The period 1923-1970. These reporting formats were introduced at a time when there were no comprehensive mandatory reporting formats for other Dutch companies. Before 1971, the Netherlands had only very limited legislation or regulations on financial reporting. Subsequently, the companies’ annual accounts act came into force, introducing not only specific reporting formats, but also requirements in respects of accounting principles and disclosures. The changes were, therefore, caused by domestic developments in financial reporting requirements;

3. The period 1971-1989. The reason to choose the year 1989 as the end of this period is different than is described above: it is mainly driven by company developments, in particular influencing the predecessors of Fortis and ING. Specifically, the events were the mergers between insurance companies and banks, occurring at the end of 1990 (creating Fortis) and the beginning of 1991 (establishing ING). However, it should be noted that these mergers were made possible by changes in Dutch legislation: until the end of this period, combinations of insurers and banks were only allowed to a limited extent. In other words, the company events were only possible because of changes in the domestic supervisory environment;
4. The period 1990-1999. As is described above, the main drivers for change so far were domestic developments. This is not the reason to select the year 1999 as the end of the one-but-last period described in this dissertation. On the contrary, this choice is made because of developments on European level: the first steps in a decision process to, gradually, move to accepting and requiring IAS as the reporting framework for companies listed in the EU. Since all three companies reviewed in this dissertation were listed in the Netherlands and active on an international basis, these developments may have had an impact on their reporting practices even before IAS was mandatory; and, finally,

5. The period 2000-2005. As is described in chapter 8, this period – although short – showed a large amount of activity in respect of both financial and prudential reporting developments. The year 2005 is selected because it was the first year of mandatory application of IAS/IFRS in the EU. Since these standards, in general, offered much less flexibility than the existing Dutch standards and the transition to this new reporting framework had to be combined with extensive disclosures on the impact of this change, the annual accounts of 2005 offered the opportunity to assess the previous differences in reporting practices between the three companies.

2.6 Why AEGON, Fortis and ING?
As is noted previously in this chapter, the focus of this dissertation is on the description of the developments in financial and prudential reporting requirements and their impact on the actual reporting practices of Dutch insurance companies. This means that a decision had to be made which companies should be selected.

This section explains the reasons to select AEGON, Fortis and ING:

- All three groups were the result of a large number of mergers and acquisitions, and their predecessors were already created in the 19th century. This means that they existed during the whole period described in this dissertation;
- They were the only three Dutch insurance groups listed at several European and other stock exchanges at 31 December 2005. Moreover, all listings occurred in the 1960s, which provides the opportunity to assess and compare any impact of such listings on their actual financial reporting practices. Furthermore, both AEGON and ING were listed in the US at the NYSE and therefore subject to the potential influence of the financial and prudential reporting requirements in this country. Fortis did not have such a listing, but it did have a sponsored ‘American Depositary Receipts’ (henceforth, ‘ADR’) program in the US, so it could have been impacted by such requirements as well. As a result of these listings as well as their positions in the Dutch insurance industry, the three groups were, more than non-listed companies, subject to the (potential) tension between the financial and the prudential reporting requirements. Because of their high rankings in the Dutch insurance statistics and the related public profile, this also applied (although to a lesser extent because of the absence of Dutch financial reporting requirements before 1970) to their predecessors;

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50 The description of the reporting practices of these companies includes their predecessors and main Dutch insurance subsidiaries, which are presented in the next chapter.
51 The structure of such a program was described by Vergoossen (1996). He explained that an ADR is a certificate issued by a US bank, representing a share of a non-US company which had been deposited by the company in its home country at the local office of the bank or of an affiliate.
The listing on European stock exchanges also means that these companies were required to report under IAS/IFRS as of 2005, which creates the opportunity to obtain more insight in the differences between their accounting practices before the transition to IAS/IFRS. This is possible as a result of the extensive disclosure requirements for this transition; 

All three companies had large domestic and international operations. As a result, they held high rankings in several domestic and European insurance statistics. This was not only the case for AEGON, Fortis and ING as the existing companies at 31 December 2005, but also for their respective predecessors. This means that they were not only influenced directly by the developments in the countries in which they operated (including the UK and the US), but also indirectly, since the users of the financial statements compared them to their international competitors;

Since the early 1990s, Fortis and ING were so-called ‘financial conglomerates’, combining banking and insurance activities. This meant that specific solutions had to be found regarding several complex issues, such as the harmonisation of accounting principles, presentational formats, and segmental information. Since, on top of this, Fortis was also influenced by Belgian accounting standards as a result of its dual listing in Amsterdam (the Netherlands) and Brussels (Belgium) and its Belgian-Dutch legal structure, different solutions could be expected;

As is described in subsequent chapters, all three companies and their predecessors were members (or even provided chairs) of important industry committees, both on national and on European levels; and, finally,

With the selection of these three companies the problem of data availability could easily be overcome, since all possessed extensive archives, which were accessible to document and analyse the actual reporting practices of the companies and their predecessors, based on their financial statements and prudential returns.

The decision to focus on these companies means that my findings cannot always be compared to observations on the industry as a whole: the selected companies are only a subset of all companies on the Dutch insurance market. My selection also avoids a too large emphasis on some important incidents in the Dutch insurance industry, i.e. the bankruptcy of the ‘Algemeene’, the ‘Kosmos’, the “Wereld” and the ‘Vie d’Or’, which all triggered certain legislative initiatives, none of which were, in my view, representative of the overall developments in and affecting the industry.

In contrast, my selection of ‘survivors’ made it possible to look at the longer-term development in the reporting practices of large and important Dutch insurers over the full period discussed in this dissertation, and to describe and analyse these practices based on a consistent sample.

52 The transition requirements were included in IFRS 1. For a description of this standard, see section 8.4.4.3.
53 For further details on these rankings, see annex 6.
54 See section 3.3.1.
55 For a discussion on the financial reporting requirements for financial conglomerates, see section 7.4.6.
56 See section 4.4.3.9.1.
57 See section 4.4.3.9.2.
58 See section 5.4.2.6.
59 See section 7.2.4.
To obtain insight into the reporting practices of the industry as a whole, additional analysis of the financial statements of other Dutch insurers would be necessary and this is, therefore, a potential topic of further research.60

2.7 Terminology
Before presenting the scope of this dissertation, some comments should be made on the used terminology. During my research, I was confronted with the problem that terminology within a country changed over time (e.g., in life insurance business, the terms ‘premium reserve’ or ‘mathematical reserve’, both pointing at the liabilities arising from life insurance contracts, were replaced by the term ‘life insurance provision’). Furthermore, in the Netherlands no real distinction was apparent in the past between ‘reserves’ (i.e. a part of equity) and ‘provisions’ (i.e. uncertain liabilities). And thirdly, I noted that differences existed in terminology between countries. As an example, in the US the term ‘reserve’ had a different meaning than it nowadays has in the UK and in the Netherlands.

To provide the reader with an understandable overview of the developments over time and with an appropriate comparison between countries, a consistent use of terminology is required, in my view. Therefore, in this dissertation one specific set of terminology is used, derived from the European fourth directive, the banking accounts directive and the insurance accounts directive as the oldest pieces of international legislation available.61 Where relevant, any specific problems in respect of terminology are explained. However, in the annex presenting the mandatory reporting formats the original terms are used, since they refer to the actual legislative and other developments.62

For the convenience of the reader, an overview of used terms and their equivalents in other languages is presented in annex 7.

A similar problem was encountered when I considered the difference in terminology regarding the auditing profession. In all countries reviewed in this dissertation, the local term for the members of this profession is ‘accountants’. On the other hand, in the English translation of the Dutch term this word is replaced by ‘auditor’, which is also the word used in the eight European directive on the approval of persons responsible for carrying out the statutory audits of accounting documents.63 Finally, the Dutch translation of the English word ‘accountant’ refers to an auditor as well as a chief bookkeeper. To avoid confusion, this dissertation uses consistently the term ‘audit profession’ and ‘auditor’ in referring to those who are involved in the audit of financial or prudential statements.

Another term the meaning of which varies between jurisdictions is insurance ‘supervision’. As is shown in the subsequent chapters, this can refer to prudential requirements to be met before an insurance company can become active (e.g., the need to obtain a license), to active supervision during the year (e.g., the possibility to carry out inspections or to ask for specific information), and to a retrospective review of the financial position and performance of an insurer (e.g., the assessment of submitted prudential returns). In this dissertation, I use the term ‘supervision’ in a comprehensive way, referring to all these supervisory actions.

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60 See section 9.6.
61 For an overview of these directives, see sections 6.4.2.2, 7.4.2.1 and 7.4.2.2, respectively.
62 See annex 9.
Variability also exists regarding the meaning of the term ‘investor’. As Zeff explained, it could include existing shareholders, potential shareholders, existing holders of debt securities, and potential holders of debt securities. In this dissertation, I define investors as existing and potential holders of shares and debt securities, i.e. all who make, or consider making, capital available either privately or through a stock exchange.

Finally, confusion may arise regarding the contents of the term ‘generally accepted accounting principles’ or ‘GAAP’. The subsequent chapters show that this term was only introduced in the middle of the 20th century and could encompass a variety of pronouncements, including legislation, standards issued by regulators and accounting standard setters, industry guides, authoritative literature, and views expressed by auditors and academics. Again, the meaning of the term varied between jurisdictions and, sometimes, even over time. For the purpose of this dissertation, I use a definition derived from a Dutch financial dictionary, as follows: “GAAP is a set of generally agreed conventions, rules and procedures for the financial reporting practices by companies”.

2.8 Selected elements of financial reporting

As is explained earlier in this chapter, the focus of this dissertation is on those elements which create some specific reporting issues for insurance companies and make them differ from other companies. This means that other relevant elements, such as accounting for intangible assets or leases, or revenue recognition are not discussed. The selected elements are:

- The size of the financial reports;
- The layouts of the balance sheets, the profit and loss accounts, and the cash flow statements;
- The selection of accounting policies and the mandatory and voluntary changes therein;
- Investments;
- Technical provisions (i.e. the insurance liabilities), which also determine the recognition of revenues from insurance contracts;
- Long-term employee benefits (the provision for pensions and similar obligations);
- Taxes (the provision for (deferred) tax and tax on profit or loss);
- Segment information;
- Business combinations; and
- Disclosure of solvency information.

The arguments for this selection are presented hereafter. For readers who lack a background in insurance accounting, this one but last part of the chapter includes further information on the technical provisions and acquisition costs of an insurance company.

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64 Zeff (2013).
2.8.1 The explanation of selected elements

The size of the financial reports
Data on the size of the financial reports provide information on the level of disclosures that companies presented, voluntarily or as a result of new or amended financial/prudential reporting requirements. These data give an indication on the level of transparency in the financial reports and the impact of such legislation. However, for a large part of the period reviewed in this dissertation there was no clear distinction between the financial statements and the other parts of the financial reports, such as the directors’ report. To enable comparison over time, I have therefore chosen to focus on the size of the financial reports as a whole.

The layouts of the balance sheets, the profit and loss accounts, and the cash flow statements
This issue is selected since the introduction of mandatory formats (or minimum lines in these primary statements) was discussed for a very large number of years, both for financial reporting purposes in general (i.e. for all companies), and for prudential reporting purposes. The subsequent chapters show that full formats for the balance sheet and the profit and loss account were introduced for prudential reporting purposes first, at a time that there were none or only very limited requirements for companies in general. This triggers the question whether such schedules could or should be used for financial reporting purposes as well, in particular at the time that mandatory layouts were also introduced in this reporting environment. In other words, whether the legislation allowed or required a single-track reporting approach.

The selection of accounting policies and the mandatory and voluntary changes therein
As is described earlier in this chapter, the selection of accounting policies and changes therein has an important impact on the annual results and the financial position of companies. For insurance companies, the presence of prudential supervision creates an additional dimension in respect of this topic, since such supervision is based on the protection of the interest of policyholders, which could be in conflict with the interest of shareholders and other involved parties. This can, in particular, be the case if annual returns to prudential supervisors are also designated and published as the official financial statements (a single-track reporting approach). Accounting policy choices also play a role regarding segment information and the disclosure of solvency information, as is described later in this dissertation. The selection of accounting policies is especially relevant for the topics discussed next, i.e. investments, technical provisions, long-term employee benefits, taxes, and business combinations.

Investments
As the subsequent chapters show, insurance companies own a variety of investments, including land and buildings, participating interests, subsidiaries, shares, different types of fixed-income investments, deposits, participations in investment pools, and, after a certain point in time, investments for the benefit of life insurance policyholders who bear the investment risk. Combined, these investments represent the largest category of assets in the balance sheet of an insurance company.
For such investments, several accounting policies are available, both in respect of the valuation in the balance sheet and regarding the treatment of unrealised and realised gains and losses. For valuation purposes, measurement ranges from a pure historical cost principle to a basis determined by external market factors (such as appraisal value, sales value, or stock exchange value), with a number of methods in between. In respect of unrealised and realised gains and losses, the main issue is whether or not to account for such items within or outside the profit and loss account, and at which point in time this should be done.

**Technical provisions**

Regarding the technical provisions, a clear distinction should be made between life insurance business and non-life insurance business. In both cases, uncertainty plays a major role, although the risks and the period of uncertainty differ, as covering risks (i.e. accepting uncertainty) is the heart of the insurance business. This is the main reason why technical provisions represent the largest category of liabilities for mature insurance companies.

This uncertainty, for life insurance business combined with the long-term nature of the products, triggers a number of accounting questions. Given the importance of the technical provisions, an overview of the nature and available methods to determine these liabilities and, in particular for life insurance business, the consequences of these methods for the profit and loss account is presented later as a separate part of this section.

The determination of the technical provisions also determines the amount of revenues from insurance contracts. In general, it is calculated as the amount of ‘earned premiums’, which directly relates, for most insurance products, to the movements in the technical provisions. For this reason, revenue is not identified as a separate selected element.

**Long-term employee benefits**

This topic is selected for several reasons, all related to the accounting treatment of pension schemes for the staff of a life insurance company itself:

- If such schemes are not insured with a third party, can they be considered and treated as obligations from life insurance arrangements; and
- If such obligations are insured with a third party, such as a pension fund, which subsequently insures its liabilities with the life insurer, how should such transactions be accounted for.

In both cases, the life insurer, effectively, concludes a contract with itself, and a conflict can arise between the accounting principles to determine the technical provisions and those covering long-term employee benefits.

**Taxes**

Taxes are selected as a topic covered in this dissertation, because, as future chapters show, Dutch insurance companies operated since the 1940s under a special tax regime, which triggers a number of questions in respect of accounting for deferred tax. The regime concerned the possibility to set up, for tax purposes only, a special equalisation reserve, enabling an insurer to decrease taxable profits and defer tax payments for a large number of years.


**Segment information**

The issue of segment information relates in particular to the tension between financial and prudential reporting requirements and to the creation of composite insurance groups, combining life and non-life insurance business. Consolidation of these two activities in the prudential returns is prohibited, while, on the other hand, the following chapters show that it played an important role in the discussions on financial reporting developments. In consolidated financial statements, information on the different activities is provided by disclosing segment information, which triggers the question whether such information is fully comparable to and aligned with what is included in the prudential returns.

**Business combinations**

In respect of business combinations, the issue researched in this dissertation concerns, next to goodwill, in particular the accounting treatment of the technical provisions at the time of the business combination. As these provisions are or can be influenced by the rules issued by prudential supervisors, this triggers the question how the level of prudence in these liabilities is treated.

**Disclosure of solvency information**

The final topic selected for this dissertation relates to solvency information. As is described in subsequent chapters, insurance companies are generally subject to specific solvency requirements, i.e. requirements regarding the amount of equity they need to hold to cover unexpected risks. This leads to the question whether or not such requirements, as well as the way in which these are met, are disclosed in the financial statements to enable the user to assess the amount of freely distributable reserves.

To use consistent terminology throughout this dissertation, I use, based on the third insurance directives described later in this dissertation, the term ‘required solvency margin’ for the required amount of equity and the term ‘available solvency margin’ for the amount of available equity under the prudential requirements, despite the fact that it is unclear why these directives used the term ‘margin’, while, effectively, they focused on calculated absolute amounts.

**2.8.2**  
**The issues in respect of technical provisions**

**2.8.2.1**  
**Introduction**

As is noted earlier, regarding these provisions a clear distinction should be made between life and non-life insurance business.

A comprehensive overview of the contemporary methodologies and issues surrounding these provisions was provided in 1984 by C.T.M. Wolters, an actuary employed by the ‘Nationale-Nederlanden’. The fact that this publication was issued more than 100 years later than the first period reviewed in this dissertation naturally triggers the question whether its contents are relevant to describe and analyse the actual practices and debates during this earlier period. This is one of the issues covered in this dissertation.

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66 See section 7.6.4.  
But it can already be stated now that the next chapters show that this is indeed the case: almost all methodologies presented hereafter were applied in practice and were, sometimes heavily, debated among practitioners and other involved parties such as auditors. For these reasons, I consider the overview provided by Wolters a good starting point to explain the methodologies and resulting accounting consequences.

Hereafter, a split is made between non-life insurance business and life insurance business. Since the former is, for most lines of business, more of a short-term nature, the methodologies are, in general, simpler than those for life insurance business. For this reason, they are presented first.

2.8.2.2 The methodologies and issues regarding non-life insurance provisions

Provision for unearned premiums
The provision for unearned premiums is caused by the fact that, in general, the premium payment period does not equal the financial year. As a result, the insurer is still ‘at risk’ in the next year for premiums received in this year and a part of these premiums has to be reserved to cover those future risks. In insurance terminology, these premiums are ‘unearned’ and included in the provision for unearned premiums. By nature, it is a transitory item.

The provision is generally determined on the basis of the gross premium, i.e. the premium charged to the policyholder, decreased by commissions paid to intermediaries to obtain the insurance business. The reason for this treatment is that these commissions are normally paid upfront, independent of the term of the insurance contract. The provision can be calculated on an exact basis (day-by-day, policy-by-policy) or using approximations, based on average maturities of the insurance portfolios.

Provision for unexpired risks
The provision for unearned premiums is sometimes combined with a provision for unexpired risks. This item is created in case of so-called ‘onerous’ contracts, i.e. contracts for which the future income is less than the future charges. In such cases, choices have to be made what to include in the future income (e.g., investment income) and in the future charges (e.g., expense levels).

Provision for claims outstanding
The provision for claims outstanding usually includes two distinct components:

- A provision for claims which have been reported, but not yet paid or fully-paid; and
- A provision for claims which have occurred before the end of the financial year, but not yet reported to the insurer. This is the so-called ‘IBNR’ provision (‘Incurred-But-Not-Reported’).

One of the issues in determining the first category is that there is often still uncertainty about the exact amount of the claims: this can result in a necessary increase of the provisions, sometimes called an ‘IBNER’ provision (‘Incurred-But-Not–Enough-Reported’). Another issue can relate to the term over which the payments are or should be made, in which case the time value of money can start playing a role, in other words, the issue of discounting the provision and the decision on the applicable discount rate. Depending on the class of business, the provision is determined on a case-by-case basis or using statistical techniques based on the law of the large numbers.
The level of uncertainty in determining the IBNR provision is generally larger than in case of reported claims. For some classes of business, e.g., liability insurance, it can take a number of years before a claim is actually reported. For this reason, this provision is normally based on statistical techniques, using trend analysis of past experience, adjusted as much as possible for new developments and current knowledge.

The provisions usually include the future expenses, related to the handling of the claims. However, the methods to determine these expenses vary from ‘direct expenses only’ to ‘all expenses related to these activities’.

**Equalisation provisions**

Equalisation provisions are created for classes of non-life insurance business where the claims ratio (i.e. claims divided by premiums) varies considerably from one year to another. Typical examples are claims related to natural hazards, such as hail or storm. The provision is formed to ‘smooth’ the claims over the years, using a ‘normal’ average to determine the additions to or releases from the equalisation provision. Statistical methods are used to achieve this goal.

**Catastrophe provisions**

Catastrophe provisions differ from equalisation provisions, in the sense that they are usually created to cover the risk of low-frequency, but high-impact events such as an earthquake. Generally, there is no unique method to determine the amount of these provisions.

**Fund systems**

Finally, in certain classes of non-life insurance business, in particular marine and aviation insurance business, it is very difficult to determine the levels of the provisions for unearned premiums and claims outstanding. The traditional cause for these difficulties was the time lag between the occurrence of the event and the settlement (i.e. the determination and payment) of the claim: in the past, it could take a long time before the loss of a ship with its cargo was reported, resulting in considerable uncertainty about the size of the claim because of the lack of (reliable) information. Later, the problems are related to the complexity of the claims, in particular in case passengers are involved.

To address these issues in financial reporting terms, insurers do not set up separate provisions for unearned premiums and claims outstanding, but allocate, per underwriting year, all premiums to a ‘fund’ (a separate liability), to which interest is added and claims and expenses are charged. A particular issue in this system is the assessment of the sufficiency of the fund, which has to be increased in case of deficiencies. After a certain number of years, any remaining surplus in the fund is released to the profit and loss account.

2.8.2.3 **The methodologies and issues regarding life insurance provisions**

To determine the life insurance provisions, a variety of methodologies is available, using different inputs (in particular, premiums and expenses, and the discount rate) and calculation methods. The provisions for unearned premiums and claims outstanding are usually not calculated or presented separately and are therefore not discussed.
The definitions of premiums and expenses are relevant because they are, next to the discount rate, the most important parameters in the calculation methods. Depending on these definitions and on the calculation methods, the resulting provision is more or less prudent, which, in turn, has an effect on the profit and loss accounts over the term of the contracts.

Hereafter, first the definitions of premiums and expenses are provided. This is followed by a discussion on the selection of the discount rate. Subsequently, an overview is presented of a number of methods to calculate the life insurance provisions, followed by an explanation of the provisions for bonuses and rebates. This section ends with a description of a specific type of provision for products where the investment risk is born by the policyholders.

2.8.2.3.1 Definition of premiums and expenses
In calculating the provisions, different categories of premiums and expenses can be included. The definitions are presented below. The actual premium used in the calculations is called the ‘reserve premium’.

Net premium
The concept of a net premium is based on the principle that, at the inception of a life insurance contract, the net present value of the net premiums equals the net present value of the expected claims. As the latter can be derived, and therefore calculated, from the insurance coverage defined in the contract, the net premium can be determined from this equality. In this approach, both the surcharges for expenses and the actual expenses are ignored.

Expenses
The expenses include two different categories:

- Initial expenses, such as brokerage fees, marketing expenses, initial policy administration expenses, and medical examination expenses. These expenses, nowadays called ‘acquisition costs’, are incurred before or at the inception of a new contract; and
- Ongoing expenses during the existence of a contract, to be divided into collection expenses and administration expenses.

Gross premium
The gross premium is the sum of the net premium and the surcharges for initial and ongoing expenses. Normally, the surcharge for initial expenses is calculated as a monetary amount, and the surcharges for ongoing expenses are a percentage of the gross premium.

2.8.2.3.2 Selection of the discount rate
For life insurance products, the premiums are paid either fully upfront (‘single premium business’) or over a period of time (‘regular premiums’). Furthermore, the claims are paid as a lump-sum or as periodic instalments; however, in both cases the moment of payment lies in the future and in most products there is a large time interval between the inception of the contract and the moment(s) of payment.

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68 Although, generally, the term ‘claim’ is used in non-life insurance and the term ‘benefit’ is used in life insurance, for consistency reasons the second term is not used in this dissertation.
This means that, from an economic perspective, the time value of money plays a role in the pricing (i.e. the premium-setting) of the products, since the insurer can use the premiums received to make investments and generate investment returns, as long as the claim payments are not yet due. As a result, all methods to calculate the life insurance provisions are based on a present value approach, which requires the choice of a discount rate.

In determining this rate, the insurer can use either the level applied in setting the premiums, or some other rate. Because of the size of the life insurance provisions in the balance sheet, a small change in the discount rate has a large impact of the annual results of the period.

2.8.2.3.3 Methods to calculate the life insurance provisions

There are several methods for such calculations, which depend on the views regarding the treatment of expenses in the annual profit and loss account. The methods all assume that initial expenses are not capitalised and amortised as a separate asset: they are either directly charged to the profit and loss account, or form a component of the calculation of the technical provision, as is explained hereafter. Furthermore, in comparing the methods, it is assumed that all other relevant assumptions, e.g., the discount rate, are equal. Finally, the overview assumes that ‘negative’ provisions (which are explained hereafter) are acceptable and not neutralised to zero. A numeric example comparing the different methods is presented at the end of this section.

All methods described and examples presented assume a ‘lock-in’ approach, under which the assumptions to determine the premium rates are also used in the calculations of the technical provisions and are not changed subsequently. As is presented later in this dissertation, this is a distinctive feature of US GAAP for insurance contracts. It is, however, not a distinguishing factor between the methods described next.

Net premium method

Under this method, the provisions are calculated using the net premiums and the net claims, i.e. without taking any future expenses (surcharges or actual) into account. As a result of this method, initial expenses are charged to the profit and loss account. Annually, the difference between the gross premium and the net premium is available to cover the ongoing expenses. A separate provision can be created for ongoing expenses after the premium-paying period. Of all methods described, the net premium method results in the highest level of provisions, but also results – at the inception of the contract – in the highest charge to the profit and loss account.

Gross premium method

This method uses the gross premium as the reserve premium, and calculates the provision as the difference between the present value of the net claims and the present value of the gross premiums. At the inception of the contract, this automatically results in a negative provision, amounting to the present value of the surcharges for all expenses. At the same time, there is no future coverage available for ongoing expenses, which do occur. This can only be addressed by creating a separate provision for such expenses. Of the different methods described, the gross premium method results in the lowest amount of provisions and has no impact on the profit and loss account at inception. In this sense, the net and the gross premium method represent the two extremes of the spectrum.

69 See section 6.5.2.5.
Adjusted gross premium method

This method is a variant of the gross premium method. Under this method, not the full surcharge for ongoing expenses is included in the reserve premium, but only part of it. The reserve premium is expressed as a percentage of the gross premium.

Zillmer method

As under the net premium method, this method uses the net claims in its calculation. However, the reserve premium is calculated as the net premium increased by a percentage of the surcharge for initial expenses or by a percentage (the ‘Zillmer-quote’) of the insured capital. The result of the method is that part of the initial expenses are debited on the provision: these expenses are presumed to be ‘prepaid’ by the insurer, and the policyholders pays back this ‘loan’ over a number of years in the form of the surcharge for initial expenses, which is included in the annual premiums. Depending on the level of the Zillmer-quote and the determination of the reserve premium, the Zillmer method can produce the same results as the adjusted gross premium method. However, the starting point of both methods is fundamentally different (net premium for the Zillmer method and gross premium for the adjusted gross premium method), which, as is described in a next chapter, was one of the elements in the fierce debates among practitioners on the most appropriate method to determine the life insurance provisions.70

Höckner method and inventory method

These two methods are relevant in case the premium-paying period is shorter than the contract period.

Under the Höckner method, the reserve premium is the gross premium, and the net claims are increased by all ongoing expenses. If the periods of premium-paying and coverage are the same, the method gives the same result as the Zillmer method with a quote of 100%. At inception, the provision is negative to the amount of initial expenses, and over the whole contract period it is less than the provision calculated under the net premium method. In case the premium-paying period is shorter, an implicit provision for ongoing expenses is created, bringing the provision above the level calculated under the net premium method.

The inventory method uses, as the reserve premium, the net premium increased by the surcharge for ongoing expenses. At the same time, the net claims are increased by the actual ongoing expenses. In substance, this produces the same result as the net premium method with an additional provision for ongoing expenses, in particular when the premium-paying period is shorter than the contract period. After the premium-paying period, the inventory method produces the same result as the Höckner method.

Comparative examples

To illustrate the impact of the choice of the method, hereafter a set of examples is provided, derived from Wolters. The contract concerns a term insurance policy. Under such a contract, the insured capital is paid if the policyholder dies before the age of 65; if he still lives at that age, nothing is paid. The premiums are paid annually. Since the Höckner and the inventory method are designed to deal with special circumstances and products, they are not included.

70 See section 4.5.5.
Table 2.2  Example of methodologies to calculate the life insurance provision – input to the calculations

<table>
<thead>
<tr>
<th>Input to the calculations</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Age at inception of the contract</td>
<td>30 years</td>
</tr>
<tr>
<td>Insured capital</td>
<td>NLG 10,000</td>
</tr>
<tr>
<td>Term of the contract</td>
<td>35 years</td>
</tr>
<tr>
<td>Discount rate</td>
<td>4%</td>
</tr>
<tr>
<td>Net annual premium</td>
<td>NLG 44</td>
</tr>
<tr>
<td>Initial expenses</td>
<td>NLG 268</td>
</tr>
<tr>
<td>Ongoing annual expenses</td>
<td>9.5% of gross premium</td>
</tr>
<tr>
<td>Gross annual premium</td>
<td>NLG 64</td>
</tr>
<tr>
<td>Adjusted gross premium 95%-level</td>
<td>NLG 61</td>
</tr>
<tr>
<td>Surcharge for initial expenses</td>
<td>NLG 14</td>
</tr>
<tr>
<td>Reserve premium Zillmer method 100% of surcharge for initial expenses</td>
<td>NLG 58 (44 + 14)</td>
</tr>
<tr>
<td>Reserve premium Zillmer method 1% of insured capital</td>
<td>NLG 49</td>
</tr>
<tr>
<td>Reserve premium Zillmer method 2% of insured capital</td>
<td>NLG 55</td>
</tr>
<tr>
<td>Total surcharge for expenses</td>
<td>NLG 20 (64 – 44)</td>
</tr>
<tr>
<td>Present value of total surcharges for expenses</td>
<td>NLG 380</td>
</tr>
</tbody>
</table>


Table 2.3  Example of methodologies to calculate the life insurance provision – outcome of the calculations

<table>
<thead>
<tr>
<th>Time</th>
<th>Gross premium method</th>
<th>Adjusted gross premium method 95%</th>
<th>Zillmer method 100% of surcharge</th>
<th>Zillmer method quote 2%</th>
<th>Zillmer method quote 1%</th>
<th>Net premium method</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>-380</td>
<td>-320</td>
<td>-268</td>
<td>-200</td>
<td>-100</td>
<td>0</td>
</tr>
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<td>5</td>
<td>-153</td>
<td>-97</td>
<td>-50</td>
<td>13</td>
<td>105</td>
<td>197</td>
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<tr>
<td>10</td>
<td>108</td>
<td>158</td>
<td>200</td>
<td>256</td>
<td>339</td>
<td>421</td>
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<td>369</td>
<td>412</td>
<td>448</td>
<td>497</td>
<td>569</td>
<td>640</td>
</tr>
<tr>
<td>20</td>
<td>585</td>
<td>620</td>
<td>650</td>
<td>690</td>
<td>748</td>
<td>806</td>
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<td>768</td>
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<td>614</td>
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<td>661</td>
</tr>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>


2.8.2.3.4  Provisions for bonuses and rebates

This provision includes amounts for bonuses and rebates, which are determined to be distributed to policyholders, but which are not yet individually allocated. Although such profit sharing mechanisms can be present in non-life insurance contracts, they are – as is shown in the next chapters – generally more present in life insurance contracts. Usually, the calculation of these provisions does not create specific accounting problems, since the necessary parameters to determine the amount of policyholders’ profit sharing are derived directly from the underlying insurance contracts or other legal documents, such as the articles of association of the insurer (e.g., in case of a mutual insurance company). Such insurance contracts are sometimes called ‘with-profit’ contracts.

The drivers for the profit sharing mechanisms depend on the nature of the contract: for group insurance contracts (also called ‘collective’ contracts), this is often a combination of underwriting results and interest-related triggers; for non-group insurance contracts (also called ‘individual’ contracts), interest is in most cases the only driver.

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71 A group insurance contract is a single policy under which individuals in a natural group (such as employees of a company) are covered.
In case the policyholders receive a part of the interest income of the insurer by a reduction of the premiums, this is considered as a prepaid amount that can be capitalised and amortised as ‘capitalised interest rate rebates’. This is economically similar to increasing the discount rate to calculate the technical provisions.

### 2.8.2.3.5 Technical provisions for life insurance policies where the investment risk is born by the policyholders

These provisions, which were created only in the second half of the 20\textsuperscript{th} century, cover the liabilities to policyholders who have fully accepted the investment risk on a specified pool of assets, in which the net premiums paid by these policyholders are invested. Therefore, the main part of the liabilities is directly linked to the value of the related assets. In this sense, these parts are a special variant of a provision for bonuses. The remaining part of the provision covers the life insurance risks in the contracts.

### 2.8.3 The accounting treatment of acquisition costs

The previous description of Wolters shows that the accounting treatment of acquisition costs plays an important role in the determination of the insurance provisions and the annual results of an insurance company. He explained that, in non-life insurance business, these costs, in particular commissions to intermediaries, are generally deducted from the provision for unearned premiums. Economically, this is the same as capitalisation and amortisation of the costs as an asset, as prepaid expenses. The same applies to life insurance provisions. If the actual acquisition costs equal the surcharges in the premiums to cover these costs, capitalising and amortising them in combination with the net premium method produces the same result as applying the gross premium method. Therefore, in substance there are three methods to account for acquisition costs:

- Charge them to the profit and loss account when they occur;
- Deduct them from the insurance provisions; and
- Capitalise and amortise them as prepaid expenses in combination with the insurance provisions.

If applied properly, the second and the third method produce the same net provisions and annual results, and differ in presentation only. Since the third method was not (yet) applied at the time Wolters published his overview, it was not discussed. As is shown in chapter 7, the method started to become popular in the 1990s,\textsuperscript{72} and should, therefore, be mentioned in this overview of methodologies and issues.

### 2.9 Explanation of the size of this dissertation

The earlier sections in this chapter present my approach to and the scope of this dissertation. They show that there are a large number of developments to describe and analyse, over a long period of time. They also note that there has been no systematic research on most of the topics I have selected, and that the existing literature, if available at all, does not cover the insurance industry, at least not for the full period. This applies to the financial and the prudential reporting developments in the selected geographies, but also for the history of the selected companies.

\textsuperscript{72} See section 7.7.6.
To fill this gap in the literature, but also to enable the reader to follow and understand the individual developments, their relationships and their historical context, I have chosen, within the limitations defined by the selected elements of financial reporting, to describe these individual developments comprehensively. This explains the size of this dissertation.